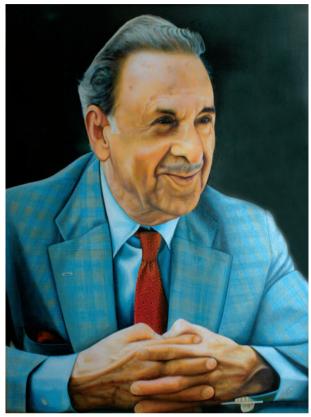


National Institute of Advanced Studies Bengaluru, India

ANNUAL REPORT 2024 - 2025



JRD Tata Founding Chairman

The Vision and Mission of NIAS

To integrate the findings of scholarship in the natural and social sciences with technology and the arts through multi-disciplinary research on the complex issues that face Indian and global society.

To assist in the creation of new leadership with broad horizons in all sectors of society by disseminating the conclusions of such research through appropriate publications and courses as well as dialogues with leaders and the public.

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FROM DIRECTOR'S DESK



Dr Raja Ramanna Birth Centenary Celebrations including panel discussions, seminar, related to traditional wisdom, nuclear science and technology, etc. were held during the year. Prof Ajay Sood, Principal Scientific Adviser, to the Government of India delivered Dr Raja Ramanna Memorial Lecture as a part of the Closing Ceremony on January 31, 2025. A Video Film on 'Legacies of Innovation: The NIAS and Raja Ramanna' was produced and screened.

One of major achievements of the Energy, Environment and Climate Change, the decision of the Ministry of Environment, Forest and Climate Change was to defer the installation of the Flue Gas Desulfuriser (FGD) in all thermal power plants (TPP). FGDs may be installed only in TPPs situated in urban areas. An investment of about Rs.1,20,000 crore which is not likely to result in tangible benefits, has been put on hold. The recommendation for the development of Small and Modular reactors (SMRs) and Bharat Small Reactors (BSR) along with industries has been accepted by the Government of India and is part of the 'Nuclear Energy Mission'. The Atomic Energy Act and Nuclear Liability Act will be modified. Reports on site selection for SMRs and BSRs have been provided to many industries. A final report for the NIAS-MECS Project on 'An evidence-based approach to access energy transition in clean cooking' was submitted.

Dr Tejal Kanitkar and Dr Gufran Beig as a member of the Indian Delegation to 29th COP, UNFCC, Baku, WG-3 Meeting for 7th Assessment Cycle of IPCC, Kuala Lumpur, 63rd Session of IPCC and to 'Conciliation Resources Consortium' to deliberate about air pollution at Baku.

Under the Complex Systems Programme, a unifying framework on chaos and causality for deep network pruning has been developed. A random heterogeneous extension of Neurochaos Learning, mimicking the randomness and heterogeneous nature of human brain networks have been proposed.

The Animal Behaviour and Cognition Programme focused on evolution of social behaviour and communication. Projects on political ecology of campaigning to label the wild pig as 'vermin' in Kerala, the role of local ecological knowledge and environmental values in conserving pangolin species in NE India are being pursued.

A study involving the diversity present in salutations systems of the traditional Indian Martial art – Kalaripayattu has been completed as a part of Science Communication Programme.

Under Inequality and Human Development Programme, a study on migration, urbanisation and food security involving primary survey of 600 low-skilled migrant members to understand their food security situation in cities for promoting just and inclusive urbanisation has been completed.



A framework for evaluation of the Sundarbans 'Blue Economy' has been developed. Household income accounting from various sources along with impacts of natural hazards on economy has been completed in 2 blocks (1500 observations). Economic impact analysis of DRDO has been undertaken.

The Education Programme focused on gifted and talented children through intensive teacher training and mentorship for children for five years. The model was implemented in Army Public schools, Jawaharlal Navadoya schools and Kendriya Vidhlaya.

In Urban and Mobility Studies, a baseline survey has been completed among 400 sexual and gender minorities in Chennai for developing an intervention model to integrate viral hepatitis prevention services within HIV prevention services of targeted interventions in India. The association between sexual and gender identity stigma, COVID-19 economic stressors on mental health and HIV risk of transgendered women in South India have been studied.

As a part of Cultural Heritage, Science and Society, early connections between Tamil Region and Thailand during 1300 to 1200 BCE based on known examples of high-tin (22%) beta-bronzes from Adichanallur near Tuticorin were discovered. A new insight was gained on the ancient city of Vallabhi, the Maitraka Dynasty's capital from the fifth to eighth centuries, using mainly satellite images along with historical records. The megaliths of Vidarbha, Kashmir, Kumaon and Meghalaya were studied as a part of creating database of Indian Megaliths. The cultural practices and ancient material culture of local communities of the Nilgiris is being studied.

Under Consciousness Studies Programme, how well-being transcends clinical definitions to emerge as a spiritual attitude and lived experience was explored. The movement, change, and self-integration as dynamic contributors to well-being was examined. Themes related to intersection of knowledge systems, well-being, and metaphysical inquiry and aesthetic traditions are being addressed.

The International Strategic and Security Studies Programme focussed on international treaties, control regimes, etc. on the development of space technologies in the country, maritime security governance of SE Asia and the QUAD strategy for SE navies. NIAS-CISAC Silver Jubilee Dialogue on thematic topics on Ongoing Wars and Fallouts, Space Security and Sustainability was conducted in November 2024.

The Conflict Resolution and Peace Research Programme focusses on building conflict data base on national and global conflicts and social impact assessment. Some of the major studies were related to natural resources and people's movement in Odisha, Maoist insurgency, etc. Conflict Annual and Conflict Weekly are published regularly.

Under Science, Technology, and International Relations Programme, area studies on Europe, China, East Asia and Pacific and Pakistan, Polar and Ocean studies. were continued. Europe Monitor, China and East Asia Reader, Pakistan Reader, Africa Monitor, were issued regularly including daily brief on these areas. Discussions were held on various topics related to global political scenarios under Global Politics Young Voices programme. The World This WEEK is published weekly.

First Polar Dialogue was organized as a1.5 Track initiative jointly by NIAS and MEA. Government officials, diplomats, academia and young scholars participated in this event.

Many new projects related to impact assessment of weather and climate services, blue economy, small and modular reactors and net zero, climate migration, site selections for SMR and BSR, energy transition, cultural heritage sites, economic impact of DRDO, natural resources utilisation plan, etc. were secured. This will help to tide over financial difficulties.

Ten new students were inducted in the doctoral programme. Six students were awarded doctoral degree during 2024-25 from the Manipal Academy of Higher Education and Transdisciplinary University, Bengaluru.



37th NIAS Programme on 'Transformational Leadership' for Senior Executives, 1st Programme on Humanistic Leadership in an AI-Driven World, NIAS-DST Programmes on Advanced Technologies for Urban Development, Policy for Science and Science for Policy, Space Ecosystem for National Security, Leading from Within: Leadership Programme on Personal Mastery and Role Excellence, were conducted.

Annual Memorial Lectures, in the memory of Raja Ramanna, CV Sundaram and RL Kapur were conducted. Apart from these lectures, many public lectures and Wednesday Discussions were continued.

Important visits include, HE Ms Baiba Braze, Foreign Minister, and HE Mr Juris Bone, Ambassador, Republic of Latvia, Dr AK Mohanty, Chair, Atomic Energy Commission, Prof Rajeev Gowda, Former Member of Parliament and Prof WPS Sidhu along with 15 Graduate Students from New York University.

Many faculty members received many awards this year. Notable among them is, Prof Sharada Srinivasan, was elected as the Fellow of the American Academy of Arts and Sciences and awarding the civilian honour 'Padmashree' to me by the Government of India.

The activities related to sustainable development goals, climate change and energy transition, focus on cultural heritage and international strategic and security studies have brought visibility to NIAS and these themes will be pursued in future to sustaining NIAS activities.

Shailesh Nayak Director, NIAS





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Mr Debashish Dutta Gupta

NIAS looks forward to receiving continued support from our well-wishers, funding agencies and all others towards actualising our research and academic mandate.





The activities of NIAS are organized under four schools: Conflict and Security Studies, Humanities, Natural Sciences and Engineering, and Social Sciences. The following is a summary of the major outcomes and achievements of the various programmes and initiatives of the four schools at NIAS.

1. CONFLICT RESOLUTION AND PEACE RESEARCH

Conflict Resolution and Peace Research Programme focuses on conflict resolution, social impact assessments, and building a conflict database on national and global conflicts. The programme also aims to build capacity amongst young scholars and train them to analyse conflicts and peace research through its courses, PhD programme, annual conclaves and publications. The programme published the following volumes: Negotiating Development at the Margins: Natural Resources, Conflicts, and People's Movements in Odisha; Maoist Insurgency, State and People: Overlooked Issues and Unaddressed Grievances; NIAS Conflict Annual 2024; and NIAS Conflict Annual 2025. NIAS Democracy Programme, International Conflict History Project and NIAS-IPRI Annual Conflict Workshops are a few big programmes.

2. SCIENCE, TECHNOLOGY AND INTERNATIONAL RELATIONS

Science, Technology and International Relations Programme examines international relations from a science and technology (S&T) perspective, and vice versa. The programme has a special focus on Area Studies as a part of its focus on Global Politics – looking at Pakistan, China, Africa, Europe, and Polar and Ocean Studies. The Area Studies bring regular briefs (daily/weekly/monthly) on the respective regions. The Area Studies also aims to build capacity amongst the young scholars through annual conclaves, online and summer courses, young scholars' workshops, and publications. The programme published the following: The War in Gaza, Vol.1; NIAS Global Politics Annual; NIAS Indo-Arctic Annual; and NIAS Africa Annual. Besides the above annual, the programme also continued with its flagship weekly: The World This Week.

3. INTERNATIONAL STRATEGIC AND SECURITY STUDIES

The emphasis of the programme is on integrating complex elements of science and technology with policy, geopolitics, strategic and security dynamics. Research towards identification and analysis of international treaties, policies and export control regimes including civil and defence technologies which may impact the supply chain for development of defence space technologies is being carried out. Research in the programme examines technologies such as drones, AI, Geo-intelligence, Electronic Warfare etc at play in Russia-Ukraine and Israel-Gaza wars. Another goal is development and application of software and analysis tools for issues such as Space Domain Awareness. Maritime security governance of Southeast Asia and the QUAD strategy for capacity building of Southeast Asian Navies is being researched. Field visits to Japan, Singapore, Vietnam, and Indonesia have resulted in addressing the security priorities of Southeast Asia concerning maritime security and the perspectives of Southeast Asian scholars on QUAD's role in providing support. The need for regional cooperation in underwater domain awareness is being studied. Indonesian concerns about the increasing underwater security threats have been researched. Scenario generation for a potential conflict in space is being researched, leading to a potential war gaming tool.

4. CONSCIOUSNESS STUDIES

Consciousness Studies Programme's research addressed themes at the intersection of knowledge systems, wellbeing, and metaphysical inquiry, drawing on sources including indigenous healing practices, classical Sanskrit texts, and aesthetic traditions. Doctoral research completed this year explored Kerala's mantravāda narratives, performance theory in Tirayāṭṭam and Sarppamtuḷḷal, and tribal healing among the Adiyan, Mavilan, and Nilambur Valley communities. The ICPR-supported project examined health as a lived and integrative process. A new project focuses on retelling classical Sanskrit texts for younger generations. The 'AI Futurelines' initiative studied awareness and self in relation to contemporary discussions. Outreach included a workshop on spirituality and consciousness studies, a focus group on body-mind-self integration with diverse professionals, and international collaborations with institutions such as Archbridge Institute



(Washington DC) and Stony Brook University. Various interdisciplinary discussions continued through the 'Reading Glass' series and other online forums.

5. HERITAGE, SCIENCE AND SOCIETY

NIAS collaborated with Tamil Nadu State Department of Archaeology in the Antiquity of Iron Report released by Chief Minister on the earliest known AMS dates worldwide for iron from around 3000 BCE. Contributions in archaeoastronomy on alignments of monuments and megaliths to the sun and solstices were recognised. A research on Chinese monk and traveller Xuanzang to Buddhist sites in 'The Xuanzang's Trail' was carried out.

6. ANIMAL BEHAVIOUR AND COGNITION

The main focus of the Animal Behaviour and Cognition Programme is to investigate human-animal interactions and behaviour across a range of species and environmental contexts with the larger objective of promoting biodiversity conservation and a more equitable human-wildlife coexistence. The major projects that were engaged in for this purpose include: human-primate interactions in southern and northeastern India, human-elephant interactions in northeastern India, behavioural adaptations in Deccan mahseer juveniles, ant and spider assemblages in urban Guwahati, patterns characterising wildlife trade in southern India, community-led models to protect wildlife from illegal hunting and trade in Nagaland, distribution and abundance of pangolins in northeastern India, human-wild pig conflict in southern India, ecological flexibility in the slender loris and the role of gut microbiota as a driver for wildlife crop raiding. Other studies on traditional ecological and health systems in South Asia, nutritional benefits of crop raiding behaviour in macaques and the development of an archive of Puroik oral literature from eastern Arunachal Pradesh, northeastern India were also carried out.

7. COMPLEX SYSTEMS

Introduction of a novel chaotic trajectory termed the Universal Orbit. A research study exploring the connections between universal orbits, normal numbers and brain-inspired machine learning has been initiated. A speed-up of 10X was achieved in learning tasks using properties of these orbits.

For the first time, a random heterogeneous extension of Neurochaos Learning (a brain inspired machine learning architecture), was proposed where various chaotic neurons are randomly placed in the input layer, mimicking the randomness and heterogeneous nature of human brain networks. These newly proposed learning algorithms consistently outperformed homogeneous learning architectures and classical machine learning/deep learning algorithms. An Indian patent application titled 'A Chaos-Causality Driven Pruning Method for Neural Networks to Improve Efficiency Without Loss of Performance' has been filed in October 2024.

8. ENERGY, ENVIRONMENT AND CLIMATE CHANGE

Energy, Environment and Climate Change Programme (EECP) addresses key challenges to ensure the sustainable development of India's energy sector so that India can overcome its development deficit while protecting the environment and public health and progressing towards its long-term goal to contribute fairly and equitably to the global effort to mitigate climate change. Specifically, EECP faculty are engaging with policymakers in the Atomic Energy Commission, NITI Aayog, Ministry of Environment, Forest, and Climate Change (MoEFCC), Ministry of Power, Ministry of Earth Sciences, and the office of PSA through peer-reviewed papers, research reports, and policy briefs, as well as through participation in meetings. These contributions are recognized by the Government by nominating the relevant EECP faculty as members of official Government delegations to the UNFCCC Conference of Parties (Dr Tejal Kanitkar) and the Intergovernmental Panel on Climate Change (Dr Tejal Kanitkar and Prof Gufran Beig) as well as expert members of various working groups and committees related to energy security (Prof R Srikanth), air quality (Prof Gufran Beig), and climate change (Dr Tejal Kanitkar). Their focus on research-based policy advocacy has contributed to policy formulation and impact at the highest levels of the Government of India.

Further, EECP faculty have gained recognition for their project conceptualisation and delivery not only from the Government but also from several blue-chip companies like, Reliance Industries, Tata Power, Hindalco, Adani Power, Bajaj Energy, Tata Consulting Engineers, etc. Large projects from these companies



have been secured to help them in their entry into nuclear power, thereby contributing to NIAS finances in a significant manner. EECP's policy-focussed research and its ardent advocacy by Director, NIAS have also made a significant impact on the Government's decision to reconsider the 2015 MoEFCC mandate to install Flue Gas Desulphurisers (FGDs) in 537 Thermal Power Plants (TPPs) in the country. This is likely to help TPPs avoid capital investments to the tune of Rs.1.2 lakh crores, besides reducing the impact of FGDs on Climate Change and India's water security.

9. SCIENCE COMMUNICATION

Science Communication Programme aims to strengthen the science-society relationship in India by integrating knowledge from science, social and behavioural sciences and communication studies. Last academic year the programme implemented two projects – 'Student-Scientists: A Network of Students for Monitoring the Impact of Climate Change and Communicating the Risk of Natural Disasters in the Coastal Regions of Kerala and Karnataka' and 'Kalarippayattu (A traditional Indian martial art) and Wellbeing'. As part of the student-scientist project a network involving 120 school children, 40 college students, 24 school teachers and teacher trainees were established to monitor and communicate the impact of climate change on the coastal ecosystems of the Karnataka state. Additionally, the programme organized a two-day workshop titled Environmental Psychology and Climate Change and conducted a course on Conservation Psychology for MSc and PhD students.

10. EDUCATION

Education Programme rests on the premise that the education system in India is entrapped in several contradictions. Attempting to match local and national priorities with global regimes, the programme works on connecting research with teaching, advocacy and policy. Identifying critical issues in education, the current research priorities are: Integrating education for the gifted and talented in formal school education, early career mentoring and challenges for women in STEM; women in leadership in higher education, learning analytics in higher education; interlinkages of vocational education, school dropout and livelihoods; exclusion in education and teacher professionalism.

11. INEQUALITY AND HUMAN DEVELOPMENT

Inequality and Human Development Programme has aimed at understanding, theorising, and providing directions for intervention around the nature of socio-economic inequality in India. The programme included five themes: migration, technology, gender, autonomous adaptation to climate change, and aggregation. The programme has now expanded further into sustainability and inclusion in coastal economy, socio-economic development evaluation, policy critique, concerns around land and agrarian transition, and questions around rural-urban transition, migration and urbanisation. Funded research studies are well underway in these directions. While the final purpose is to evolve policy formulations and suggest interventions, the programme also seeks to contribute to a richer scholarly and public discourse on development in India, as well as to more novel theorisation, more expansive conceptual reach, and broader spatial coverage.

12. URBAN AND MOBILITY STUDIES

Urban and Mobility Studies Programme explores social, cultural and political-economic dimensions of urbanisation and rural-urban migration in India, including transformations in land, urban environments and inequalities, and labour, through an interdisciplinary lens. The programme also focuses on issues faced by sexual and gender minority communities in cities, especially the interconnections between stigma, mental health and health inequity. Work completed this year includes a study of women workers in the readymade garments industry and another on construction labour contracting, both carried out in Bengaluru. Ongoing research includes several projects on the health risks of sexual and gender minority communities in urban spaces.

TRAINING PROGRAMMES

A total of six training programmes were conducted. These include the 37th NIAS Programme for Senior Executives; Humanistic Leadership for India in an AI Driven World – A Unique Programme for Leaders and Decision-Makers; Programme on Space Ecosystem for National Security; Leading from Within: Leadership Programme on Personal



Mastery and Role Excellence; and two NIAS-DST Programmes on Advanced Technologies for Urban Development; and Policy for Science and Science for Policies.

DOCTORAL PROGRAMME

NIAS is recognized as a centre for research by Manipal Academy of Higher Education (MAHE), the University of Trans-Disciplinary Health Sciences and Technology (TDU), Defence Institute of Advanced Technology (DIAT) and Indian Maritime University (IMU) from which students get their PhD degrees. At present there are seventy-seven students pursuing interdisciplinary research in natural and engineering sciences, social sciences, humanities and arts. A total of six students were awarded PhD degrees last year.

OUTREACH

NIAS has initiated various means of outreach for extending news and updates of the academic achievements of faculty members. The lectures delivered by NIAS faculty and the public programmes organized by NIAS were conducted using the online/offline mode.

SCHOOL OF CONFLICT AND SECURITY STUDIES

Programmes

- Conflict Resolution and Peace Research
- Science, Technology and International Relations
- International Strategic and Security Studies





SCHOOL OF CONFLICT AND SECURITY STUDIES

The School of Conflict and Security Studies, has three programmes – Conflict Resolution and Peace Research (CRPR) Programme, International Strategic and Security Studies Programme (ISSSP), and Science, Technology and International Relations (STIR) Programme. The three programmes of the School complement each other in terms of research focus and activities. While ISSSP looks at larger security issues, CRPR looks at conflict resolution and peace research, and STIR adds value by merging S&T with diplomacy and global politics. The School works closely with various departments of the government, from Defence Research and Development Organization (DRDO) to Department of Science and Technology (DST). The School also maintains links with several international institutions and scholars.

Programmes

- Conflict Resolution and Peace Research
- Science, Technology and International Relations
- International Strategic and Security Studies





Introduction

Conflict Resolution and Peace Research (CRPR) Programme focuses on the following: conflict resolution, social impact assessments, and building a conflict database on national and global conflicts. The programme also aims to build capacity amongst young scholars and train them to analyse conflicts and peace research through its courses, PhD programme, annual conclaves and publications.

Research Activities

The programme has two primary pillars - Conflict Resolution and Peace Research.

On Conflict Resolution, the programme attempts to pursue evidence-based research on individual conflicts and aims at a larger conceptualization of conflict. It studies the individual conflicts in-depth with the twin purpose of identifying elements that can be used to resolve them in achieving peace, as well as to further develop the overall understanding of conflicts and their resolutions. The process of engagement with conflicts takes a conceptual route to identify the issues and contenders of the conflict that otherwise remain inadequately addressed in most other platforms.

On Peace Research, the programme aims at studying "peace" as a political process, with an objective to provide policy inputs to the State and the society. In particular, the Programme researches "peace processes" across the world – their successes and failures. It tries to answer why these processes do not always end up in peace. In particular, it aims to study and find answers to the last mile problem in peace processes. In terms of regions in studying conflicts and peace, the programme has a special focus on the following: India's Northeast; Left-wing affected areas, J&K, Sri Lanka, Myanmar, Pakistan and Afghanistan.

The programme also believes in capacity building and disseminating of knowledge and practice about conflicts and peace processes with a larger objective to influence both popular perceptions and policies aimed at conflict resolution and achieving peace. A series of research backgrounders ranging from conflicts in the Northeast to the Maoist conflicts in India have been published offering substantial and critical knowledge on each of these. The programme thus seeks to intervene in the knowledge about conflict and peace research in three major ways: research, teaching, and policy interventions.

Major Projects/Research Areas

Socioeconomic Impact Assessment of Development Projects and Corporate Social Responsibility (CSR) Engagements: Around the principle of 'development as a social' process, the socioeconomic impact assessment of the planned and implemented development projects and the social engagements of the industries through CSR activities are studied and evaluated. These studies of socioeconomic impact assessment analyses, monitors, and manages the (un)intended social consequences (both negative and positive) of planned development interventions and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable, equitable biophysical and human environment. In this process, we intend to collaborate with industries and other agencies of development to offer comprehensive evaluation of socioeconomic impacts that would help the development process more inclusive and participatory. Currently, the programme is conducting a socio-economic impact assessment for the Numaligarh Refinery Limited (Assam).

Democracy, Decentralization, and Governance: The status, role, and functions of democracy, decentralization, and governance around the conflict prone areas of India are important areas of study. We investigate and engage with the crucial interactions between the formal and informal institutions in the decentralization process, cooperative federalism and local governance, ethnic assertion and demands for autonomy, and the local delivery mechanism and efficacy in the Northeastern states and the states affected by the Maoist conflict. Currently, we are conducting two research studies- formal and Informal Decentralization in Manipur and Mizoram and Cooperative Federalism and Local Governance in Assam, Nagaland, Odisha, and Chhattisgarh.



A new initiative, NIAS Democracy Forum, is involved in organizing lectures, training programmes for young scholars and researching on the areas of federalism, local governance, electoral politics and participatory democracy. Supported by the Hanns Seidel Foundation, Germany, we are carrying out studies on 'Effective Fiscal Federalism for Viksit Bharat'.

Development, Resource Distribution, and Conflict: Around the broader theme of 'Development and Conflict,' we investigate the uneven distribution of resources and the conflicts (read people's movements) in India's Scheduled Areas. The demands for fair share and ownership over natural resources take the shape of several people's movements resisting the development interventions of the State. The conflicts in Odisha over the issue of natural resource distribution have been studied.

Left-Wing Extremism (Maoist Conflict) in India: The Left-Wing Extremism (Maoist Conflict) is dominantly understood through a security perspective without adequately engaging with other critical aspects like grievances of people, governance deficit, faulty development models, and the possibility of dialogue between



Participants of a Round Table Conference on 'Cooperative Federalism and Local Governance in India' jointly organized by NIAS

Democracy Forum and Hanns Seidel Foundation, Germany, September 25, 2024.



Workshop for the Early Career Researchers and Faculty Members 'On Democracy' organized by NIAS Democracy Forum with Hanns Seidel Foundation, Germany, July 4 and 5, 2024.



the State and the Maoists. Along with the security perspective, the immediacy of addressing the grievances of the popular movements independent of the Maoists and the governance and development aspects in the Maoist-affected areas is studied.

NIAS Conflict Annual Study: The Conflict Annual is a collection of special essays, commentaries and short notes published during the first quarter, looking at major developments during the previous year. The Conflict Annuals aim to identify major conflicts, nature, geographies, issues, actors, trends and trajectories of major conflicts throughout the year. By studying the state of peace and conflict, the annual tries to predict probable evolution, trajectories, breakthroughs, and hotspots of major conflicts in the upcoming year.

NIAS Conflict Weekly: Conflict Weekly is a flagship publication under the CRPR programme, published every Friday. It is a weekly analysis of the conflict and peace processes across the world. It covers issues relating to peace and conflict from East Asia to Latin America. Additionally, it looks beyond the traditional definition of conflict by discussing climate change, gender and migration. The primary objective of this publication is to study contemporary conflicts and peace processes, tracking issues, actors and trajectories. Conflicts are analysed on a weekly basis to track and forecast on its trajectories.

Study on Contemporary Conflicts: The study focusses on ongoing conflicts across the regions. Currently, the study is looking at three conflict theatres – Gaza, Ukraine and Sudan. The programme published the first volume of "War in Gaza" in October 2024. The second and third volumes in the series will be on Ukraine, to be published in 2025.

D Suba Chandran, *Professor & Head*Anshuman Behera, *Associate Professor*Doctoral Students: Aparupa Bhattacherjee, Hrudaya Chandana K, David Jangminlien, Saransh Kumar, Hrudaya C Kamasani, Zarnain Manzoor, Nitin Rawat, Rahula Kumar Swain, Jenish Anil Trivedi





SCIENCE, TECHNOLOGY, AND INTERNATIONAL RELATIONS PROGRAMME

Introduction

Science, Technology and International Relations (STIR) Programme examines international relations from a science and technology (S&T) perspective, and vice versa. The programme has a special focus on Area Studies as a part of its focus on Global Politics - looking at Pakistan, China, Africa, Europe, and Polar and Ocean Studies. The Area Studies bring regular briefs (daily/weekly/monthly) on the respective regions. The Area Studies also aims to build capacity amongst the young scholars through annual conclaves, online and summer courses, young scholars' workshops, and publications.

Research Activities

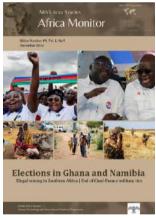
The programme has an exclusive focus on Global Politics through its Area Studies initiative, Pakistan, China and East Asia, Africa, Europe, and Polar and Oceans. All five Area Studies at NIAS serves three purposes – capacity building, research and publications, and create a network.

Area Studies-Pakistan: As a part of the area studies initiative, the Institute started a focused study on Pakistan in 2020. The aim is to study contemporary Pakistan with a comprehensive and regular focus looking at issues ranging from politics, economy, and society to climate change. The initiative also intends to build a team of young scholars studying/researching Pakistan within India, and create a global network such scholars. In December 2024, the programme organized its First Pakistan Annual Conclave in collaboration with Pondicherry University and Indian Council of World Affairs, New Delhi. A half-day workshop themed "Pakistan at 77" was also organized in August, 2024.

Area Studies-Africa: The area studies programme on Africa was started in 2021 and aims to study contemporary Africa from an African prism. It covers multiple verticals including internal politics, peace and conflict, governance, regional dynamics, insurgencies, civil-military relations and external relations. The study aims to build a network of scholars studying African affairs. It also aims to be a platform for interaction with scholars in Africa and Indian scholars studying Africa. The area studies include a series of expert lectures, workshops, and publications, including a Monthly and an Annual, exclusively focused on Africa. As part of the area studies, a focused study was carried out on "Coups in Africa," investigating the causes, tracking the course, and identifying the consequences of the coups in Mali, Niger, Guinea, Burkina Faso, Gabon, and Sudan in 2023. As part of the study, a Young Scholars' Workshop was conducted at Kristu Jayanti College, Bengaluru in October 2024. The workshop concluded a collection of essays on "Coups in Africa: Course, Cause and Consequences".

Area Studies- Europe: The Europe Area Studies was launched in 2021 under the Area Studies Initiative within NIAS. The primary objectives of the NIAS Europe Studies include, developing expertise on the region, creating a platform for scholars working on Europe and creating a network through young scholar workshops and international dialogues.

It publishes "Europe Monitor" which is a monthly and a Daily E-brief on Europe, including an evening alert on War in Ukraine. NIAS Europe Studies was until 2023 supported by the India Office of the Konrad Adenauer Stiftung (KAS). In collaboration with KAS, Kristu Jayanti College, Bengaluru and other partner institutions, the area studies organized 25 expert lectures, two annual conclaves on contemporary Europe and four Indo-German Dialogues.









NIAS-KJC Lecture Series: An interaction with HE Baiba Braže, Foreign Minister of the Republic of Latvia on 'Contemporary Europe & The Future of World Order'.

Area Studies-China, East Asia, and the Pacific: The fourth area studies on China, East Asia, and the Pacific (CEAP) within the STIR programme was started in December 2023. The area studies aim to provide a daily brief on contemporary developments within China and its external engagements. Daily developments are categorized under the following sections: Internal (Politics, Economy, S&T), Regional (China's interactions primarily with East Asia, Southeast Asia, South Asia, the Pacific, and also with other regions including Europe, the Americas, Africa, and the Middle East), Big power politics and China's global power projections. CEAP aims to build an online database on China by collating information from different regions and/multiple sources. The objective is to capture different narratives and make sense of information and disinformation. Two workshops on "China in South Asia" were conducted. It looked at the presence and influence of China in the South Asian region. CEAP also conducted the First Annual South Korea Conclave at NIAS, in collaboration with the Consulate General of the Republic of Korea, Chennai. The conclave looked at contemporary South Korea and its influence on the global order.

Polar and Ocean Studies: NIAS Polar and Ocean Studies is our latest area studies initiative launched in 2024 and aims to study the polar regions – Arctic and Antarctic along with the Himalayas. On the Oceans, it aims to study the following verticals: Governance, Conservation, Blue Economy, Security, Infrastructure, Ocean Health, Ocean Science, Ocean as a Global Common and Maritime Security. Polar and ocean research plays a key in developing a knowledge database on the unknown horizons in the earth's system. We are currently witnessing vast changes in the form of ocean temperatures, shrinking of glaciers, and ice sheets in the polar regions which could lead to critical impact on the seas, life in the ocean and land. This makes it essential to understand the nature of the polar regions and oceans through a multidisciplinary approach.

Focus on S&T through International Relations: As a part of its focus on the interaction between S&T and International Relations, it aims to focus on Space, Cyber, AI, Critical Minerals etc through global governance – in terms of institutions, legislations and international interactions on the above.



The programme coordinates the "BRICS Young Scientists Forum (BRICS-YSF)" activities. Supported by the Department of S&T, NIAS serves as the BRICS-YSF Secretariat.



NIAS-IISc Policy Dialogue on Frontier Technology: In collaboration with the IISc, during 2024-24, the programme has started a new initiative to look at frontier technologies. The initiative aims to publish a series of policy briefs.

Research and Publications – Four Daily Briefs, Two Weeklies, Five Monthly Monitors, and NIAS Annuals: The STIR programme has been publishing four daily briefs on Pakistan, China and East Asia, Europe, and Ukraine War Alert.

Two Weeklies – "The World This Week" and "Conflict Weekly" analyse developments relating to global politics and conflicts respectively. These weeklies have two/three commentaries looking at the following three questions: What happened? What are the issues? What do they mean?

All five area studies publish a monthly monitor – which contain a cover story, few commentaries, and a collection of daily developments arranged section/issue wise.

The Area Studies now publish an annual. During 2023 and 2024, published two NIAS annuals on "Global Politics" and "Conflicts". In 2025, all the five area studies are in the different stages of publishing NIAS Annuals. In April 2025, we will be releasing "NIAS Indo-Arctic Annual 2025" and "NIAS Africa Annual 2025".

Annual Dialogues/Conclaves: Research, Track-II and Track 1.5: On Europe and Conflicts, we have been holding research and track-II dialogues, an annual dialogue on Contemporary Conflicts. In collaboration with the Ministry of External Affairs, NIAS has started Polar Dialogue," – at Track 1.5 level. Planned as an annual dialogue, it aims to make NIAS a centre of Arctic dialogue in the Global South. It was organized on August 30 and 31, 2024. Started annual conclaves on the Indian Neighbourhood on Pakistan and Myanmar, supported by ICWA.

The inaugural issue of "Indo-Arctic" was released during the dialogue which is published as part of the latest area studies at the institute "Polar and Ocean Studies. The dialogue was divided into five sessions, where scientists and academic experts from the polar region present across India, Norway, Finland, Australia and Germany took part along with senior faculty and young scholars from NIAS and partner institutions.

First Annual South Korea Conclave, 2024: The First Annual South Korea Conclave celebrated South Korea's National Foundation Day and held a cultural performance for Kristu Jayanti College Dance Academy. His Excellency



NIAS-MEA First Polar Dialogue 2024.





NIAS-KJC – Consulate General of the Republic of Korea First Annual South Korea Conclave.



NIAS-ICWA-Pondicherry University Pakistan 2024: First Annual Conclave.



NIAS-Pondicherry University CEAP Young Scholar Workshop: Beijing's Long Shadow.

Chang-nyun Kim Consul General gave a special inaugural address. Kristu Jayanti College Dance Academy gave a multicultural dance performance. Young scholars participated in the poster presentation workshop focusing on contemporary South Korea. Day II held special lectures by experts on South Korea and a series of presentations by young scholars from around the world on South Korea.

First Annual Pakistan Conclave 2024 and First Annual Myanmar Conclave 2025: As a part of area studies, in collaboration with the Indian Council for World Affairs, the programme organized two conclaves, planned to be an annual, at Pondicherry University and University of Mysore.

Research Networks: An important component of the research at the STIR is the creation of exclusive networks on international relations. We work closely with the following institutions: Kristu Jayanti College in Bengaluru, St Joseph's University and Christ University in Bengaluru, University of Madras, Stella Maris College and Madras Christian College in Chennai, Pondicherry University, University of Mysore, and MG University in Kottayam.

About Indo-Arctic: Indo-Arctic Reader is a research outcome of the Ocean and Polar Studies academic initiative. The Monthly includes focused commentaries on the Arctic and the Antarctic and daily updates on contemporary Polar. Indo-Arctic Reader will focus on capacity building amongst young scholars, expert lectures by prominent academicians and diplomats, monthly discussions on Arctic and a Monthly Dispatch – Indo Arctic Reader.

The World This Week: The World This Week (TWTW) is an academic initiative of the Global Politics course at the National Institute of Advanced Studies (NIAS), Bengaluru. The alert, published every Sunday, aims to provide its readers with a ready reckoner of major developments during the week across the world on themes



such as elections, global summits, and appointment of new heads of state among others. This is done under three headings- what happened, what is the background and what does it mean. The alert also contains regular regional roundups of global developments from China to Latin America. The TWTW also provides an opportunity for young scholars at NIAS and its partner institutions to follow and comment on contemporary global developments.

Capacity Building: Young Scholar Workshops and Global Politics, Young Voices (GPYV): The programme organizes regular presentations/events/workshops exclusively for young scholars as a capacity-building endeavour. It allows young scholars to make presentations, publish their findings, and be a part of our network. On August 5, 2024, NIAS in collaboration with KAS, and University of Madras conducted a half-day workshop focusing on the war in Ukraine and the challenges for the actors in the war. Young scholars from both institutions presented papers on endgame of Russia, NATO, such as sanctions, food security, Turkey and Poland's role in the war, and Ukraine's endgame.

China, East Asia, and the Pacific area studies introduced a focused area study on China in South Asia. This study included three workshops that looked at the regional presence of China in the South Asian region. The first workshop held at Mahatma Gandhi University, Kerala looked at China's state of presence and took of influence. The second workshop was held at Pondicherry University titled "Beijing Long Shadow," part of the China in South Asia study. The workshop also included a panel discussion by Nishchal N Pandey the Director of the Centre for South Asian Studies, Kathmandu, Ashish Banik the Deputy Director of Bangladesh Enterprise Institute, Dhaka, and Asanga Abeyagoonasekera the Executive Director of South Asia Foresight Network (SAFN).

D Suba Chandran, *Professor & Head* Doctoral Students: Harini Madhusudan, Rashmi Ramesh, Rohini Reenum, Akriti Sharma, Lokendra Sharma, Ankit Singh





INTERNATIONAL STRATEGIC AND SECURITY STUDIES PROGRAMME

Introduction

The emphasis is towards integrating complex elements of science and technology with policy, geopolitics, strategic and security dynamics. The programme examines key technologies like Hypersonic Weapon Systems in advocating policy. Another is development and application of software and analysis tools for assessment of issues independently. Space, Maritime domain and defence applications of GIS are areas of interest in the programme. Research was carried out on creation of defence space ecosystem for India. The proliferated LEO/MEO space architecture was studied. Electronic warfare techniques for cyber warfare were studied. Research on various subjects that have the potential to foster Australia-India cooperation, particularly in the realm of defence was pursued. Focus was on exploring the possibility of collaboration in the area of underwater domain awareness, which involves creating a comprehensive system for monitoring and detecting underwater threats, such as submarines, mines, and other hazards that could pose a risk to national security.

Research Activities

International Treaties, Control Regimes etc. in the field of civil and military are being analysed with respect to their influence on development of space technologies in the country. Critical technologies such as satellite propulsion, electro-mechanical actuation, sensor and processor for spaceborne applications are being researched. China's success in the area of space technology in the midst of embargos is being studied. Impact of International Cooperation and Technologies such as EW, Satellite EO, AI in the ongoing Russia-Ukraine War are being researched.

Maritime security governance of Southeast Asia and the QUAD strategy for capacity building of Southeast Asian Navies is being researched on the security priorities of Southeast Asia concerning maritime security and the perspectives of Southeast Asian scholars on QUAD's role in providing support.

The need for regional cooperation in underwater domain awareness is being studied. Indonesian concerns about the increasing underwater security threats have been researched. Scenario generation for a potential conflict in space is being researched. Space situation awareness capabilities that lead to early detection and avoidance of co-orbital threats and the international cooperation needed to supplement are being studied. Potential manoeuvres by threat satellites and the required simulation of trajectories are being worked out with a space startup company.

The ease of genetic modification, accessibility of DNA synthesis technology, and lack of comprehensive international oversight raise concerns about the proliferation of synthetic biological weapons. The 1925 Geneva Protocol banned the use of biological weapons, yet none has an organizational structure to tackle the threats posed by them. Given the lack of an effective mechanism and oversight organization, global biosecurity struggles to address the emerging challenges posed by synthetic biological weapons. Research is being conducted to address gaps in existing international norms, treaties, and domestic capacities governing these areas. By doing so, it aims to offer practical and actionable strategies to strengthen India's biosecurity measures effectively.

NIAS-CISAC held online meetings on September 3 and 4, 2024 regarding Scenario Development Dialogue – Space Situational Awareness. A two-day virtual meeting with 2.5 hours each day were held. On the first day, a "Scenario Development Dialogue" (SDD) that examines aspects of an ASAT test conducted in a time of heightened tensions. The goal was to help CISAC and NIAS better understand how a satellite incident/collision would affect relations in a time of heightened tensions, perhaps leading to a crisis, and the debris and escalatory consequences that might occur, and what information sharing and other actions might improve the situation in the scenario.

Under the aegis of the "India–US Cooperation on Global Security Strategic Security Threats of 21st Century a Virtual Dialogue" an online dialogue on "Cybersecurity for Critical Infrastructure" was held on March 6, 2025.



Under the theme of the PowerGrid chaired by Dr Persis Drell, Chair, CISAC the CISAC viewpoint was presented by Dr Chris Ingles, Former Deputy Director of the National Security Agency and the nation's first National Cyber Director. The NIAS viewpoint was presented by Dr BS Bindhumadhava, Chief Operating Officer, POWERGRID Center of Excellence in Cybersecurity, IISc. Under the theme of Nuclear Infrastructure Cybersecurity chaired by Dr Sudhir Kamath, former Director General (MED and CoS), DRDO; the NIAS viewpoint was presented by Dr Gigi Joseph, Head, CISO, Bhabha Atomic Research Centre, Mumbai. The CISAC viewpoint was presented by Dr Gregory Shannon, Cybersecurity Scientist and Fellow for INL's National and Homeland Security Directorate.



NIAS-CISAC Silver Jubilee Dialogue, November 2024.

NIAS-CISAC Silver Jubilee Dialogue was organized during November 12 to 14, 2024 at NIAS. The opening remarks were delivered by Prof VS Ramamurthy, Professor Emeritus, NIAS and Prof Raymond Jeanloz, Chair, CISAC and Professor, University of California.

The Dialogue spread over three days included three thematic topics namely – Nuclear Topics, Ongoing Wars and fallouts and Space Security and Sustainability. Totally nine sessions were included under these topics. Under each session the viewpoints of NIAS and CISAC were presented by the domain experts from either side.

NIAS-CISAC Silver Jubilee event was also convened with a Dr Raja Ramanna Centenary Lecture delivered by Dr Anil Kakodkar, Chancellor, Former Secretary, DAE and Chairman, Atomic Energy Commission, which was well received by the audience.

PM Soundar Rajan, Visiting Professor & Head
D Suba Chandran, Professor
S Chandrashekar, Honorary Visiting Professor
Rajaram Nagappa, Honorary Visiting Professor
N Ramani, Visiting Professor
Prakash Panneerselvam, Assistant Professor
Doctoral Students: Varun Mohan, Virain Mohan, KG Ramkumar

SCHOOL OF HUMANITIES

Programmes

- Consciousness Studies
- Heritage, Science and Society





The School of Humanities is engaged in research in the broad areas of philosophy, psychology, literature, archaeology, history, mathematical modelling, fine arts, and culture. The Programmes of the School currently focuses on philosophical foundations of health sciences; consciousness studies; indigenous healing traditions; integrated information theory; history and philosophy of biology; archaeometallurgy and analysis of ancient metals.

Programmes

- Consciousness Studies
- Heritage, Science and Society





CONSCIOUSNESS STUDIES PROGRAMME

Introduction

The research, outreach and documentation completed by the Consciousness Studies Programme pertained largely to the projects funded by the ICPR, Tata Trusts, and SERB-TARE. The larger goal of the programme is an interdisciplinary and multidisciplinary mandate that tries to connect knowledge, wellbeing and "the beyond" to seek both the manifest and subliminal meanings and experiences of consciousness. The beyond is identified as the unknown space that invokes complex questions and challenges, and that are explored using principles of causality, AI, indigenous healing, metaphysics, ethnography, literature and the arts. This academic year, the focus was on the humanistic and health aspects of consciousness along with a critical approach to the theorization of the self in the context of AI. The overall goal is to bring to the public and interested students and scholars the importance of health, aesthetic pleasure, and knowledge as a triune reality deeply interconnected with consciousness.

Research Activities

The Indian Council of Philosophical Research (ICPR) funded project titled 'Philosophy of Health and the Healing Self' explores how well-being transcends clinical definitions to emerge as a spiritual attitude and lived experience. The project examines movement, change, and self-integration as dynamic contributors to well-being.

A new project on 'Health and Wellbeing in Select Classical Sanskrit Texts of Poetry, Philosophy, Aesthetics and Health – A Retelling for the GenZ (Generation Z) and the GenAlpha', to explore how health and wellbeing are portrayed in select Sanskrit texts of poetry. This study examines works from notable authors and treatises such as Kalidasa's poetry, the Natyasastra, the Chitrasutra, Mahabharata, Subhashita Trisati, and classical Ayurvedic texts such as the Caraka Samhita and Ashtangahrudayam.

Another pioneering outreach and research initiative titled "AI Futurelines" was launched to examine Artificial Intelligence within philosophical and psychological frameworks. The themes focused on awareness and self. Drawing from Advaita Vedānta, the initiative explored how consciousness includes both sense-perception and self-awareness – i.e. the known and the knower – unified in the reflective space of experience. The Self is proposed as an ontological bridge, connecting raw experience with reflective cognition. These insights were shared through engaging social media discussions, prompting reflective dialogue on the nature of the self in an AI-integrated reality.





Outreach

A one-day workshop was held on November 27, 2024 on "Innovations in Consciousness Studies, and the Place of Spirituality in India". The meeting was sponsored by Templeton Religion Trust, Archbridge Institute, Washington DC.

A Focus Group Discussion was held by NIAS on the body-mind-self coordination, and the markers of life-purpose and meaning. The meeting focused on an open-ended list of themes that included mental health in general and with specific discussion on self, memories, inner and outer space, and "what is that which stays".

The Reading Glass: NIAS CSP Reading Glass group continues to engage with different disciplines on matters of importance in humanities. to bring in "consciousness conversations". In March the discussion was focused on "common sense" as a specialised sense capability that requires understanding based on "theory of mind".

Sangeetha Menon, *Professor & Head*Sisir Roy, *Honorary Visiting Professor*Doctoral Student: Pushya Gautama





HERITAGE, SCIENCE AND SOCIETY PROGRAMME

Introduction

The Heritage, Science and Society Programme works on documenting and preserving material culture and tangible and intangible heritage using scientific techniques of materials characterization and heritage documentation. Research areas include archaeological sciences, archaeomaterials and archaeometallurgy, landscape archaeology and geospatial techniques, monumental architecture, crafts documentation, experimental archaeology, conservation science and performance studies in dance and music. Studies are conducted on archaeological materials heritage and archaeological landscapes not only for insights into history of science and technology but also to understand the historical, art historical and archaeological trajectories. Experimental archaeology is also a major area of exploration as a pedagogical tool. Cultural landscapes were explored using geospatial methods such as satellite imagery and supported by ground surveys and site explorations to assess the integrity of cultural heritage landscapes and to make policy recommendations regarding heritage boundaries; such work has been especially useful in the context of Buddhist stupa and monastic sites of brick in Bihar and Andhra Pradesh. Architectural heritage of Karnataka and other regions was explored with respect to quarrying, stone working, and orientations of temples and monuments with respect to astronomical aspects. Initiatives were undertaken for dissemination of traditional knowledge of studies made the programme on metal mirror working and high-tin bronze working. The Nilgiris, a major biodiversity hotspot at the border of Karnataka and Tamil Nadu, with local communities that have distinctive cultural practices and with an enigmatic ancient material culture is also a focus area through the Nilgiri Archaeology Project.

Research Activities

Archaeometallurgy of South Indian Iron Age: With new expertise in the use of portable x-ray fluorescence analysis techniques, new strides are being made for on-site analysis such as of excavated material from Iron Age sites in southern India of gold, ferrous and copper alloy artefacts. Coupled with recent AMS dates which have pushed back the dates for the Iron Age around 3000 BCE in Tamil Nadu, our findings have been shown to be very significant and have been incorporated in the Antiquity of Iron Report of TNSDA. The early dates (at the urn burial sites of Sivagalai and Adichanallur) suggested the migration of Harappan copper smelters to the coastal Tamil region and who then not finding less prevalent copper ores, experimented with more readily available iron ores to 'discover' iron smelting in Tamil Nadu.

Material Culture and Experimental Crafts: Some of the salient sites investigated under the Project on Material Culture and Experimental Crafts are Iron Age-Early historic sites of Adichanallur, Sivagalai, Kodumanal, Thurukurapatti, Mayiladumparai, Keeladi, Krishnagiri. Furthermore, with the help of in situ X-ray fluorescence spectroscopy, surface composition analysis of about 50 artefacts was made in a comprehensive manner to help to characterise the archaeomaterials at the first level. An interesting aspect was the characterisation of early historic terracottas from Nilgiri cairns using x-ray fluorescence analysis pointing to compositional differences between handmade and wheel made terracottas. Important new ethnoarchaeological studies were begun to gain insights into numerous aspects of material culture, while also documenting rare artisanal practices, including making of ritual pottery by indigenous Kota women in the Nilgiris, comparative documentation of pottery making at Manamadurai, Tamil Nadu and Bankura terracotta making practices in Bengal.

Nilgiri Archaeology Project: On Nilgiri Archaeology Project (In collaboration with Ghent University) explored the ethnographic and megalithic collections in Government Museum, Ooty to identify intriguing bronze vessels, metal and ceramic artefacts for further scientific investigations. This was complemented by research on surviving techniques in the Nilgiris by indigenous Kota women potters.

Manuscript Profiling Initiative: Under the collaborative initiative between NIAS Heritage Programme and Hamburg University of Palm-Leaf Manuscript Profiling Initiative (PLMPI), , Hamburg University, a team from NIAS and IISc was sent for training to Hamburg University in advanced analytical techniques of Xray fluorescence analysis on palm leaf manuscripts and other analytical techniques.



Geospatial Studies on Buddhist Heritage of Vallabhi: A recent study has shed new light on the ancient city of Valabhi, the Maitraka dynasty's capital from the fifth to eighth centuries CE. Located in present-day Vallabhipur, Gujarat, Valabhi was a key Buddhist and trade centre. Using historical records, remote sensing, and geospatial analysis, the study identified fortifications and monastic sites, and traced landscape changes suggesting Valabhi once served as a port. These findings offer a clearer picture of the city's layout and historical significance, demonstrating the value of geospatial methods in reconstructing the spatial dynamics of early urban centres. This study was reported in Gujarat editions of Time of India and Deccan Herald.

Megalithic Monuments of India: One of the long-term interests is to create a database of Indian megaliths, with detailed information about megalith types, measured drawings, extent, and distribution etc. Clusters of megaliths outside of the South Indian Megalithic complex have been studied, too. These include megaliths in Vidarbha, Kashmir, Kumaon and Meghalaya. Progress has been made on this with field visits to several monument sites at Krishnagiri in Tamil Nadu.

Indian Temple Architecture: Origins of temple architecture in southern India has been the focus of the study initially, along with investigations into possible influences of the preceding megalithic monument-building culture on temple architecture. Evolutionary trajectories in Dravida idioms of Karnataka and Tamil Nadu have also been studied. Procurement and processing of stone for temple-building, as well as artisanal techniques and identities also form part of the study programme. Also, temple architecture in Nagara heartland as well as the Himalaya have been studied lately.

Archaeoastronomy: This long-term study of the orientation of megaliths and temples, as well as their astronomical implications, continue to receive attention. The identification of what could possibly be the first instance of a sun-facing feature of the Karnataka Dravida temple-building tradition at Badami, as well as two equinoctially aligned temples of the Hoysala period in Late Karnataka Dravida idiom are prominent results of



Mandu Fort Panoramic View.



Indigenous Community of Kotas in Nilgiris, Blacksmith.



Bronze Casting Workshop for Tamil Nadu State Department of Archaeology Students at NIAS, March 27 to 29, 2025.



this study. This ongoing investigation which had been expanded to cover temples in northern India as well as the Himalaya, like the temples of Khajuraho, the Katarmal Sun Temple near Almora etc. has culminated in a research project which has been presented for funding.

Outreach

Organized workshop on '100 Years of Harappa: Through Bronze Age' for Tamil Nadu State Department of Archaeology Students at NIAS, March 26 and 27, 2025.

One-day workshop at Archaeology Department of University of Wisconsin Madison on Experimental methods in Archaeotechnology for Students Course, October 3, 2024.

A master class conducted for Science Gallery, Bengaluru's Carbon Exhibition, entitled 'Carbon, the Elusive Archaeomaterial' for students aged 15 to 28 during May 16 and 17, 2024.

Sharada Srinivasan, Professor & Head
Deepti Navaratna, TV Raman Pai Chair Visiting Professor
S Ranganathan, Honorary Visiting Professor
Srikumar M Menon, Associate Professor
MB Rajani, Associate Professor
S Udayakumar, Assistant Professor
Post-Doctoral Associate: Diya Mukherjee

Doctoral Students: Titir Debnath, Santa Ghosh, Divya Hoskere, Saket Kumar, Sarah Mahajan,

Aishwarya P Mhaske, Shivansh Pareek, Meera Vishwanath

SCHOOL OF NATURAL SCIENCES AND ENGINEERING

Programmes

- Animal Behaviour and Cognition
- Complex Systems
- Energy, Environment and Climate Change
- Science Communication





SCHOOL OF NATURAL SCIENCES AND ENGINEERING

The School carries out original research and policy advocacy in fields as diverse as environmental science, animal behaviour, climate change, nonlinear dynamics, science communication, human-animal interactions, pollution and energy. The school trains a large number of PhD students as well as several young research fellows and project assistants due to the success of its faculty in securing long-term research funding from multiple sources. The faculty is also well-recognized for their policy advocacy and outreach that extends NIAS's standing with the Government and amongst academia. The four Programmes of the School are as follows:

Programmes

- Animal Behaviour and Cognition
- Complex Systems
- Energy, Environment and Climate Change
- Science Communication





ANIMAL BEHAVIOUR AND COGNITION PROGRAMME

Introduction

The primary goals of the Animal Behaviour and Cognition Programme are to understand the evolution of social behaviour and communication, the cognitive foundations of behaviour and to study intraspecific variation in the ecology and behaviour of animals. These core areas of research are complemented by other research interests of faculty members in the areas of environmental decision-making, animal personality, urban ecology, human-wildlife conflict, human-animal studies, environmental education and natural resource conservation. Over the past year, programme members were involved in several different studies that underscore the interdisciplinary nature of work carried out in the programme. All projects by programme members were funded by national (SERB-DST, CSRI-DST, DBT) and international (ERC, Leakey, Rufford, HSI) organizations.

Research Activities

Primate Studies: These included projects on primate gut microbiota, investigation of illegal wildlife trade involving the slow loris and the slender loris, social dynamics in wild bonnet macaques in Andhra Pradesh and synurbic rhesus macaques in Guwahati and Andhra Pradesh, and human—lion-tailed macaque interactions in Tamil Nadu. The studies on primate gut microbiota include two studies on the role of gut microbiota as a driver for crop raiding primates and on the role of gut microbiota in promoting ecological flexibility in the slender loris. The study on the role of gut microbiota as a driver for primate crop raiding completed data collection on three species of macaques and one langur species across southern India and the fecal samples were submitted for genetic analysis. Different primate populations — wild, anthropogenic and captive — were sampled to understand the role of diet on gut microbiota. The slender loris study also completed data collection of loris fecal samples and all the samples were submitted for genetic analysis. Field data collection was also completed for the study on the nutritional benefits of crop raiding behaviour in macaques.

Fish Studies: The focus of these studies is the Mahseer, a group of freshwater megafishes. The objective of the study is to document the alternate behavioural trajectories taken by hatchery reared juvenile mahseers and the coping strategies exhibited by them during encounters with the Alien Invasive Fishes (AIF). This study is the final stage of completion. All the data collection has been completed and the data is being analysed. Based on the findings of the study a draft paper was submitted and uploaded on BioRxiv. The attitudes and behaviours of various stakeholders such as hatchery managers, anglers, government officials, NGOs, general public etc. towards different species of mahseers present in India, were studied with an aim to develop educational programmes and policy recommendations to reduce human pressure on these fishes.

Two collaborative research projects on the political ecology of campaigning to label the wild pig as vermin in the state of Kerala and Investigating the role of Local Ecological Knowledge and Environmental Values in conserving pangolin species in northeastern India have been undertaken. Preliminary research in the area of more-than-human lifeworlds, with a particular focus on interspecies relationships, traditional ecologies, sustainability, and One-Health across urban and rural



Lion-tailed Macaque (one of the primate study species in the primate gut microbial study) on the Highway in Aqumbe, Karnataka.





Grey Langur (one of the primate species in the primate gut microbial study) in a Temple in Mannanur, Telangana.

India. Developing an archive of Puroik oral literature from eastern Arunachal Pradesh, which will document the age-old ethnobotanical knowledge of a starch-producing sago palm *Arenga micrantha*, have been initiated.

Outreach

A Special Interest Group on Integrating Formal and Experiential Knowledge Systems for Wildlife Ecology Research and Conservation Practice in the Future, at the Indian Wildlife Ecology Conference 2024, organized by the National Centre for Biological Sciences in Bengaluru.

A module on Animal Agency for a course on Human-Animal Interactions for Masters students in ATREE, Bengaluru.

Sindhu Radhakrishna, *Professor & Head* Anindya Sinha, *Professor* VV Binoy, *Associate Professor* DBT-BioCARe Fellow: Vani Kulkarni

Doctoral Students: Athira Balakrishnan, Sayan Banerjee, Karshita Bharati, Anmol Chowdhury, Titir Debnath, Sneha Gutgutia, Ashisha Kannadasan, Abhijit Konwar, Shruti Ragavan, Ankita Sharma,

Shubhangi Srivastava, Zakhiya PC





Introduction

Complex systems are ubiquitous. We find complex behaviour occurring in natural phenomena (physical, chemical, biological, climate etc.) and in human designed engineering systems (communication systems, language models, artificial intelligent agents). The charter of the Programme is to undertake the systematic study of such complex systems with the aim of characterizing their dynamics, mathematical modeling of complex phenomena to understand, explain and interpret them, and to design novel computational methods and algorithms to predict and control.

Examples of complex systems include (but not limited to) (a) Human Heart and Brain, (b) Communication Systems, (c) Artificial Intelligent Agents, (d) Social Networks, (e) Climate/Weather Systems, (f) Language Models, (g) Earth System, (h) Economic Systems, (i) Quantum Systems, etc. Complex systems are governed by principles which have both deterministic and stochastic components. For example, a weather system is modelled by nonlinear deterministic differential equations with a stochastic noise component. A deep understanding of complex systems involves mathematical modeling, computational and numerical methods, data-driven analysis including the use of artificial intelligence (machine learning, deep learning, reinforcement learning, transformers, foundational models etc.), optimization techniques, information theory, statistics and causal reasoning.

The Complex Systems Programme has the following focus areas:

- Nonlinear Dynamics, Chaos and Information Theory and its Applications
- Learning in Complex Systems: Artificial Intelligence, Brain-Inspired Machine Learning and Reservoir Computing
- Earth Systems/Climate/Weather Modeling
- Language Modeling
- Causal Reasoning in Complex Systems
- Dynamics on Networks

Research Activities

Investigation into the Chaotic Dynamics of Neural Networks, SERB-TARE: Developed a unifying framework on chaos and causality for deep network pruning. The unifying framework uses Lyapunov Exponents (LE) and Granger causality (GC) in tandem. A novel pruning architectures of deep neural nets using LE and GC was proposed. Its performance was compared with random and magnitude-based pruning techniques. Performance, feature consistency and explainability is found to be better. An Indian Patent was filed based on this work.

Investigations into Mathematical Properties of Universal Orbits of 1D Dynamical Systems and their Applications to Brain-Inspired Machine Learning: Introduction of a novel chaotic trajectory termed the Universal Orbit. A research study exploring the connections between universal orbits, normal numbers and brain-inspired machine learning has been initiated.

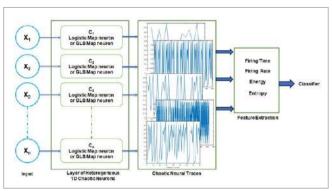
Brain-Inspired Machine Learning (Neurochaos Learning): For the first time, propose a random heterogeneous extension of Neurochaos Learning (a brain inspired machine learning architecture), where various chaotic neurons are randomly placed in the input layer, mimicking the randomness and heterogeneous nature of human brain networks. These newly proposed learning algorithms consistently 'outperformed' homogeneous learning architectures and classical machine learning/deep learning algorithms. Also, simplifying NL by reducing the number of features extracted from the chaotic neural firing and the number of hyperparameters, thereby making it lighter and faster in computation while not losing out on classification accuracy.

Causality in Brain-Networks and Artificial Neural Networks: Ongoing investigation into role of causality in understanding the functional connectivity of brain-networks. This forms the basis of several brain-based quantitative measures of consciousness. Exploration of causality in learning in artificial neural networks,

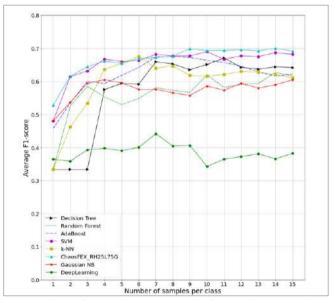


especially in determining which weights can be pruned without losing out on classification performance in terms of accuracy. Also, robust and reliable estimate of causality in multi-variate systems is being explored.

A Novel Backdoor Detection Approach Using Entropy-Based Measures: the recent technological breakthroughs and increased integration of Artificial Intelligence (AI) technologies across various domains, it is imperative to consider the myriad security threats posed by AI. One of the significant attack vectors on AI models is the backdoor attack, which involves maliciously manipulating the model's behaviour by inserting hidden patterns or triggers into training datasets. In this paper our primary focus is on the defences for the backdoor attacks mounted via poisoned training datasets. While many backdoor defence mechanisms have been proposed in the context of text, image, and audio domains, a majority of these defence mechanisms focus on training a specific model to detect backdoor triggers. Our current work proposes a novel model agnostic backdoor detection approach that utilizes complexity/entropy-based measures. In this study, we demonstrate the limitations of currently existing entropy measures -Sample Entropy and Approximate Entropy in detecting backdoor triggers in poisoned datasets. Consequently, we propose a novel modification of the Manhattan metric in the Entropy calculation and incorporate it in the complexity measures. This modified approach is shown to successfully detect backdoor triggers in datasets from not only the Natural Language Processing (NLP) domain, but also from the Financial and



Random Heterogeneous Neurochaos Learning Architecture using 1D Chaotic Maps (GLS and Logistic Maps) for Data Classification Tasks.



Comparative Performance (average F1-score) of proposed RHNL: Random Heterogeneous Neurochaos Learning Architecture (ChaosFEX_RH25L75G) with Chaotic Neurons: 1D Logistic (25%) and GLS Maps (75%) with standalone Machine Learning Algorithms (Decision Tree, Random Forest, SVM, kNN, Gaussian NB) and Deep Learning Architecture for the brain tumour image dataset in the low training sample regime. RHNL Architecture outperforms Deep Learning and ML Algorithms.

Geological domains. The effectiveness of the proposed approach was further substantiated with the high F1 scores in the range of 0.92 to 1.00 across the datasets, and with zero false negatives for the real-world datasets from the Financial and the Geological domains.

Nithin Nagaraj, *Professor & Head*Doctoral Students: Anand Ganesh, Hema S Karnam





ENERGY AND ENVIRONMENT AND CLIMATE CHANGE PROGRAMME

Introduction

Energy, Environment, and Climate Change Programme (EECP) conducts research, outreach, and policy advocacy on critical problems connected to key Sustainable Development Goals, especially, SDG 3, SDG 6, SDG 7, SDG 11, and SDG 13. Specifically, EECP is working closely with various Ministries and Departments in the Government of India on strategies & policies connected with energy security, environmental concerns, water security, and climate change.

Research Activities

The following project and research reports were submitted to the Government of India and other sponsors NITI Aayog, the Office of Principal Scientific Advisor, Modern Energy Cooking Services (MECS), and the Environmental Management and Policy Research Institute (EMPRI) after completing the respective research projects.

Research on India's Transition to Net Zero by 2070 for Tata Consulting Engineers (TCE)

- Low Carbon Development of the MSME Sector in India for Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Chapter on Climate Change Mitigation for India's official submissions to the UNFCCC for the Ministry of Environment, Forest and Climate Change (MoECC), Government of India.

Detailed reports on the assessment of potential sites for Nuclear Power Plants, to the Nuclear Power Corporation of India (NPCIL), NTPC Limited, Jindal Renewable Energy, Hindalco, Tata Power, RIL, and through TCE to Hindustan Mittal Energy Limited (HMEL) and Adani Power. These reports are not available publicly due to confidentiality agreements.

Besides continuing their work on ongoing projects, programme faculty also initiated work on several new funded projects. Projects from Tata Power, Reliance Industries, Bajaj Energy, and Jaiprakash Ventures Private Limited have been secured to assist them in selecting sites for Bharath Small Reactors (BSRs) to provide low-carbon, firm, and affordable electricity to industries. Two projects from Tata Consulting Engineers to provide site selection reports for two clients, viz., Adani Power and Hindustan Mittal Energy Limited. Two projects from Hindalco to assist them in selecting sites for BSRs to partly decarbonize their aluminium smelters in Odisha and Madhya Pradesh. The final report to NTPC on site selection as well as technology assessment of select SMRs and LWRs have been submitted.

A grant from the International Sustainable Energy Fund for a 2-year research project on Small Modular Reactors (SMRs), a 3-year project entitled 'Impact Assessment of Weather and Climate Services of the India Meteorological Department (Phase 1: Agrometeorological Advisory Services)' and a one-year research project entitled, "Circularity for Water-Stressed Towns" have been obtained.

MAHE awarded Dr Aariz Ahmed the PhD for his dissertation 'Interlinking of Rivers for Integrated Water Resources Management'. The 2024-25 Union Budget included Government of India's decision to partner with the private sector for (1) setting up Bharat Small Reactors, and (2) research and development of Bharat Small Modular Reactor. The liberalization of India's civilian nuclear power sector and the deployment of SMRs were recommended by NIAS in the Policy Brief published in November 2023 which was also followed up with extensive consultations.

The NIAS recommendations related to Flue Gas Desulphurisers (FGDs) for Thermal Power Plants (TPPs) based on the programme's long-term research on the thermal power sector are under consideration for implementation by the Government of India after postponing the deadline for FGD implementation by three years. The NIAS report submitted to the Office of the Principal Scientific Adviser is widely circulated in the Ministries of Power



and Environment, NITI Aayog, and the Central Electricity Authority. This report and NIAS's policy advocacy based on this report are now considered to be crucial inputs in the formulation of stack emission standards for TPPs to ensure environmental protection without compromising on electricity affordability, water use efficiency, and climate change commitments.

Outreach

First International Symposium on Nuclear Power to Achieve Net Zero with Energy on October 21, 2024. This symposium was inaugurated by Dr VK Saraswat (Member, NITI Aayog) and several industries, think tanks, and relevant experts participated in this symposium.

Dr Tejal Kanitkar has been selected by the IPCC as an expert to attend the Scoping Meeting for the IPCC Seventh Assessment Report to be held in Kaula Lumpur in December 2024.

Prof R Srikanth was appointed as a member of two working groups constituted by NITI Aayog on Energy Transition and Climate Change. Dr Tejal Kanitkar participated as a member of the Government of India's delegation in COP 29 held in Baku in November 2024. She also participated as an Expert Member in the Scoping Meeting for the IPCC Seventh Assessment Report held in Kaula Lumpur in December 2024, IPCC meeting held in China in February 2025 to finalize the scope of the IPCC 7th Assessment Report, to participate in the Global dialogue on the Biennial Transparency Report (BTR) for the submission to the United Nations Framework Convention on Climate Change (UNFCCC).

Prof Gufran Beig, Dr Tejal Kanitkar, and Dr Sumana Bhattacharya have participated in the IPCC meetings held in Sofia and Kaula Lumpur as expert members of Government of India's official delegation.

A stakeholder meeting to discuss the research conducted on air pollution inventories was organized on November 7, 2024.

R Srikanth, Professor & Head
Gufran Beig, Sir Ashutosh Mukherjee Chair Professor
AV Krishnan, Raja Ramanna Chair Professor
DK Srivastava, Honorary Visiting Professor
Tejal Kanitkar, Associate Professor
Rudrodip Majumdar, Assistant Professor
Doctoral Students: Aariz Ahmed, Tanmay Ghosh, Summaiya Khan, Joan Shilpa Kiran, Rakesh Nannewar, Ankita Ranjan, Kumar Saurabh





Introduction

The Science Communication Programme (SCP) studies the dynamics of the science communication ecosystem present in India and develops strategies for the effective dissemination and education of scientific information using conventional and social media in this multicultural society. Risk communication is one of the focal themes pursued by the SCP and a research project examining the linkage between risk communication strategies practiced during the time of natural calamities such as cyclones and landslides and protective action decision-making by the general public is progressing. This year the SCP implemented the following projects. The project titled Student-Scientist: A network of students for monitoring the impact of climate change and communicating the risk of natural disasters in the coastal regions of Kerala and Karnataka is financially supported by National Council for Science and Technology Communication, Government of India. As part of its activities aiming to bring traditional knowledge systems under the lens of science SCP is implementing another project titled 'Kalarippayattu (a traditional Indian martial art) and wellbeing' in collaboration with the UL Research Centre, Kozhikode, Kerala.

Research Activities

Communicating science with society and promoting bidirectional communication between researchers and non-expert public is key to ensure a healthy science-society relationship and hence achieving conflict-free sustainable development in any nation. The programme studies the perceptions of various stakeholders – scientists, communicators, research scholars, government and non-governmental organizations and the general public- on this vital subject. The programme is also involved in developing and implementing programmes to promote public involvement in research and other science-related activities, make science learning effort free by integrating science communication with science education and encourages scientific thinking, scientific temper and scientising policy-making in Indian society. The major research and outreach activities conducted by the SCP during the last academic year were:

Student-Scientist and Climate Change: This project is building a network of students (from both colleges and schools) at the coastal regions of Kerala and Karnataka and training them to scientifically monitor and report changes brought into their environment and society by the global warming and climate change. Empowering students to communicate the risk of natural disasters in the coastal regions of these states is another objective this project aims to achieve. SCP established the state level node of student-scientists in Karnataka, comprising of 12 schools, selected students from the institutions of higher education, and scientists and college teachers interested in the climate change. A module introducing the scientific methodologies popularly used for monitoring changes happening in various parameters of coastal ecosystem and society was developed. A state level training programme was conducted at BM School, Ullal, Dakshina Kannada District, Karnataka (on December 4, 2024) by involving 120 school children, 40 college students, 24 school teachers and teacher trainees. Training programmes involving children of the fishermen community to focusing climate change adaptation was conducted in the coastal regions of the Thiruvananthapuram district of the Kerala state.

Risk Communication: How people make sense of the scientific information broadcasted on different media at the time of natural disasters such as cyclones and landslides and utilize it for making protective action decisions, is the focal theme of this project. By following an approach integrating media and social media analysis, surveys, and interviews of the stakeholders this project aims to develop effective communication strategies to ensure protective action decision-making during the disaster at every level of the society. Our team is currently conducting surveys in the landslide affected regions of the Kerala state to come out with an effective communication strategy to reduce the impact of this natural disaster.

Conservation Communication: Conservation of animals living in human-dominated ecosystems is not possible without making people aware of the importance of such species. By following an approach integrating the methodologies of conventional ecology and ethology with Iecology and conservation culturomics this project is tracing out the knowledge, attitude, and behaviour of different stakeholders towards mahseers, a group of





Workshop on Environmental Psychology and Climate Change at NIAS, January 27 and 28, 2025.

megafishes inhabiting freshwater ecosystems in India. Members of SCP has completed the study of the attitude of multiple stakeholders from four states, Uttarakhand, Bihar, Karnataka and Assam towards this fish following Conservation Planning Framework (CPF) and the Theory of Planned Behaviour (TPB),

Citizen Science and Science Communication: Involving public in the scientific research conducted by the professional researchers is a win-win situation. Such citizen science project familiarises non-expert volunteers with the methodologies of science and helps scientist to



Student Scientist Workshop at BM School, Ullal, Dakshina Kannada District, Karnataka, December 4, 2024.

collect grassroot levels socio-environmental data. An integrated study of the 'nature walks' a citizen science initiative getting popularity in different states of India was completed.

Outreach

A two-day workshop titled 'Environmental Psychology and Climate Change' involving faculty, students, science communicators and professional researchers was organized on January 27 and 28, 2025.

A two-credit course on 'Conservation Psychology' for MSc and PhD students was conducted in collaboration with ATREE, Bengaluru. Student-Scientist workshop titled 'Coast and Climate Change' was conducted at Puthiyathura, Thiruvananthapuram (May 25, 2024), Alvas Educational Foundation, Mangalore (November 15, 2024) and BM School, Ullal, Dakshina Kannada District, Karnataka (December 4, 2024) were conducted.

A discussion on Artificial Intelligence for Research and Communication (January 6, 2025), a workshop on 'Yoga and Wellbeing' (June 19, 2024) were also conducted.

A Student Scientist Interaction was conducted for the psychology students of the Central University of Karnataka on October 21, 2024.

VV Binoy, Associate Professor & Programme in Charge M Sai Baba, Honorary Visiting Professor Doctoral Students: Anjali Bharati, Ayana Krishnan, Hashim Mohammed, Sreshtha Mondal, Mahendra Singh Rawat

SCHOOL OF SOCIAL SCIENCES

Programmes

- Education
- Inequality and Human Development
- Urban and Mobility Studies





The School of Social Sciences reflects the philosophy of NIAS in creating leaders and changemakers that can provide leadership to the country and the world. The school is home to programmes that undertake research in critical areas through a transdisciplinary approach to understand three domains: education, mobility, and inequality. The methodological consistency across the three programmes allows them to address diverse issues and the specific problems they bring. The issues raised by the Education Programme range from the concerns of the gifted in school education, marginalised students in formal education to the challenges faced by women in the STEM disciplines. The Urban and Mobility Studies Programme provides insights into the continuing and growing links between village, town, and city, as well as the affected population and conditions in each of them. The Inequality and Human Development Programme explores the dynamics of difference, distinguishing between aspirational differences and the responses to inequality. Together, research in the three programmes provide insights into the rapidly changing dynamics of Indian society, even as these ideas influence policies and public discourse through lectures, interventions and policy advocacy on multiple platforms.

Programmes

- Education
- Inequality and Human Development
- Urban and Mobility Studies





The Education Programme is a multi-disciplinary programme that draws on the broad

disciplines of Sociology, Psychology, Technology and History among others. The research work of the faculty of the programme is built on concerns for equity, quality and excellence at all levels of education. The challenges are multiple: how to provide equal and quality education to all? What models and practices of education are suitable for a diverse population? How can local and national priorities be matched with the pressures of global regimes? Attempting to address these challenges, the focus is on connecting research with teaching, advocacy and policy.

Research Activities

Education for the Gifted and Talented: The research programme is currently focusing on expanding the segment of NIAS Advanced Learning Centres through a hybrid model that is integrated with formal schooling in accordance with the National Education Policy 2020. The programme identifies the gifted and talented from grade 6 and 7 through intensive teacher training and provide mentorship to the children for a period of 5 years. The Jawaharlal Navodaya Schools, Kendriya Vidyalaya, Army Public schools and small budget schools will represent the different school environment. The hybrid model of school partnership of the NIAS Advanced Learning Centres was piloted for the first time in 15 Army Welfare Education Society Public schools across India in 2023.

This model was successfully implemented in 32 Army Public Schools across the country through a subscription model. The pilot phase for the Jawaharlal Navodaya schools and the Kendriya Vidyalayas is underway where we are working with about 20 schools across south India. In addition to setting up the NIAS ALC as a sustainable model, the research now is focusing on student assessment using technology to measure the impact of the programme. Currently the NIAS Education for the gifted and talented has trained over 25,000 teachers in India and the world and has established 75 NIAS ALCs across India catering to over 2500 gifted children in the country.

Vocational Skill Policy, Dropout Reduction and Employability among Adolescent Youth: Built on the premise of NEP 2020, the research project on vocational skill policy, dropout reduction and employability among adolescent youth explored linkages between education, emerging vocational skill opportunities and sustainable livelihoods among disadvantaged adolescent youth in Manipur. Specific recommendations based on the research was submitted to the state and national governments.

Learning Analytics in Higher Education: Based on a national study of a sample of universities (2 Public and 1 Private) and colleges (1 autonomous and 4 affiliated colleges) were carried out to understand the interface of technology with higher education institutions with reference to student learning, pedagogic practices, assessment reforms. The study aimed to provide the status of learning analytics in India and its potential to enhance







Conduction of Pre-Test at Multiple School Locations.



the overall quality and experience of learning in higher education institutions by leveraging technology and generating data on student learning, pedagogic practices, and assessment parameters.

Outreach

As part of the outreach activities last year, the NIAS Education for the Gifted and talented, provided intensive training over 75 school leaders, 10,000 teachers across schools in India. In addition, the programme provided advanced training to 2500 teachers of grade 6 and 7 from these schools. A total of 150



Fieldwork at JNV Ernakulam.

facilitators were provided online training to be able to train the gifted children in their respective schools through the NIAS ALCs established in their respective schools. The winter residential workshop was organized for 55 students of the NIAS ALCs.

Anitha Kurup, *Professor & Head*Jeebanlata Salam, *Assistant Professor*Malavika Kapur, *Honorary Visiting Professor*Doctoral Students: Aiswarya T, Anoop M, Tirthankar Chakravorty, Navaindu Joshi, Ekasmayi Joyeeta, Surachita Lal, Souri Majumder, Megha Poonia, Sabna ES, Shashank SR, Shruti Shankar, Varun Sudhakaran





Introduction

The Inequality and Human Development Programme (IHDP) was set up in 2015 to develop policy options based on a multidisciplinary and empirically consistent conceptualisation of inequality, and to contribute towards public discourse to enable more informed policy choices. The programme conceptualises inequality as differences that are ethically unacceptable and suggest policy interventions to help mitigate the adverse effects of inequality.

The programme focused on five interconnected transformations prompted by the larger rural change in India: i) The Left Behind in the Rural Transformation, ii) Technology and Inequality, iii) Inequality and Autonomous Adaptation to Climate Change, iv) Gender and Intra-Personal Inequality, and iii) Inequality of Aggregation. In each case, members of the programme first explored the transformation, identified the associated inequalities, and then pointed to specific interventions to help remove the unacceptable effects of inequalities. This phase of the programme concluded on March 31, 2024, with submission of the reports accompanied by substantial research output spread across scholarly publications, working papers and policy briefs, conferences, and public outreach.

Research Activities

Technology Policy, Rural Transition: A research project on the limits of instrumentalism in India's technology policy has been completed. The research examined the assumption that technology policy can bypass the debates on the conceptualization of technology. Using evidence from an ethnography of a village in Jharkhand, it pointed to the role that the social construction of technology played in the way it worked, especially the informality in the development of skills. The evidence also pointed to the demands technology made on the community.

In another project, the long-term trends in fallows in the context of urbanization were explored. The study showed that as cultivators left agriculture permanently, they tended to leave their land fallow for long periods till they found a viable buyer for their land. In contrast, short-term migrants to the city keep open the option of cultivating the land when urban job opportunities were not available, resulting in shorter-term fallows.

A research project on the consequences of land reform on the districts that recorded the greatest success of the policy in the 1970s, Dakshina Kannada and Udupi was initiated. While most studies look at the impact on the beneficiaries of the reforms this project focused on its effects on those who lost land. The loss of land encouraged the movement of capital out of agriculture leading to a variety of successes in education, finance and Udupi hotels.

Blue Economy: The project on 'Economic Accounting for a Sustainable and Inclusive Blue Economy in India: Case of Sundarbans' plans to finish by April 2026. To achieve this, the project is implementing the following tasks:

- (1) The fieldwork on the economic activities in the Sundarbans, including Fishing, Forestry, agriculture, tourism, etc., and their connection with environmental degradation.
- (2) Based on the data collected from the field, the project is working towards generating the following estimates: First, an estimate of the current magnitude of earnings from the ocean economy and how these earnings are distributed. Second, an estimate of the future magnitude of earnings from the ocean economy and their distribution over a specific period. Third, the project is assessing the potential ecological damage in the future resulting from the growth that is expected to generate these earnings. Lastly, an evaluation of how the impact of ecological damage will affect different sections of the population.



Economic Impact Analysis of DRDO: Currently, the analytical research study 'Economic Impact Analysis of DRDO' (funded by DRDO, New Delhi) is underway and will be concluded in July 2026. This will analyse the economic impact of DRDO to provide a holistic view of the organization, evaluate its strategies, and understand the contributions of the institution – its vast laboratory network, and its projects – over the last fifteen years to industry, employment, entrepreneurship, spillovers, local economies, and to science-technology-innovation. This research project is concerned with the evaluation of large public institutions in their role in economic growth and development.

Rural-Urban Transition and Migration: Another key area of IHDP's research agenda concerns policy-relevant work around questions of rural-urban transition, migration and urbanization in India. Economic growth and structural change in India has changed the sectoral composition of country's economic growth. The importance of rural-farm sector has declined, while the urban-nonfarm activities in manufacturing and services have assumed greater significance in the framework of national income and employment. Compounding the challenge of farm-dependent livelihoods is climate change. Expansion of infrastructure that include highways and Special Economic Zones that have necessitated huge land acquisition in rural areas has further affected the livelihoods of communities traditionally dependent on land. Consequently, the past few decades have witnessed millions of rural dwellers shifting their livelihoods away from farming to nonfarm jobs in cities and towns. But ruralurban transition in India remains slow and incomplete. This is because most low-skilled rural-urban migrants end up in precarious informal urban jobs which, while allowing them to make up for agrarian decline, preclude realistic opportunities for them to carve out permanent urban lives. Most migrants face significant hardship in cities including inadequate access to food security. Against this general background, the IHDP's work in the next year (2025-26) will focus on these pressing issues. More specifically, there are three interrelated themes of work to be carried out in the year ahead. These include (a) migration, urbanisation, food security; (b) climate migration; and (c) rural-urban transitions and commons natural resources.

Outreach

A stakeholders' workshop on economic accounting for a sustainable and inclusive blue economy on February 24 and 25, 2025 was organized. The workshop included former and current senior-level professionals from the Ministry of Earth Sciences, the Zoological Survey of India, the Department of Forests, ISRO, the National Remote Sensing Centre, ICAR, as well as prominent academics from various universities. This workshop generated valuable insights and guidelines for developing a framework for the economic accounting of the blue economy in India.

Narendar Pani, *JRD Tata Chair Visiting Professor & Head*Debosree Banerjee, *Assistant Professor*Chetan Choitani, *Assistant Professor*Anant Kamath, *Assistant Professor*Doctoral Students: Anjali Anil, Ajit Kumar Babu, Chandana R Bindu, Joyeeta Dey, Vishal George, Arslan Wali Khan, Manjusha A, Shilajit Sengupta





Introduction

The Urban and Mobility Studies Programme carries out original, field-based and policy-relevant research on diverse dimensions of urban life, urbanization, and migration, drawing on several disciplinary perspectives. Recent research has examined the social and economic impacts of real estate-led development in Bengaluru and the Amaravati greenfield city project in Andhra Pradesh; informal labour in Bengaluru's construction and readymade garments industries; and climate change induced migration in the Sundarbans. Other research projects focus on issues faced by sexual and gender minority communities in urban spaces, especially the interconnections between stigma, mental health and health inequity. Substantial grants have been obtained to support work in this area.

Research Activities

A study on '3HP Linkages Project: Integrating a community-led, peer-delivered model of prevention, screening and treatment referral services for viral hepatitis (HBV/HCV/HAV) and PrEP within HIV prevention interventions for sexual and gender minorities in India' has been pursued. This study aims to:1) develop a community-based, person-centered model of prevention and care of HIV and HBV/HCV/HAV infections (provision of information, counselling and referrals for MSM and transgender women in Chennai; 2) implement and integrate the '3HP Linkages' model with the HIV prevention interventions of CBOs and assess its feasibility, acceptability and realworld effectiveness. This model is consistent with the Indian government's strategy of involving community agencies in HIV/STI prevention and care, ensuring community ownership and sustainability. The model is also consistent with WHO's (2022) consolidated quidelines on prevention, diagnosis, treatment, and care for key populations. If found effective, this model can be scaled up through the wide network of government-supported targeted HIV interventions and adapted in the National AIDS Control Program, with support from the National Viral Hepatitis Control Programme. During the year, a baseline survey (Phase 1) was completed among 400 sexual and gender minority communities in India. Sexual and gender minority persons were recruited as project staff and received research capacity building training at NIAS. IEC materials generated with community inputs were shared with key populations and relevant healthcare departments in Chennai to raise awareness on viral hepatitis prevention and treatment.

A research project, 'From Delta to City: Climate Change and Migration in the Sundarbans', through pilot studies of 60 households in four villages in two Community Development Blocks in the Sundarbans region of West Bengal has been initiated. The research examines declining incomes of rural households in a context where climate related factors have affected both agriculture and aquaculture production. Our survey of migrants from these villages showed that only seasonal migration of males is preferred, and while this provides some critical cash income to rural households, there is no significant discernible move towards urbanization or socioeconomic mobility.

The research project 'Labour Supply Chains in the Construction Industry: Circular Migrants, Contracting, and Covid' was completed this year. The overall objective of the study was to understand the institutional and governance frameworks that structure the recruitment, deployment and mobility of migrant workers in the construction sector in India. The study focused on two dimensions of the governance of mobile labour: (1) the organization of labour contracting chains and the production process in the construction industry, and (2) the implementation and consequences of government policies and schemes developed for migrant workers, especially following the migrant labour crisis caused by the Covid-19 lockdowns. The study traced the entanglements and co-constitution of 'formal' and 'informal' relationships and processes in the sourcing and control of construction labour. It also documented several shortcomings and contradictions in the policy framework for informal migrant labour, especially stemming from digitalization.

A study report titled 'A qualitative formative research to inform pre-implementation planning of services PrEP services of FPAI: Perspective of potential/recent users, service providers and stakeholders' was submitted





UoTIF-NIAS Workshop on Urban Data Visualization, March 3 and 4, 2025.

to the Family Planning Association of India (FPAI). This intervention is conceptualized in 3 phases: preimplementation, implementation and post-implementation. The pre-implementation qualitative assessment (Phase 1) was conducted across the FPAI clinics in three urban sites in India (Gwalior, Hyderabad, and Thane) from October to December 2024. It gathered perspectives of potential PrEP users, stakeholders and project/ clinic staff views on PrEP-implementation, possible facilitators and barriers of PrEP uptake and adherence and strategies for inclusive implementation.

Outreach

NIAS in collaboration with the University of Toronto India Foundation and the School of Cities at the University of Toronto organized a two-day workshop on 'Urban Data Visualization: From Data to Decision' on March 3 and 4, 2025 (organizers: Dr Aleena Sebastian and Dr Srikumar M Menon).

The following lectures as part of the NIAS Urban Lecture Series were organized:

- Para, Padri and Politics of Faith: Interrogating Schism in a Christian Neighbourhood in Kolkata, Dr Abhijit Dasgupta, Assistant Professor of Sociology, VIT Vellore (online), April 30, 2024.
- Imperial Datafication: Sedimented Histories of the Modern Global Data Economy, Dr Preeti
 Raghunath, Department of Sociological Studies, University of Sheffield, UK (online), May 14, 2024.
- Chosen Family and Practical Kinship among Migrant Trans Men in Bengaluru, Dr Agaja Puthan Purayil, Assistant Professor, Gitam University, Vishakapatanam (online), September 24, 2024.
- We Will Keep Clapping till the End, Hijra Narratives on Their Clapping (Taali) by Prof Pushpesh Kumar, Department of Sociology, University of Hyderabad. December 10, 2024.

Carol Upadhya, *Honorary Visiting Professor & Head* Supriya RoyChowdhury, *Honorary Visiting Professor* Aleena Sebastian, *Assistant Professor*

Doctoral Students: Chaithanya K, Himangshu Kalita, Julian Lambolem Roy Jyrwa, Annalisa Rapthap





Beyond Forecasts: Providing Agrometeorological Advisory Services in India

Rakesh Gomaji Nannewar, Tejal Kanitkar, R Srikanth, Shailesh Nayak NIAS/NSE/EECP/R/PB/01/2024

The policy brief present results of a survey of 1800 households in six districts of North Karnataka in India. The analysis demonstrates how District Agrometeorological Units (DAMUs) have helped farmers get better access to weather-based agricultural advice. Their location at Krishi Vigyan Kendras has facilitated the sharing of localised and timely information with farmers. Access to these advisories has resulted in improved crop yields and incomes. The policy brief recommends re-instituting DAMUs based on robust evidence of their importance for famers in rainfed areas in India, especially in the context of increased weather variability due to climate change.

Fallows at a Time of Urbanisation

Narendar Pani NIAS/SSc/IHD/R/PB/01/2025

The policy brief showed that as cultivators left agriculture permanently, they tended to leave their land fallow for long periods till they found a viable buyer for their land. In contrast, short-term migrants to the city keep open the option of cultivating the land when urban job opportunities were not available, resulting in shorter-term fallows.

Impact of EV-Transition on Air Quality and Public Health

Gufran Beig, Jithin Jose and Shailesh Nayak NIAS/NSE/EECP/R/PB/02/2025

This policy brief highlights the air quality and public health benefits of transition to Electric Vehicles (EVs) as a case study for Delhi city. Despite concentrated efforts to improve air quality, control of ambient PM2.5 concentration remains a major concern. Considering that vehicle exhaust emissions are the primary source of PM2.5 in Delhi, switching full fleet to pure electric vehicles can dramatically reduce PM2.5 pollution by around 40%, reduce number of days with "Severe" Air Quality Index (AQI) by 90% and per-capita healthcare costs by 27%. If electrification is done only for light commercial fleet and buses, it can reduce PM2.5 emissions by 20%, resulting in a per-capita health care savings of over 13%. However, there are many practical challenges, like concerns over battery life and driving range, limited DC fast chargers and reliance on imported rare earth elements. Therefore, strategic interventions prioritizing most polluting vehicle first, improving EV infrastructure, and offering financial incentives are essential to realize health co-benefits.

Women Workers in Karnataka's Apparels Export Industry

Supriya RoyChowdhury NIAS/SSc/UMP/R/PB/03/2025

This policy note draws on the report 'Home and the World of Work: The Intersections of Gender, Labour and Capital in Karnataka's Apparels Export Industry' (2024), (https://cividep.org/workers-observatory/workers-voice/#download). The ready-made garments industry as a global supply chain has been viewed very positively as a generator of foreign exchange and of employment for low skilled workers, particularly migrant women. The policy brief highlight benefits of factory work available to low skilled women, while at the same time drawing attention to the need for regulation-based institutional interventions such as a higher minimum wage and greater access to social security than is currently available in this sector.





NIAS has been conducting training programmes in order to develop leadership to address various societal issues through multidisciplinary approaches. The Department of Science and Technology supported two training programmes.

37th NIAS Programme for Senior Executives – January 21 to 25, 2025



Theme: Transformational Leadership

Inaugural Address: The programme was inaugurated by Mr Harish R Bhat, Former Brand Custodian, Tata Sons.

About the Programme: The programme for the Senior Executives is one of the cornerstones at NIAS to develop an effective and responsive leadership in India. Mr JRD Tata and Dr Raja Ramanna envisioned this initiative as a flagship programme of the Institute. Launched in January 1989, the programme has developed a niche for itself at the national level.

This programme is delivered as a series of interactive dialogues with inspiring thinkers and leaders who have reached the zenith of their respective fields of endeavour. The primary objectives and strategies of the 37th Programme were:

- Building deep multidisciplinary understanding of contemporary challenges facing India.
- Understand how leaders meet challenges during times of uncertainty.
- Develop insights on the approach to tackle specific challenges in an uncertain world.
- Develop a leadership network based on shared experiences.

A total of twenty-two participants from various organizations such as Indian Army, Indian Space Research Organization, Defence Research and Development Organization, Aeronautical Development Establishment, Tata Consultancy Services, Mahindra and Mahindra Limited, National Centre for Biological Sciences, Defence Electronics Research Laboratory, Defence Materials and Stores Research and Development Establishment, Indira Gandhi Centre for Atomic Research participated in this flagship programme of NIAS.

A visit to UR Rao Satellite Centre/ISRO, Bengaluru and a dance performance by Nrityagram Dance Ensemble was organized during the programme.

Valedictory Address: The valedictory address was delivered by Dr K Radhakrishnan, Former Chairman, ISRO.

Coordinators: The programme was coordinated by Prof R Srikanth and Prof Nithin Nagaraj. Ms V Girija assisted them in the coordination of the programme.



NIAS-DST Training Programme on Advanced Technologies for Urban Development – February 17 to 21, 2025



Theme: Advanced Technologies for Urban Development

Inaugural Address: The programme was inaugurated by Dr Sudhir Krishna, Former Secretary, Ministry of Urban Development, Government of India.

About the Programme: The programme aimed to have participation from diverse organizations across the country, with a particular focus on the Town Planners among other professionals including scientists and academicians.

The focus of this training programme was to provide the orientation and planning skills required for scientists/ technocrats of the country, and in particular, to offer perspectives on the broader scientific, technological, economic, social and cultural milieu in which the Indian scientific enterprise could flourish in this century. The current rapid pace of scientific and technological advances has far-reaching consequences for the future which requires their understanding and appreciation to derive benefits in cross-disciplinary areas. Hence, the need was felt to provide specialized training modules to apprise future managers and leaders in scientific community of the emerging developments.

The programme was attended by twenty-one mid-level and senior scientist from premier institutions like National Power Training Institute, Survey of India, National Remote Sensing Centre, Punjab State Council for Science and Technology, Traffic and Transportation Division, Centre for Water Resources Development and Management, Kerala State Council for Science Technology and Environment, Birbal Sahni Institute of Palaeosciences, North Eastern Space Applications Centre, National Aerospace Laboratories, Aeronautical Development Agency, Office of the Chief Town Planner, Indian Institute of Remote Sensing and Indira Gandhi Centre for Atomic Research, thus covering diverse departments and across the country.

Valedictory Address: The valedictory address for the programme was delivered by Mr Prakash Belawadi, Theatre Artist, Film Director, TV and Media Personality, Activist, Journalist, Bengaluru.

Coordinators: The programme was coordinated by Prof PG Diwakar and Dr Rudrodip Majumdar. Ms JN Sandhya assisted them in the coordination of the programme.



NIAS-DST Training Programme on Policy for Science and Science for Policies – December 16 to 20, 2024



Theme: Policy for Science and Science for Policies

Inaugural Address: The programme was inaugurated by Prof VS Ramamurthy, Former Secretary, Department of Science and Technology, Government of India.

A visit to the Department of Aerospace Engineering, Indian Institute of Science, Bengaluru was organized during the programme. Prof Joseph Mathew, Chairperson, Department of Aerospace Engineering, gave an overview of the facilities and the visit was coordinated by Mr Duvvuri Subrahmanyam of the Department of Aerospace Engineering.

The programme was attended by twenty-six senior scientists from the government R&D organizations.

Valedictory Address: The valedictory address was delivered by Prof Annapurni Subramaniam, Director, Indian Institute of Astrophysics, Bengaluru.

Coordinators: The programme was coordinated by Prof Sangeetha Menon and Dr Srikumar M Menon. Ms VB Mariyammal assisted them in the coordination of the programme.



Programme on Space Ecosystem for National Security - September 9 to 14, 2024



Theme: Space Ecosystem for National Security

Inaugural Address: The programme was inaugurated by Dr AS Kiran Kumar, Member Space Commission and Chairman, PRL Governing Council.

About the Programme: This short-term programme was aimed at pondering on various aspects of the space eco system to support the national security in the context of current global space scenario of privatization, commercialization and near weaponization.

The overall programme objectives were centred on the defence space systems. It was intended to apprise the representatives of the stakeholder agencies on the intricacies of the above aspects through interactive sessions with domain experts. Twenty-eight representatives from various government and private organizations, public sector companies attended the programme.

A visit to Ananth Technologies Private Limited, Bengaluru and Digantara, Bengaluru was organized during the programme.

Valedictory Address: The valedictory address was delivered by Prof VS Ramamurthy, Professor Emeritus, NIAS.

Coordinators: The programme was coordinated by Prof PM Soundar Rajan and Mr V Gopalakrishnan. Ms JN Sandhya assisted them in the coordination of the programme.



Leading from Within: Leadership Programme on Personal Mastery and Role Excellence – September 23 to 27, 2024.



Theme: Personal Mastery and Role Excellence

Inaugural Address: The programme was inaugurated by Dr Shailesh Nayak, Director, NIAS.

About the Programme: The programme's pedagogy is designed specifically for the Indian context; it equips participants with a wider global perspective that is crucial in today's interconnected world. The programme methodology awakens one's inner compass to effective leadership that is grounded in self-awareness, self-reflection, a robust presence and an ability to read ground-realities with great clarity. The pedagogy also augments the Karmayogi Competency Model (Developed by the Capacity Building Commission) by providing practices for enhancing the "Virtues of a Karmayogi" as well as personalized life-long learning for staying anchored on the "Chaar Sankalpa".

Twelve participants from government and private organizations attended the programme.

Coordinators: The programme was coordinated by Prof Deepti Navaratna and Mr Raghu Ananthanarayanan (Ritambhara Ashram, Kotaqiri, Tamil Nadu). Ms JN Sandhya assisted them in the coordination of the programme.



Humanistic Leadership for India in an AI Driven World – A Unique Programme for Leaders and Decision-Makers – August 26 to 30, 2024.



Theme: Humanistic Leadership for India in an AI Driven World

Inaugural Address: The programme was inaugurated by Prof Pratima Murthy, Director, National Institute of Mental Health and Neuro Sciences, Bengaluru and she emphasized the importance of humanism and the authentic self in leadership.

About the Programme: The vision behind the National Institute of Advanced Studies is the perfect melange of Leadership excellence, Effective response to changing technologies, and Transformative work outcomes. Following the tenor and guiding principles of JRD Tata, the NIAS Programme on 'Humanistic Leadership in an AI Driven World' was the first nation-wide initiative to address the implications and opportunities for top level leaders in an AI driven world, to address facets of leadership from a multidisciplinary point of view. This new leadership programme was conceptualized and designed by Prof Sangeetha Menon.

Twenty-eight nominations were received from various public, private and corporate institutions in India. Twenty-six leaders and decision-makers attended the programme.

The programme was a positive and timely response to leaders who face challenges and conflicts on how to relate with their employees, manage work force and the system in general, in an AI-driven machinic world, and make their leadership approaches more humanistic, participative, motivational, and inclusive. Social psychology says that among the different kinds of leadership styles, the humanistic leadership approach focuses on qualities such as respect for the other, and inspires the unfolding of individual excellence, agency, and creative possibilities. Such a focus is important as India and the rest of the world is moving faster towards AI driven work and living spaces. This new Programme is expected to leverage leadership concepts and experience for top Indian companies to bring in holistic changes both in the leaders and the leadership approaches. The major challenges of the nation and the global existence as a whole today, with implications from an AI driven machinic world, will be the basis for the discussion.

An outdoor event 'Mind-Body Coordination and Self-Awareness Building through Kalaripayattu', with a lecture demonstration by Guru Ranjan Mullarat and his team at Aura Kalari, Chikkagubbi Village, Bengaluru was organized during the programme. The programme participants shared their enthusiastic and welcoming feedback along with their support for the future editions of the programme.

Valedictory Address: The valedictory speaker Mr R Gopalakrishnan, Former Director, Tata Sons, remarked that this programme highlights the vision of the late JRD Tata, and it should be the flagship programme of NIAS. He emphasised the importance of humanism for leaders in an AI-driven world.

Coordinators: The programme was conceptualised and coordinated by Prof Sangeetha Menon. Ms V Girija assisted her in the coordination and conducting of the programme.



DOCTORAL PROGRAMME



NIAS is recognized as a research institute and its doctoral students are awarded the doctoral degree by the Manipal Academy of Higher Education (MAHE), the University of Trans-Disciplinary Health Sciences and Technology (TDU), Defence Institute of Advanced Technology (DIAT) and Indian Maritime University (IMU).

For the academic year 2024-25, NIAS conducted its online written examination and two sets of online interviews for admission to its Doctoral Programme in June and July 2024 respectively. A total of 266 applications were received across its four Schools, out of which ten candidates have joined the Programme.

The academic year in the Institute began in August 2024 with the first semester of coursework ended in December 2024. All teaching was conducted offline, with the fresh cohort of students attending two mandatory courses: Research Methodology – consisting of two modules, Qualitative Research Methods and Quantitative Research Methods – and Research and Publication Ethics. The other thirteen optional courses, offered by the faculty in this semester, included: Global Politics: The world order and contemporary International Relations; GIS for spatial data visualization and analysis; Introduction to Education Research; India's Energy Policy; Introduction to Inequality; Signs of self – a study of the self-sense and its Constituents; Introduction to Neuroasthetics of Indian Music Dance and Art; Urbanization Development and Exclusion; Education and Migration; An Introduction to the Built Heritage of India; Doing Urban Studies; Themes and Approaches; Theoretical Constructs of Conflict and Peace Research; An Introduction to Animal Behaviour and Cognition. All courses offered at NIAS were open to students from other institution as well.

The NIAS Annual Students' Colloquium was organized on January 7 to 9, 2025. Fifty-two doctoral students presented of their research work to the larger NIAS community. Additionally, ten first-year students, presented posters giving an overview of their proposed work at the Colloquium. This Colloquium, as in every year, allowed the student community to directly interact with and have discussions on their work with the faculty, postdoctoral researchers, and the other academic staff of the Institute. Several members of the Doctoral Advisory Committees



of the respective students attended the Colloquium and this facilitated critical discussions, not only on the achievements of the research scholars, but also on the directions that their work could take in the future.

The coursework for the second semester, January to April 2025, commenced with the following courses being offered by the different faculty: Perspectives on Technology; Methods in Archaeology; A Primer to Reconstructing Climatic and Environmental history; Advanced Energy Systems and Futuristic Solutions; Debates in Climate Policy and Sustainability Studies; What is Mathematics?; Gender in Context: Understanding Identities, Roles and Inequalities; Methodology of Social Sciences and Typology Research; Archeomaterials Research and Analytical Methods.

The Qualifying Examination for the cohort of 2024-25 was held on March 7, 2025 All ten students successfully quailed in this examination enabling them to register for their doctoral degree in the university of their choice.

The following students were awarded the doctoral degree between April 1, 2024 to March 31, 2025.

No.	Date	Name	Supervisor	School	University
1.	May 15, 2024	Rakesh Kumar	Sangeetha Menon	Humanities	TDU
2.	May 28, 2024	Vijayashhree	Carol Upadhya	Social Sciences	MAHE
3.	June 7, 2024	Ajit Kumar Babu	Narendar Pani	Social Sciences	TDU
4.	June 20, 2024	Sherin Ajin	Shivali Tukdeo	Social Sciences	MAHE
5.	December 19, 2024	Shilajit Sengupta	Narendar Pani	Social Sciences	TDU
6.	February 3, 2025	Aariz Ahmed	R Srikanth	Natural Sciences and Engineering	MAHE

The following students submitted their final thesis to the University for evaluation by external examiners.

No.	Name	School	Date of Submission	University	Thesis Title
1.	Tanmay Ghosh	Natural Sciences and Engineering	April 22, 2024	MAHE	Sustainable Options for City Transport Based on First and Last Mile Connectivity
2.	Rakesh Gomaji Nannewar	Natural Sciences and Engineering	September 11, 2024	MAHE	Assessment of Socio-Economic Impact of Agrometeorological Advisory Service (AAS) in Kalyana-Karnataka Region
3.	Zarnain Manzoor	Conflict and Security Studies	January 2, 2025	MAHE	Discourses around the Kashmiri Pandits: Engaging with the Fractured Identity and the Polices of Deadlock



The following students have given their final PhD Colloquium and are due to submit their theses for evaluation to the University.

No.	Name	Date of Colloquium	Thesis Title	Supervisor	University
1.	Shruti Ragavan	April 4, 2024	Of Cash Cows and Piggy Banks? Natures, Cultures and Politics of the Cultivated Animal in Urban India	Anindya Sinha	TDU
2.	Sayan Banerjee	April 5, 2024	Encountering More-than-Human Lifeworlds: Behavioural and Political Ecologies of Human– Elephant Relations in Northeast India	Anindya Sinha	MAHE
3.	Preeth Khona	April 8, 2024	Early Fusion Music: Cross- Cultural Musical Exchanges in Colonial India from the Late 18 th to the Early 20 th Century	Rajani	MAHE
4.	Rashmi BR	June 12, 2024	Governance in the Arctic: Role of Institutions with Special Reference to the Arctic Council, Sámi Council and the Arctic Circle	Suba Chandran	TDU
5.	Aparupa Bhattacherjee	July 30, 2024	Religion in Contemporary Nation-building: A Case Study of Sri Lanka, Myanmar and Thailand	Suba Chandran	MAHE
6.	Hrudaya C Kamasani	August 5, 2024	Discursive Formulations of Violence in Ethnic Conflict: Generation and Transmission of Values	Anshuman Behera	MAHE
7.	Harini Madhusudhan	September 26, 2024	Militarisation in Outer Space: A Case Study of India, Japan, and France	Suba Chandran	MAHE
8.	Shubhangi Srivastava	October 8, 2024	A Tail of Two Cities: Ecological, Socioeconomic and Political Dynamics of Human-Street Dog Relations in Urban India	Anindya Sinha	MAHE
9.	Chandana R Bindu	January 15, 2025	Patterns of Response to Inequality in Relation to the Development Process: A Study of Two Villages in Gujarat and Kerala	Narendar Pani	TDU
10.	Shruti Shankar	January 20, 2025	The Many Meanings of Work in Bengaluru's Schools: Histories, Cultures and Practices	Shivali Tukdeo	MAHE
11.	Sneha Gutgutia	February 5, 2025	Life at the Urban Margins: Human-Animal Relations and Precarity in Indian Cities	Anindya Sinha	MAHE



The following students are currently pursuing their doctoral studies at the Institute.

			Date of		
No.	Name	Supervisor	Date of Joining	Title of Thesis	University
1.	Chandana R Bindu	Narendar Pani	August 1, 2017	Patterns of Response to Inequality in Relation to the Development Process: A Study of Two Villages in Gujarat and Kerala	TDU
2.	Sarvajeet Kumar Sinha	Natural Sciences	April 28, 2018	Consolidation of Laws Related to Environment Protection in Coal Mines in India	MAHE
3.	Zarnain Manzoor	Anshuman Behera	August 1, 2018	Discourses around the Kashmiri Pandits: Engaging with 'Fractured Identity' and the 'Politics of Deadlock'	TDU
4.	Aparupa Bhattacharjee	D Suba Chandran	August 1, 2018	Role of Religion in Contemporary Nation- Building: A Case Study of Sri Lanka, Myanmar, and Thailand	TDU
5.	Sreshtha Mondal	VV Binoy	August 1, 2018	Determinants of the Protective Action Decision Making during Floods and Cyclones: A Study of Kerala	MAHE
6.	Hrudaya Chandana K	Anshuman Behera	August 1, 2018	Discursive Formulations of Violence in Ethnic Conflict: Generation and Transmission of Values	MAHE
7.	Shruti Ragavan	Anindya Sinha	August 1, 2018	Of Cash Cows and Piggy Banks? Natures, Cultures and Politics of the Cultivated Animal in Urban India	TDU
8.	Anmol Chowdhury	Anindya Sinha	August 1, 2018	Rethinking the Urban 'Wild' Animal: Ethnologies and Ethnographies of Nonhuman Primates in Indian Cities	TDU
9.	Sneha Gutgutia	Anindya Sinha	August 1, 2018	Life at the Urban Margins: Human-Animal Relations and Precarity in Indian Cities	TDU
10.	Shubhangi Srivastava	Anindya Sinha	August 1, 2018	A Tail of Two Cities: Ecological, Socioeconomic and Political Dynamics of Human-Dog Relations in Urban India	MAHE
11.	Rakesh G Nannewar	Tejal Kanitkar	August 1, 2019	Assessment of Socio-Economic Impact of Agromet Services in Hyderabad–Karnataka Region	MAHE
12.	Sayan Banerjee	Anindya Sinha	August 1, 2019	Encountering More-than-Human Lifeworlds: Behavioural and Political Ecologies of Human–Elephant Relations in Northeast India	MAHE
13.	Preeth Khona	MB Rajani	August 1, 2019	Early Fusion Music: Cross-Cultural Musical Exchanges in Colonial India from the Late 18 th to the Early 20 th Century	MAHE



No.	Name	Supervisor	Date of Joining	Title of Thesis	University
14.	Anna George	Smriti Hariharan	August 1, 2019	Reverberations of Cilapatikaram and the Worship of Kannaki in Caste, Gender and Regional Identities of Kerala and Tamil Nadu	МАНЕ
15.	Megha Poonia	Shalini Dixit	August 1, 2019	Collective Memory and Social Identity: A Study of Denotified Tribes in Rajasthan	TDU
16.	Sabna ES	Anitha Kurup	August 1, 2019	Understanding Practices Related to Menstrual Health among Women in Rajasthan	МАНЕ
17.	Athira Balakrishnan	Sindhu Radhakrishna	August 1, 2019	From Wild to Vermin: A Study on Human– Wild Pig Conflict in India	MAHE
18.	Tanmay Ghosh	R Srikanth	August 1, 2019	Assessing Public Transit Integration with Special Focus on First and Last Mile Connectivity	MAHE
19.	Rashmi BR	D Suba Chandran	August 1, 2019	Arctic Governance: The Role of Institutions with Special Reference to the Arctic Council, Saami Council and Arctic Circle	TDU
20.	Harini Madhusudan	D Suba Chandran	August 1, 2019	Militarisation in Outer Space: A Case Study of India, Japan, and France	TDU
21.	Shruti Shankar	Shivali Tukdeo	August 1, 2019	The Many Meanings of Work in Bengaluru's Schools: Histories, Cultures and Practices	MAHE
22.	Akriti Sharma	D Suba Chandran	September 1, 2020	Climate Change and the Himalayas: A Case for Regional Governance	TDU
23.	Lokendra Sharma	D Suba Chandran	September 1, 2020	Technology and International Relations: India's Approaches to Cyberspace and Internet Governance	TDU
24.	Anand Ganesh	Nithin Nagaraj	September 1, 2020	Recursion, Dynamics and Causality: Topics in Model Analysis	MAHE
25.	Pushya A Gautama	Sangeetha Menon	September 1, 2020	Situating the Correlates of Wellbeing through an Ayurvedic Approach to the Concepts of Consciousness, Self and Life- Purpose	МАНЕ
26.	Ankita Ranjan	Tejal Kanitkar	September 1, 2020	Exploring the Various Axes of Equity in Climate Change	MAHE
27.	Abhijit Konwar	Sindhu Radhakrishna	September 1, 2020	Distribution and Ecology of Scaly Anteaters in India	MAHE
28.	Ashisha K	Sindhu Radhakrishna	September 1, 2020	Ecological Flexibility and Gut Microbial Dynamics in the Gray Slender Loris <i>Loris</i> <i>Lydekkerianus</i>	МАНЕ
29.	Joan Shilpa Kiran	Tejal Kanitkar	September 1, 2020	Energy Dependence and Just Transitions: A Study of Developing and Developed Countries	МАНЕ



No.	Name	Supervisor	Date of Joining	Title of Thesis	University
30.	Kumar Saurabh	Rudrodip Majumdar	September 1, 2020	Energy Transition Pathway for the Indian Road Transport Sector	MAHE
31.	Shashank SR	Anitha Kurup	September 1, 2020	Higher Education as a Site of Investments: A Case Study of Institutions run by Lingayat and Veerashaiva Mathas in Karnataka	MAHE
32.	Souri Majumder	Anitha Kurup	September 1, 2020	Role of Mythology in the Learning and Identity Formation among Adolescents: A Study of Two Schools in West Bengal	MAHE
33.	Varun Sudhakaran	Jeebanlata Salam	September 1, 2020	Aspiration and Higher Education among the OBCs: A Study among the Thiyyas and Vannathan	TDU
34.	Ankit Singh	D Suba Chandran	August 2, 2021	Political Economy of External Public Debt of Pakistan	TDU
35.	David Jangminlien	Anshuman Behera	August 2, 2021	Ethnic Identities and Conflicts: The Case of Kuki and Naga Conflict in Manipur 1992- 2020	MAHE
36.	Hema S Karnam	Nithin Nagaraj	August 2, 2021	Defending System Integrity	TDU
37.	Varun Mohan	Prakash Panneerselvam	August 2, 2021	Conceptualizing and Assessing Political Salience of the United Nations' Role in Addressing Climate Security Discourse	TDU
38.	Meera Vishwanath	Srikumar Menon	August 2, 2021	The Influence of External Temple-Building Traditions on the Indigenous Laterite- Timber Tradition on the West Coast of India	МАНЕ
39.	Anjali Bharati	VV Binoy	August 2, 2021	Impact of Citizen Science Engagement on Participants' Scientific Knowledge, Scientific Sense making and Trust in Science	MAHE
40.	Ankita Sharma	Anindya Sinha	August 16, 2021	The Arthropod City: Taxonomic and Functional Diversity of Ant and Spider Species Assemblages across an Urban Gradient in Guwahati, Assam, Northeastern India	TDU
41.	Zakhiya PC	Anindya Sinha	August 2, 2021	Primate Worlds: Demographic Structure and Dynamics, Social Networks and Life-History Strategies in Wild Bonnet Macaques	TDU
42.	Aiswarya T	Shivali Tukdeo	August 2, 2021	Life and Learning on the Move: A Study of Murshidabad–Perumbavoor Migration Corridor and Family Strategies for Education	МАНЕ
43.	Navaindu Joshi	Jeebanlata Salam	August 2, 2021	Symbolic Violence in Schools and its Impact on the Social Identity and Aspiration of Students	TDU
44.	Surachita Lal	Anitha Kurup	August 2, 2021	Traveling through the Portals of Engineering Colleges: Experiences of Dalit Girls in India	MAHE



No.	Name	Supervisor	Date of Joining	Title of Thesis	University
45.	Tirthankar Chakravorty	Jeebanlata Salam	August 2, 2021	The "Self" in Classrooms – Exploring Identities through Narratives from Teaching of Social Sciences	TDU
46.	Vishal George	Anant Kamath	August 2, 2021	Youth, Sport and Urban Spaces	MAHE
47.	Ramkumar KG	Prakash Panneerselvam	August 1, 2022	Maritime Security of India: Study of Deployment Patterns by Extra-Regional Powers in the Indian Ocean Region	МАНЕ
48.	Virain Mohan	Prakash Panneerselvam	August 1, 2022	Assessing Chinese Maritime Diplomacy in Southeast Asia from 2012-2022	TDU
49.	Nitin Rawat	Anshuman Behera	August 1, 2022	Interrogating Security Situations in Jammu and Kashmir: A Human Security Perspective	MAHE
50.	Aishwarya P Mhaske	MB Rajani	August 1, 2022	Settlement Archaeology of Kutch Harappan using Geospatial Analysis	MAHE
51.	Divya Anupama Hoskere	Deepti Navaratna	August 1, 2022	Deconstructing Choreography in Performances of the Natya Tradition: A Practical Criticism in the Context of Indian Aesthetics	MAHE
52.	Hashim Mohammed	VV Binoy	August 1, 2022	Landslide Risk Perception Communication in Kerala, India: Understanding Public Awareness and Community Response Strategies	MAHE
53.	Karshita Bharathi	Rudrodip Majumdar	August 1, 2022	Living with the Enemy? Parasite Networks in Alloprimate Communities in the Lowland Rainforest Fragments of the Upper Brahmaputra Valley, Assam, India	TDU
54.	Titir Debnath	MB Rajani	August 1, 2022	The Mountain Primates: Distribution, Ecology and Human – Relationships of the Macaques of the Eastern Himalayas, Arunachal Pradesh, North-eastern India	TDU
55.	Ekasmayi Naresh	Shalini Dixit	August 1, 2022	Understanding the Experience of 'Psychotherapy' Among Sexual and Gender Minorities in India	MAHE
56.	Joyeeta Dey	Anant Kamath	August 1, 2022	Tracing the Digital Transformation of Education Governance: India as a Case Study	MAHE
57.	Anoop M	Jeebanlata Salam	August 1, 2022	Social Exclusion and Ghettoisation of Manual Scavengers in Coimbatore City: The Case of Arunthathiyar Community	TDU
58.	Chaithanya K	Aleena Sebastian	August 1, 2022	Transnational Migration and Motherhood: A Study of Experiences of Malayali Nurses in the Gulf Countries	TDU



No.	Name	Supervisor	Date of Joining	Title of Thesis	University
59.	Anjali Anil	Anant Kamath	August 1, 2022	Examining the Heteronoramtivity in Indian Education: Perspectives from the Transgender Community	МАНЕ
60.	Saransh Kumar	Anshuman Behera	August 1, 2023	Towards Integrated Impact Assessment Studies: Interrogating the impacts of <i>Char Dham</i> Project in Uttarakhand.	МАНЕ
61.	Jenish Anil Trivedi	Anshuman Behera	August 1, 2023	Contours of Conflict: Exploring Dynamics of Development and Democracy in India.	MAHE
62.	Rohini Reenum	D Suba Chandran	August 1, 2023	The idea of Ocean Governance and the High Seas Treaty	IMU
63.	Pornima Rajkarne	Deepti Navaratna	August 1, 2023	Understanding religious transmission in the Varkari Sampradaya: A cognitive Approach	MAHE
64.	Himangshu Kalita	Aleena Sebastian	August 1, 2023	Rethinking Human-Wildlife interface from a Feminist Political Ecology Approach: A Study of Three Communities in Assam, North-Eastern India	MAHE
65.	Mahendra Singh Rawat	VV Binoy	August 1, 2023	Out of Sight, Out of Mind: Communicating Mahseer Conservation for Positive Behaviour Change	МАНЕ
66.	Arslan Wali Khan	Chetan Choithani	August 1, 2023	Negotiating for Space: Violence, Segregation and Urban Social Movements in Contemporary India	МАНЕ
67.	Julian Lambolem Roy Jyrwa	Aleena Sabastian	August 1, 2023	In the Shadows of Fetishization: Examining the Intersections of Race, Desire, and Masculinities in the Lives of Migrant Queer Men from North-East India	MAHE
68.	Rahula Kumar Swain	Anshuman Behera	August 1, 2024	Structural violence, Social suffering and Subjectivity: A study of the lived experiences of migrant workers from Ganjam	МАНЕ
69.	Sarah Mahajan	Srikumar Menon	August 1, 2024	Performing Writing: Exploring Space, Memory and Genre Construction using Autofiction and Autotheory in Select Texts by Women	MAHE
70.	Santa Ghosh	MB Rajani	August 1, 2024	Landscape Archeaology of Cultural Heritage Sites in Coastal Odisha: A Geospatial Analysis	МАНЕ
71.	Shivansh Pareek	MB Rajani	August 1, 2024	A Study of Military History and Heritage in Mewar region, Rajasthan	MAHE
72.	Rudrakshi	Deepti Navaratna	August 1, 2024	The Impact of yoga on cognitive function and physiological well-being	MAHE
73.	Saket Kumar	Srikumar Menon	August 1, 2024	Relationship between Rural Settlements and Urban Centres of Harappan Civilization	MAHE



No.	Name	Supervisor	Date of Joining	Title of Thesis	University
74.	Ayana Krishnan	VV Binoy	August 1, 2024	The Study on Freshwater Resources Conservation.	MAHE
75.	Summaiya Khan	Tejal Kanitkar	August 1, 2024	Climate change Governance: Synergies and Contradictions between the Global, the National, and the Local	МАНЕ
76.	Manjusha A	Chetan Choithani	August 1, 2024	Understanding Immobility in the Context of Climate Change: A Mixed – Methods Study of Dhanushkodi Fisherfolk	МАНЕ
77.	Annalisa Rapthap	Aleena Sebastian	August 1, 2024	Women in Matrilineal Societies of Meghalaya	MAHE





Three annual memorial lectures were organized in the Institute:

Eighteenth Raja Ramanna Memorial Lecture

Prof Ajay Sood

Principal Scientific Advisor to the Government of India Raja Ramanna Memorial Lecture January 31, 2025

Seventh CV Sundaram Memorial Lecture

Prof Vasant Shinde

CSIR Bhatnagar Fellow, Centre for Cellular and Molecular Biology, Hyderabad Contributions of the Harappans to the Evolution of Indian Knowledge System (IKS) September 4, 2024

Tenth RL Kapur Oration

Dr Ravi Narayan

Community Health Adviser, Society for Community Health Awareness, Research and Action (SOCHARA) and Global People's Health Movement

Beyond Medicine: Towards a New Paradigm of Community Health – A Collective Journey

May 31, 2024

Dr MB Rajani is the Coordinator of Annual Memorial Lectures.





Dr AS Kiran Kumar

Former Secretary, Department of Science **Dr Berndt Mueller**

James B Duke Distinguished Professor of Physics, Duke University

Book Release – Science Beyond Borders: International Collaborations in Basic Sciences March 24, 2025

Screening and Discussion of the Documentary Film Garment Kelsa: Women and Work

Produced by Cividep, Bengaluru and Directed by Ms Aarthi Parthasarathy, Falana Films February 21, 2025

Dhaatu Puppet Theater

Bengaluru

Puppet Show – Giridhar Nagar Ki Meera February 20, 2025

Prof Sahana Udupa

Professor of Media Anthropology, University of Munich

Moderating Social Media Content with Artificial Intelligence: Technological Limits and Corporate Failures

February 11, 2025

Nrityagram Dance Ensemble

Bengaluru

'Khaṅkhaṇā' The Sound of Dancing Feet January 24, 2025

Prof MV Rajeev Gowda

Former Member of Parliament, Rajya Sabha and Former Professor, Indian Institute of Management– Bangalore

Public Policy in an Era of Growing Inequalities
January 16, 2025

Prof Parimala V Rao

Zakir Husain Centre for Educational Studies, Jawaharlal Nehru University The Indigenous Education in India: Access, Curriculum, Funding and the British Policies January 15, 2025

Prof Niveditha Menon

Director, Centre for Budget and Policy Studies, Bengaluru Exploring Public Spaces as Spaces of Pleasure, Violence and Justice November 15, 2024

Dr Sthaneshwar Timalsina

Mattoo Distinguished Professor of Indic Humanities, Stony Brook University, USA *The Cognitive Science of the Culture of Images* July 25, 2024

Dr Pradnya Kulkarni

Assistant Professor, Deccan College Post Graduate and Research Institute, Pune Samana: A Non-Religious Youth Festival June 28, 2024

Yogacharya Mr Vineesh KI & Ms Harpreet Kaur Sandhu

Yoga – Lecture Demonstration June 19, 2024

Mr R Gopalakrishnan

Former Executive Director of Tata Sons Limited and Chairman of Unilever Arabia

Mr Hrishikesh Bhattacharyya

Former Senior Vice President of Unilever and Visiting Faculty of Strategy, University of Michigan, Ann Arbor

Embrace the Future: The Soft Science of Business Transformation – Book Launch June 10, 2024

NIAS Foundation Day Celebrations 2024 – Dr Raja Ramanna Centenary Year 2024-2025 Dr Ajit Kumar Mohanty

Secretary, Department of Atomic Energy and Chairman, Atomic Energy Commission Foundation Day Address Followed by: Music Concert by Mysore Police Karnatic Band June 20, 2024



DR RAJA RAMANNA BIRTH CENTENARY **CELEBRATIONS**

Lecture Series on 50 Years of Pokharan

Prof VS Ramamurthy, Emeritus Professor, NIAS Amb Venkatesh Varma DB, Former Ambassador of India to the Russian Federation and Former Ambassador of India to Conference on Disarmament in Geneva

The Road to Pokhran - Science and Diplomatic Perspectives July 12, 2024

Dr Raja Ramanna Birth Centenary Celebration Dr Ngawang Samten, Dr Sudha Seshayyan, Dr Thimappa Hegde, Dr HR Nagendra

Panel Discussion on The Relevance of Traditional Wisdom in Modern Science April 4, 2024

NIAS AREA STUDIES

NIAS Area Studies - Pakistan Reader Amb Dr TCA Raghavan, Mr Rana Banerji & Prof Ajay Darshan Behera

Panel Discussion on State of Pakistan 2024 Release of Inaugural Issues of NIAS Pakistan Monitor

June 28, 2024

NIAS Area Studies: Europe NIAS Global Politics Young Voices #129

EU Parliamentary Elections 2024: A Country-Wise Review - Who Voted for Whom and Why June 25, 2024

NIAS Area Studies: Africa

Amb Gurjit Singh, Dr S Shaji and Dr Nivedita Ray Panel Discussion and Release of Inaugural Issues of NIAS Africa Monitor

June 24, 2024

NIAS-IPRI Series on Contemporary Conflicts Prof Shailesh Nayak

Director, NIAS

Release and Inauguration – The War in Gaza – Vol 01: October 7, 2023 - June 2024 June 19, 2024

NIAS-HSE DIALOGUES ON CONTEMPORARY **GLOBAL POLITICS #01 (ONLINE)**

Dr Natalia Piskunova

Associate Professor, Lecturer and Researcher at the Faculty of World Politics of Lomonosov Moscow State University and HSE University

Ms Florence Ibuowo

PhD Candidate, Faculty of World Economy and International Affairs, HSE University

Amb Gurjit Singh

Former Ambassador of India to Germany, Indonesia and ASEAN and Ethiopia and the African Union Dr S Shaji

Assistant Professor in the Department of Political Science, University of Hyderabad India, Russia and Potential Areas for Collaboration in Afric

(In Collaboration with Scientific Laboratory of Political Geography and Modern Geopolitics, School of International Affairs, Higher School of Economics University, Moscow) June 7, 2024

NIAS URBAN LECTURE SERIES (ONLINE)

Dr Agaja Puthan Purayil

Assistant Professor of Sociology, GITAM University, Visakhapatnam Campus 'Chosen Family' and 'Practical Kinship' among Migrant Trans Men in Bengaluru September 24, 2024

Dr Preeti Raghunath

Department of Sociological Studies, University of Sheffield, UK Imperial Datafication: Sedimented Histories of the Modern Global Data Economy

May 14, 2024

Dr Abhijit Dasgupta

Assistant Professor of Sociology, School of Social Sciences and Languages, Vellore Institute of Technology, Vellore

Para, Padri and Politics of Faith: Interrogating Schism in a Christian Neighbourhood in Kolkata April 30, 2024



NIAS DEMOCRACY FORUM – LECTURE SERIES

Dr V Anil Kumar

Institute of Social and Economic Change, Bengaluru Karnataka Model of Development and Federalism July 29, 2024

Prof D Jeevan Kumar

Former Professor of Political Science, Bangalore University

Consociational Democracy and Minority Representation in Legislatures – A Case for Electoral Equity

May 9, 2024

DISSECTING ARCHAIC DOMAINS (ONLINE LECTURE)

Mr Sourav Ghosh

PhD Scholar, University of California, Berkeley Scrambling for Glory: Rajput Becoming in a Mughal War of Succession (1657–59) April 30, 2024

NIAS-IISC POLICY DIALOGUE ON FRONTIER TECHNOLOGIES

Dr Thomas Lograsso

Director, Critical Materials Innovation Hub, Ames National Laboratory, US Critical Minerals: Energy Security, Supply Chain Challenges and Industry-Academia Convergence (In Collaboration with US Consulate General Chennai and Indo-American Chamber of Commerce) March 3, 2025

NIAS-IISC POLICY DISCUSSION SERIES ON EMERGING TECHNOLOGIES

Dr Chagun Basha

Chief Policy Advisor, Policy Analysis and Insights Unit, Office of the Principal Scientific Advisor to the Government of India

Dr Survesh Namdeo

Senior Research Analyst, DST Centre for Policy Research, IISC

Dr PM Soundar Rajan

Visiting Professor, International Strategic and Security Studies Programme, NIAS

Dr Nithin Nagaraj

Associate Professor, School of Humanities, NIAS Panel Discussion: A Review of ICWA Report on Emerging Technology and Indian Diplomacy April 29, 2024





NIAS Wednesday Discussion Meetings is one of the outreach events that has continued since the inception of the Institute. The faculty of the Institute meet every Wednesday for academic discussions after a lecture delivered by a member of the faculty. These Wednesday meetings also serve as a forum for invited guest speakers to deliver lectures on subjects of their choice.

Dr Rudrodip Majumdar

Assistant Professor, Energy, Environment and Climate Change Programme Can Institutional Cooking Promulgate Transition to Electricity-Based Cooking? March 26, 2025

Dr MB Rajani

Associate Professor, NIAS
Beyond Boundaries: New Insights into Bodhgaya's Ancient Landscape
March 19, 2025

Dr Sailesh Rao

Executive Director, Climate Healers, Phoenix, AZ, USA

Stopping Fossil Fuel Use Now is Suicidal: A Critical Look at UN IPCC's Emissions Accounting

March 12, 2025

Prof Sharada Srinivasan

Head, Heritage, Science and Society Programme, School of Humanities, NIAS, Bengaluru Coastal Tamil Urn Burial Sites and Harappan Links: Wrought in Iron? March 5, 2025

Ms Ashisha K

PhD Scholar, Animal Behaviour and Cognition Programme, NIAS Conceptualizing Gut Microbial Stability Using Systems Framework February 19, 2025

Dr Tejal Kanitkar

Associate Professor, Energy Environment and Climate Change, NIAS **Dr Shaik Vazeed Pasha**Post-doctoral Associate-II, NIAS

Dr Chetan Choithani

Assistant Professor, Inequality and Human Development Programme, NIAS

Dr VV Binov

Associate Professor, Science Communication Programme, NIAS
Navigating the Climate Crisis: Insights on Forests, Communities, and Human Migration
February 12, 2025

Dr Priyadarsanan Dharma Rajan

Senior Fellow, Ashoka Trust for Research in Ecology and the Environment (ATREE), Bengaluru Conserving The Less Charismatic: Strategies for Conserving Insect Diversity for the Human Well Being February 5, 2025



Dr KL Ramakumar

Distinguished Scientist, Former Head, NCPW, DAE and Former Director, Radiochemistry and Isotope Group, BARC

Strengthening Nuclear Security Architecture in India January 29, 2025

Dr Shailesh Nayak

Director, NIAS

Towards Sustainable Blue Economy

January 22, 2025

Prof Archana Mehendale

Adjunct Professor, NIAS

Child Labour in Zari Industry – What Has Changed in One Generation?

January 15, 2025

Dr MB Rajani

Associate Professor, School of Humanities, NIAS

Exploring Thotlakonda and Bavikonda: Insights into Archaeological Landscapes Near Visakhapatnam through
Remote Sensing and GIS Analysis
December 18, 2024

Mr Varun Mohan

PhD Scholar, NIAS

In Search of Consensus: Examining Global South Perspectives on Climate Security in UNSC Debates December 11, 2024

Dr Tejal Kanitkar

Associate Professor, Energy Environment and Climate Change, NIAS *Climate (in) Action at COP 29*December 4, 2024

Dr Srikumar M Menon

Associate Professor, School of Humanities, NIAS

A Random Walk through the Rock-Cut "Cave" Temples of Western Maharashtra

November 27, 2024

Prof D Suba Chandran

Dean, School of Conflict and Security Studies, NIAS

The Return of Trump: Will "Make America Great Again" Unmake the Existing Regional and World Orders?

November 20, 2024

Prof Heribert Dieter

Adjunct Professor, NIAS

Contemporary Europe: The Rise of the Far Right, Irregular Migration and Economic Isolation November 13, 2024

Prof Narendar Pani

JRD Tata Chair Visiting Professor, NIAS

Beyond the Left and the Right: Substance Philosophy in Indian Public Policy

November 6, 2024

Dr Priyanca Mathur

Associate Professor, Jain University, Bengaluru Women and Decentralised Governance in India October 23, 2024



Dr Chetan Choithani

Assistant Professor, Inequality and Human Development Programme, NIAS Understanding Migration through Socially Reproductive Labour in India October 16, 2024

Dr Kallol Roy

Research Advisor and Guest Faculty Member, IIT-Madras Micro Modular Nuclear Reactors (MMRs) October 9, 2024

Dr Shaik Vazeed Pasha

Postdoctoral Associate, NIAS Unseen Frontiers: Identifying Human-Elephant Conflict Hotspots in Karnataka September 25, 2024

Ms Anjali Mini Anil, Mr Arslan Wali Khan, Ms Joyeeta Dey, Mr Varun Sudhakaran

PhD Scholars, NIAS

Sexual Violence and Power Structures Examining Pertinent Themes September 18, 2024

Mr Manu Sanan

Lawyer, New Delhi International Space Law: A Mapping in 2024 September 11, 2024

Dr Anshuman Behera

Associate Professor, NIAS

Political Crisis in Bangladesh: Limited Democracy, Islamization of Polity, and External Power Politics September 4, 2024

Ms Judith Weinberger-Singh

Resident Representative Hanns-Seidel-Stiftung (HSS) India
Navigating Sustainable Development and Geoeconomics: India-Germany Relations in the 21st Century
August 28, 2024

Dr Debosree Banerjee

Assistant Professor, NIAS

Economic Accounting for a Sustainable and Inclusive Blue Economy in India: Case of Sundarbans August 21, 2024

Prof Youba Sokona

Honorary Professor, University College London Prospects for Climate Resilient Development and Just Energy Transitions in African Countries August 14, 2024

Mr Prantik Das

PhD Student, The University of Trans-Disciplinary Health Sciences and Technology (TDU), Bengaluru From Clicks to Conservation – Finding Key Ecological and Social Insights from Social Media to Enhance Conservation Efforts

August 7, 2024



Dr Shankara Prasad

Founder and Managing Trustee Sampoorna Swaraj Foundation
Rebooting Democracy through Digital Transformation of Gram Panchayats: Applying Frontier Technologies for
Achieving Accountability, Efficiency, and Participatory Democracy in Local Governance

July 31, 2024

Dr Gowri Vijayakumar

Associate Professor of Sociology and Women's, Gender, and Sexuality Studies Brandeis University, Waltham, USA Labors of Love: Sex, Migration and Care in Bangalore July 24, 2024

Maj Arun Sreedharan (Retd)

Dy. Director, Defence Technology and Innovation Programme, Centre for National Security Studies, Ramaiah University of Applied Sciences, Bengaluru

Defence Innovation and Technology in India

July 10, 2024

Prof D Suba Chandran

Dean, School of Conflict and Security Studies, NIAS The War in Gaza, Eight Months Later: Five Major Questions June 19, 2024

Dr Shaik Vazeed Pasha

Post-doctoral Associate-II, NIAS Extreme Rain Event and Human Impacts in a Western Ghats Site June 12, 2024

Dr Anshuman Behera

Associate Professor, School of Conflict and Security Studies, NIAS

Prof SS Meenakshisundaram

Visiting Professor, NIAS

Prof Narendar Pani

JRD Tata Visiting Professor, NIAS

Panel Discussion on Electoral Democracy in India: Analyzing the Election Results of 2024 June 5, 2024

Prof Supriya RoyChowdhury

Visiting Professor, NIAS

Dr Surya Sankar Sen

Assistant Professor, St Joseph's University, Bengaluru Democracy, Dissent and Dialogue May 29, 2024

Dr P Ramya Bala

DST-INSPIRE Faculty, School of Natural Sciences and Engineering, NIAS

Dr S Udayakumar

Assistant Professor, Heritage Science and Society Programme, NIAS Introducing the Nilgiris Archeological Project May 22, 2024

Mr Venkat Iyer

Editor, The Round Table: The Commonwealth Journal of International Affairs Hate Speech and Its Regulation
May 15, 2024



Mr Ajit Kumar Babu

PhD Scholar, NIAS

Prof Narendar Pani

JRD Tata Chair Visiting Professor, NIAS

The Authority of Technology: Insights from a Village in Jharkhand
May 8, 2024

Dr Prakash N Thirumali

Adjunct Professor, NIAS A Journey to Lakshadweep Islands April 24, 2024

Dr MB Rajani

Associate Professor, NIAS

Dr Rudrodip Majumdar

Assistant Professor, NIAS

Improved Geospatial Analysis of Shoreline Modification Using a Weighted-Average-Based Novel Formulation April 17, 2024

Dr Ekta Gupta

Juan De la Cierva Fellow, Catalan Institute of Classical Archaeology (ICAC), Spain

Navigating Bronze Age trade routes: Geospatial Perspectives on Lothal's Strategic Position as a Harappan Port

April 10, 2024

Prof VS Ramamurthy

Emeritus Professor, NIAS

Prof Dinesh Kumar Srivastava

Honorary Visiting Professor, NIAS

Fukushima: Thirteen Years Later: Lessons in Nuclear Energy and Nuclear Safety

April 3, 2024

Dr VV Binoy and Mr Ramprasad R are the Coordinators of the Wednesday Discussion Meetings.





The Literary, Arts and Heritage Forum aims to be an innovative platform for occasional lectures on diverse topics of cultural interest including literature, the arts and aspects of heritage. Major events and public lectures were held over the past year.

Dr Letizia Trinco

Odysseus Post-Doctoral Researcher, Department of Languages and Cultures, Ghent University, Belgium *Memorial Stones: One Language, Many Dialects. Cases from the Nilgiris*March 26, 2025

Prof Sharada Srinivasan and Prof Sangeetha Menon are the Coordinators of the NIAS Literary, Arts and Heritage Forum.







Prashantha SCAsst. Library and
Information Officer

Room No. Library Tele: 080-22185022 Fax: 080-22185028 Email: prashantha@ Joined NIAS on: November 23, 2022

Resources

nias.res.in

The NIAS library collection includes patron driven acquisitions and donations that support research needs of scholars. The primary objective of collection development has been to acquire books of immediate needs for research and teaching, strengthening core areas of ongoing research with seminal works and fulfilling broader mission of interdisciplinary research. Acquisition during the year included 30 books and 43 donations. Print resources include 21668 books (18606 books, 2438 donations, 602 Kannada books), 37 print subscriptions and 2733 bound volumes. Electronic subscriptions include Taylor and Francis Special Collection of 1500 journals, Sage Social Science Collection of Indian Journals, JSTOR, Harvard Business Review, EPW, Philosophy Now, Journal Consciousness Studies, The Economist, EPW India Times Series in 39 modules, indiastats.com. and a few individual journal titles. The library recorded 1185 book transactions during the year.

Publications and Website Activities

The library continued to support publication activity by disseminating faculty and student publications on the website and institutional repository. The library has been responsible for maintaining and updating the NIAS website since 1998. The webpages were updated daily throughout the year.

Plagiarism Software

The library continues to provide plagiarism detection services using *Turnitin*. The new faculty and students have also been provided with Turnitin accounts.

Institutional Repository

The Institutional Repository of NIAS is running on Eprints software and has 2892 records. The repository content includes formal and informal publications, doctoral theses and institutional documents. Consent is obtained from graduated students for uploading full text of their theses into the repository. The role of the repository has been extended to preserve and curate digital scholarships in different formats such as archiving audio recordings of talks and performances, in addition to datasets shared by faculty and students.



Remote Access

The NIAS Library provides a Remote Access facility through OpenAthens for faculty and students. Remote access refers to the ability for users, such as faculty, students, and staff members, to access library resources and databases from off-campus locations. This is particularly useful for individuals who cannot physically visit the library due to geographical constraints or scheduling conflicts. Remote access to a library's digital resources typically requires authentication, such as a login through a NIAS institution's portal, to ensure that only authorized users can access subscription-based services, digital journals, e-books, and research databases. Remote access functionality supports academic and personal research, providing users with the flexibility to access information and conduct research anytime and anywhere, if they have an internet connection.

Archives

The library has been archiving publications, institutional documents (annual reports, brochures, newsletters, policy documents), newspaper clippings, photographs and audio recordings of lectures since inception. The library introduced a formal arrangement for using the materials from NIAS archives and repository with an archives request form.

Inter library Loans and Memberships

NIAS Library has interlibrary loan arrangements with libraries of Ashoka Trust for Research in Ecology and the Environment (ATREE), Srishti School of Art, Design and Technology, International Centre for Theoretical Sciences-TIFR, Raman Research Institute, Jawaharlal Nehru Centre for Advanced Scientific Research, and National Centre for Biological Sciences. In addition, membership arrangements with libraries of Indian Institute of Science, Institute for Social and Economic Change, National Aerospace Laboratories, Indian Space Research Organization, Headquarters, Bengaluru also help NIAS community to make use of its library.

Indian Research Information Network System (IRINS)

IRINS instance for the National Institute of Advanced Studies is fully set up, and can be accessible at the link – https://nias.irins.org/

Library Events

- > Organized a comprehensive Turnitin User Awareness Programme on July 7, 2024 to educate faculty members and students on the effective use of Turnitin. The session was conducted offline and was attended by 34 research scholars and faculty members of various departments.
- ➤ User Awareness Programme on OpenAthens was conducted at NIAS on August 12, 2024. The session aimed to familiarize faculty and students with the OpenAthens platform, highlighting its significance in providing secure remote access to digital resources.







Dr K Kasturirangan

Dr K Kasturirangan was the Director of the National Institute of Advanced Studies during 2004-2009. He was Chairman, Inter-University Centre for Astronomy and Astrophysics; Chancellor, Central University of Rajasthan; Chairman, Public Affairs Centre, Bengaluru; Chairman, Karnataka Knowledge Commission and Member, Atomic Energy Commission.



Prof VS Ramamurthy

Prof VS Ramamurthy was the Director of the National Institute of Advanced Studies during 2009–2014. His current research interests span the areas of managing public perceptions for public good and public risks associated with emerging technologies, identification and mentoring of children with unusual learning capabilities and science and technology communication.





SCHOOL OF HUMANITIES



Shailaja D Sharma S Radhakrishnan Chair Visiting Professor

Room No. F 27 Tele: 080-22185079 Fax: 080-22185028 Email: shailaja@nias. res.in Joined NIAS on: July 1, 2020

Research Areas: Computational Thinking in the Indian Tradition, Chance, Probability and Statistics in the Indian Tradition.

Research Contributions

Chausar Distribution – the probability distribution of Indian chausar dice; this distribution has been incorporated into the Probability and Statistics curriculum in teacher training workshops conducted at Azim Premji University, Bengaluru.

Research Activities

The Mathematics Heritage Initiative completed the research project under Indian Knowledge Systems (IKS) funding on the topic of Mathematics and Computation in the Indian tradition, leading to three important publications including a book volume and a conference presentation, and several lectures and seminars. In the current period, an internship grant was secured from the AICTE-IKS for studying the Trisatika of Sridhara (c.10th c.) in Hindi translation. However, the funding was delayed by a year, leading to postponement and the grant is still awaited.

Continue to focus on the computational aspects of Indian knowledge systems; in particular our focus is on the references to statistics and chance events.

- Invited Talk at the Launch of the Translated Work in Indian Observational Astronomy, "Mahasalila" of Vrddha Garga (RN Iyengar), Mythic Society, Bengaluru, December 2024.
- ➤ The Epistemology of Computational Empiricism and Its Contemporary Relevance, University of Illinois Urbana-Champaigne, hosted by South Asian American Leadership Conference (online), October 2024.
- > Two lectures (i) Computational Empiricism Applied to Arts, Humanities and Social Sciences (ii) Computational Thinking in Indian Scientific Tradition, 3-Day FDP on Outcome-Based Education and NEP, Visvesvaraya Institute of Technology, Andhra Pradesh, August 2024.



SCHOOL OF NATURAL SCIENCES AND ENGINEERING



Vinay Kumar Dadhwal Indira Gandhi Chair Professor

Tele: 080-22185177 Fax: 080-22185028 Email: vkdadhwal@ nias.res.in Joined NIAS on: March 16, 2020

Research Areas: Terrestrial Carbon Cycle of India; Earth Observation Data – Analysis Techniques and Applications; Forestry and Environment – Inventory, Biomass, Productivity and Human-Wildlife conflict, Agriculture-Crop Yield Assessment and Crop Insurance; Soil-Digital Soil Mapping; Land Science – Land Use, Land Transformations and Land Surface Processes; Space Economy of India.

Research Contributions

The research group works on cross-cutting issues in environment and earth system science which have large inputs from satellite remote sensing and use of geospatial technologies. Specifically, it focuses on the following: Integrated Assessment and Modeling of the Terrestrial Carbon Cycle of India, Decadal to century-scale land cover/land use transformation for south Asia, vegetation type change and deforestation in India during the colonial and post-independence period, Other research contributions are on digital soil mapping, agricultural productivity, human-wildlife conflict, urbanization and agricultural land loss and impact of space applications on Indian economy. Major research contributions are summarized themes below:

- Remote sensing data analysis on tree loss and gain areas using 30m Landsat data since 2000. A spatial framework of 1x1km grid is then used to track areas of loss and gain in tree cover and forests.
- Official approvals of forest land diversion and The Compensatory Afforestation Fund Management and Planning Authority (CAMPA) areas reported by Ministry of Environment and Forests (MoEF) are analyzed in spatial aspects to observed tree dynamics for role of mining in forest loss.
- ➤ Urbanization since 1985 as extracted from remote sensing-based increase in impervious surface areas (ISA) has been synthesized in 1km grid for 1985-2020. Geospatial analysis of source of land for nearly 5.5 Mha increase in ISA using historical LULC maps indicated that 80 percent of this transformation originated from agricultural land use.
- Expansion of irrigated cropland in arid and semi-arid areas, especially Rajasthan and Haryana for the period 1990-2025 was studied using remote sensing.
- > Spatial variation of forest biomass density was linked to gridded forest/tree loss to estimate loss of standing forest biomass. Annual spatial deforestation data (30m) is being mapped and combined with spatially explicit maps of forest above-ground biomass density to estimate trends in standing carbon stock in



forests. Current official estimates do not consider the high spatial variability in forest biomass and location information about tree loss deforestation.

- A comprehensive data set of Soil Health Card totaling 39.5 million records was analyzed for mean soil organic carbon (g/kg) and geospatially visualized. Estimated SOC pools compared with global data sets from FAO, Rome.
- Soil Organic Carbon (SOC) density mapping using published field data was carried out for states of Andhra Pradesh, Kerala, Telangana and West Bengal at a spatial resolution of 1km and using machine learning algorithm that considered climatology, geology, terrain, soil classification, and remote sensing derived land use maps.
- > SOC dynamics due to land transformation was carried out for the state of Kerala using space for time substitution technique between 1990 and 2020.
- Mapping and Modelling the Human-Wildlife conflicts (HWC) in India using Geospatial technology and field data was undertaken for two national parks in Karnataka.
- Satellite and drone-based hyperspectral data has been analyzed for un-mixing algorithms evaluation for crop studies

Scientific Outreach: A total of 16 trainee interns (1-4 months) from 5 universities in MTech/ MSc level were provided research internship-cum training in use of RS & GIS in land transformation and carbon cycle studies.

- Approach to Building an Open Land Cover Map of India, Indian Open Land Cover Initiative, Bengaluru on March 12, 2025.
- A View from Far-Insights on Crops and Forests Structure, Function and Dynamics Using Remote Sensing, Foundation Day Lecture, ICAR-National Institute of Plant Biotechnology, New Delhi, January 15, 2025.
- > Status of Conservation Agriculture in India, BRICS Alliance for Conservation Agriculture (Russia BRICS Presidency Activity) (online), December 16, 2024.
- Earth Observation and Terrestrial Carbon Cycle-Monitoring Progress towards Net Zero, 33rd Vikram Sarabhai Memorial Lecture, Annual Convention of ISRS, Lucknow, December 11, 2024.
- Role of Satellites in Meteorology, 150 Years of IMD (online), November 11, 2024.
- Thermal Remote Sensing Applications Status in India, Keynote Lecture, International Science Workshop on High Resolution Thermal Earth Observation, Space Applications Centre (ISRO), Ahmedabad, November 19, 2024.
- > Space Economy, NIAS Training Programme on Space Ecosystem for National Security, September 11, 2024.
- ▶ Use of Space Observations for Ground Water Studies, Keynote Address, National Conference on Sustainable Groundwater Management for Water Security, Karnataka Science and Technology Academy, Bengaluru, June 19, 2024.
- Role of Forests and Trees in Terrestrial Carbon Cycle: Assessments at Landscape to National Scale, BRICS Climate Forum (BRICS Russia) (online), August 30, 2024.
- > Journey in Space Lessons in Multi-disciplinary Research and Leadership, Senior EDP Course, National Academy of Agricultural Research and Management, Hyderabad, August 28, 2024.
- Human Modification of Terrestrial Carbon Cycle of India, Science Lecture Series, Azim Premji University, Bengaluru, August 27, 2024.
- Let Us Talk Climate, Public Outreach Programme organized by Azim Premji University, Bengaluru International Centre, Bengaluru, November 17, 2024



Honour

Listed in Top 2% of Global Scientists based on career publications of Stanford Univ. in Version 7, updated on August 2024. (Was also listed in career list of Top 2% in 2022 and 2023)

Memberships

- > Chair, Research Advisory Committee of National Bureau of Soil Science and Land Use Planning, Nagpur under Indian Council of Agricultural Research, New Delhi.
- Chair, Expert Committee on National Geospatial Programme, Department of Science and Technology, Government of India, New Delhi.
- Member, Project Management and Monitoring Committee of National Centre of Geodesy, IIT Kanpur funded by DST, Government of India.
- Member, External Peer Review of Centre of Studies in Resource Engineering for the period 2013-2023, IIT Bombay.
- Member, Scientific Review and Monitoring Committee of Monsoon Mission Phase III of Ministry of Earth Science, Government of India, New Delhi.
- Member, Expert Committee on Sensors and Technology, National Agricultural Science Foundation, Indian Council of Agricultural Research, New Delhi.
- Member of Jury, Geospatial Awards, Association of Geospatial Industry Awards, 2024.
- Member, International Expert Council, Russia Programme on Carbon Control Technologies, Russia.
- Member, International Advisory Committee of UN Centre for Space Science and Technology Education (in the Asia Pacific (UN-CSSTE-AP).
- Member, Governing Board, IITM, Ministry of Earth Sciences, Pune.
- Member, Research Advisory Committee of IITM, Ministry of Earth Sciences, Pune.
- Chair, Expert Committee on METFLUX Programme of IITM, Pune.
- Member, International Editorial Advisory Board, Journal of the Indian Society of Remote Sensing, ISRS, Dehradun.



PG Diwakar ISRO Chair Professor

Room No. F 21 Tele: 080-22185069 Fax: 080-22185028 Email: diwakar@nias. res.in Joined NIAS on: November 4, 2020

Research Areas

- Digital Image Processing and Geospatial Technology, including Policy Related Aspects.
- > Time Series Analysis of Multi-Temporal space data for Transitions and Impacts.
- ➤ Potential of IOTs, Mobiles, Drones and Space Technologies for Newer Applications.
- Innovative use of Space and Terrestrial Data for Urban and Environmental Studies, including Air Pollution and Urban Sprawl.



Research Contributions

Took lead in a research project, administered by Deshpande Foundation, Hubli in implementing space and geospatial technology-based solutions for surface water management in agricultural areas. The work has resulted in the creation of GIS stack on various natural resources parameters, setting up Mapserver/Geoserver technology, design and development of multi-criterial based AHP model involving DEM/Terrain, Contours, Slopes, Streams and Morphometry, Soil, Geomorphology, Land Use, Historical Weather, Runoff etc for targeting the sites. The project is initiated from May 2024 onwards.

Actively mentoring a Bengaluru Startup, Exalogic Consulting Private Limited, to develop geospatial technology-based solutions, using Earth Observation and Geospatial technology to address various natural resources and environmental issues both within India and abroad. I am helping them in developing skills to take up new initiatives. As a demonstrator, we are in the process of developing a GIS data stack on selected villages in suburbs of Bengaluru to showcase development and management of natural resources at village level. Similarly, specific use cases are taken up in UAE terrain addressing urban development, environment, mangroves etc. This is initiated from Feb 2025 onwards

Technology and Design support for a research project 'Student Scientist on Coastal Weather and Climate' that is taken up at School of Natural Sciences and Engineering, NIAS. As part of the design, necessary mechanisms to link up with lead educational institutions both in Kerala and Karnataka were done. Further, through this lead institution, were able to link up with many schools in the region who serve as crucial data providers on the various environmental parameters in the coastal region. Designed an online web portal for field data up-linking and for online analytics. This is a unique model of carrying out research with online involvement of younger generation that helps in better understanding of local climatic conditions and also to build knowledge on scientific data analysis tools. Such programmes address the importance of weather and climate amongst students to gather first-hand knowledge on the importance of climate and weather. Am involved in the programme ever since April 2024.

Award

Fellow, Indian Society of Geomatics, December 11, 2024.

- Sustainability and New Technologies Using Satellite Based Solutions (online), ESA supported Italian Think Tank forum 'Istituto Affari Internazionali', Roma, Italy, March 13, 2025 (Published on YouTube).
- Ecosystem Changes in Sundarbans Using Space Images and Geospatial Technologies, Stakeholder Consultation Workshop on Economic Accounting for a Sustainable and Inclusive Blue Economy in India: Case of Sundarbans, supported by Deep Ocean Mission, MOES, organized at NIAS, February 24 and 25, 2025.
- Advanced Geospatial Technologies for Smart Urban Planning, NIAS-DST Training Programme on Advanced Technologies in Urban Development, February 17, 2025.
- Conducted a special technical session titled A step towards Rural Transformation, at Deshpande Foundation on the occasion of a National Seminar on Development Dialogue 25". Also delivered a talk on Use of Space technology for sustainable resources development, February 7, 2025.
- ISRO Timeline, A Special Focus on ISRO's Efforts in Technology Development with Time, as part of Amateur Astronomy Club Activity of NITK, Suratkal, January 28, 2025.
- > Space Tech and Modern Tools for Applications and Analytics, National Seminar Digital Transformation in Civil Engineering "RACE-25", ACCE, Mysuru, January 17, 2025.
- > Space Data processing and Analytics, Microsoft Research Centre, Bengaluru, December 18, 2024.
- ➤ EO Technologies and Related Applications (online), LEOCONN, UK/ Zurich, November 28, 2024. (Published on YouTube).
- Chief Guest, Winter School in Geospatial Science and Technology with a focus on HealthGIS, JSS Academy of Higher Education and Research, Mysuru, November 27, 2024.



- > Space for Urban Management, Session of TEDx, Bangalore Institute of Technology, November 23, 2024 (Published on YouTube).
- ➤ Keynote Address, Policy Dialogue on the Theme-subnational Climate Action: Monitoring, Technology and Best Practices, seminar organized by Centre for Environmental Education, Government of Karnataka, November 21, 2024.
- > Technology interventions and their impact on Climate Change, Round Table on Climate Smart Agriculture, Chanakya University, October 24, 2024.
- Use of Space Technology for Developmental Aspects, for the entry level engineering students, Global Academy of Technology, Bengaluru, September 24, 2024.
- > Space Tech for Sustainable Development and Climate Change, Lecture Series on Lets Talk Climate Change, Azim Premji University, Bengaluru, September 3, 2024 (Published on YouTube).
- ▶ Use of Bhuvan Geospatial Tool for Local Governance, Brain-Storming Session on Enhanced Local Governance, NIAS, August 29, 2024.
- Space Tech for Water Resources, PARAMCon2 Festival of Science, Yuvaka Sangha, Bengaluru, August 31, 2024
- National Space Day August 21, 2024 (various programmes during that week):
- o Chief Guest and Keynote Address, National Water Academy, Pune.
- o Inauguration of Astronomical Observation Telescope, Amber Valley Education Institution, Chikkamagalur.
- o Chandrayaan-3 Success, Chief Guest Lecture, IGSTC, DST, New Delhi.
- o Inauguration and Keynote Address, Astro-Club, MSR Education Institution, Bengaluru.
- Guest of Honor and Keynote Speaker, Graduation Ceremony, Cambridge Institute of Technology, Bengaluru, August 17, 2024.
- > Chief Guest and Keynote Address, Annual Entry Level Training Programme, Nettur Technical Training Foundation, Bengaluru, July 11, 2024.
- Guest of Honour, Graduation Ceremony and Invited Talk, AMC Engineering College, Bengaluru, June 29, 2024.
- > Space Data and ICT for Development for Cre'active Knowledge organized by ISTRAC, ISRO, Bengaluru, June 22, 2024.
- > Technical Talk, Faculty Awareness Programme for VTU Faculty, Jawaharlal Nehru New College of Engineering, Shivamogga, Karnataka, May 13, 2024.
- Future Scenarios of Bengaluru Using EO Data of the Past and Present, Keynote Address, one-day programme on AVANI Dialogues Bengaluru 2050 organized by Rotary Club, Indian Institute of Science, Bengaluru, April 21, 2024.

Memberships

- Member, Advisory Committee, Centre for Sustainability, Chanakya University, Bengaluru.
- > Member, Expert Panel, VTU.
- Member, Governing Council, Global Academy of Technology, Bengaluru.
- Member, Governing Council, Shri Madhwa Vadiraja Institute of Technology and Management, Udupi.
- Member, Academic Advisory Committee, School of Astronomy, Aryabhatta Knowledge University, Patna.

Other Activities

- > On special invitation, took lead in organizing an online technical session on Geospatial Technologies: Transforming Data into Action, as part of Sci560 at Science Gallery, Bengaluru, February 23, 2025.
- Contributed a section in a book 'Bengaluru Rising' with satellite images of past 50 years with analytics and statistics. The book was released by Honourable Chief Miniter of Karnataka as part of Bengaluru Technology Summit, November 16, 2024.



Energy and Environment Programme



Gufran Beig Ashutosh Mukherjee Chair Professor

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Joined NIAS on: October 18, 2021

Research Areas: Atmospheric Chemistry and Climate Change: Human Health and Socio-Economics.

Specific Research Areas

- Air Quality Management and Policy Framework
- Impact of Climate Change and Environmental Emergencies
- > Ozone as Pollution and Ozone as Protector
- > Development of Emission Inventory of Air pollutants and Greenhouse Gases
- > Air Quality and Impact on Human Health
- Long term Changes and Trends in the Middle Atmosphere

Current R&D Activity

- > Impact of large-scale circulation pattern and ENSO on regional air quality.
- ➤ Development of National inputs for emissions of F-gases (HFCs, PFCs, SF6, Mix, and Ammonia) for Government of India and United Nations Framework for Climate Change.
- Development of National Air Quality Resource Framework for India (NARFI).

Award

Fellow, Indian Meteorological Society, 2024.

Research Contributions

Teleconnections of Climate, ENSO and Air Quality: NIAS research explored the teleconnections of Climate Change, La Nina and air quality to understand extreme pollution events. Study underlines that in modern era of warming word, rapidly changing climate is an additional uncertain factor, other than local anthropogenic emissions, that not only exacerbating but also muddling the situation, necessitating even more rigorous mitigation efforts thereby contributing to disaster management. Findings suggest that we wake up to the fact that extreme and unusual occurrences in extreme air pollution phenomena are directly or indirectly a manifestation of climate change. Such revelations, in all probability, are set to increase by leaps and bounds and hence we need to factor it in our long-term disaster management strategies.

National Air Quality and Climate Resource Framework of India (NARFI): Air pollution has traditionally been viewed through the lens of local source emissions and location specific (states or city), which shaped India's National Clean Air Programme (NCAP).



In the context of a rapidly changing climate, there is a need to shift from a location-specific, emission-centric approach to one that accounts for broader meteorological and climatological processes, airshed mapping, and a more refined emissions inventory on a larger scale. In recognition of this, NIAS in association with the Office of the PSA working towards a resource framework for science-backed solutions for more effective pollution control. NIAS advocated a shift in policy towards an integrated air quality resource framework to provide science-based information mechanisms and knowledge resources. It will assist decision-makers across government, municipalities, start-ups, and the private sector in achieving green energy goals. A policy brief in this aspect is released by NIAS.

Towards India's National Communication to UNFCCC: Being a Party to the United Nations Framework Convention on Climate Change (UNFCCC), India on a regular basis has been communicating the status of its greenhouse gas emissions by sources and sinks amongst other relevant information through its National Communications (NC) and Biennial Update Reports (BUR) via MoEFCC focal point. NIAS is contributing for all matters relating to India's communications to the UNFCCC to provide- (a) all GHGs emissions from aviation, navigation, and Railways sectors; (b) Emissions of F-gases from industrial processes and product use.

Development of Emission Inventory of Pollutants for Indian Cities: At NIAS we work on developing the technological emission inventory for critical air pollutants over Indian Megacities and its application. This work has direct relevance to prioritizing mitigation policies and development of early warning system for air quality. A progressive approach outlining the source-specific strategy and control measures has been done to determine strength of various emission sources towards contribution to national initiative under NCAP (National Clean Air Programme). We use the most advanced technology with bottom-up approach-based surface emission database that includes all type of anthropogenic and natural sources in each city at ultra-fine resolution of 400 meters. This work will serve as foundational stone for developing an air quality forecasting framework for Bengaluru in the coming years.

Lectures

- Air Quality and Airshed Approach, Stakeholder's Meeting on Air Quality and Climate Change, organized by NIAS with Office of Principal Scientific Advisor to the Government of India, Vigyan Bhavan Annexe, New Delhi, November 7, 2024. https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2071578
- Executive Summary: Air Pollution Emission Hotspots of Bengaluru Urban District, Stakeholder Workshop on Emission Hot-spots of Bengaluru and SLCPs, NIAS, October 25, 2024.
- Recommendations and Interventions: Emission Inventory of BUD, Stakeholder Workshop on Emission Hotspots of Bengaluru and SLCPs, NIAS, October 25, 2024.

Memberships

- Member, Project Assessment and Advisory Committee, Anusandhan National Research Foundation (formerly SERB), DST, Government of India, New Delhi.
- Member, Committee on Impacts of Climate Change and Environmental Factors on Health, Indian Council of Medical Research, MoHFW, Government of India.
- ➤ Judge, 2024 Tata Transformation Prize in the Sustainability Category given by Tata Sons and The New York Academy of Sciences.





AV Krishnan Raja Ramanna Chair Professor School of Natural Sciences and Engineering

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Research Areas

- Energy Transition towards Cleaner Energy Generation.
- Identification of Greenfield and Brownfield sites for Installation of Nuclear Power Plants.
- Study the interactions between Energy Security, Environment, and Climate Change.

Research Contributions

A transition plan for thermal power plants was brought out considering the electricity demand for the Year 2030 and 2040.

Around 25 sites have been identified for installing Nuclear Power Plants. The site identification and evaluation were carried out as per the AERB Siting Code and the Preliminary Information Checklist of the Standing Committee for Site Selection constituted by the Department of Atomic Energy, Government of India.

The data analysis of CO₂ and SO_x emissions from Thermal Power Plants has been estimated for the year 2030, 2040 and 2050 under various scenarios. Policy recommendations against use of Flue Gas De-Sulphurisers (FGD) were presented to the Office of the Principal Scientific Advisor, NITI-Aayog, Ministry of Power and MoEFCC. Presentations made in various forums and the recommendations were finally accepted.

Lectures

- Stakeholder Meet on FGD, organized by the Office of the PSA, Government of India at Vigyan Bhavan, New Delhi, November 13, 2024.
- India Power Conference, Indian Energy Forum, October 21, 2024.
- > Towards Net Zero Compliant Power Sector for Developed India, India Power Forum 2024, October 21, 2024.

Membership

Member, Committee for Selection of Best-Case Studies in the Area of Overall Excellence, BHEL.





Raja Ram Singh Yadav Homi Bhabha Chair Visiting Professor School of Natural Sciences and Engineering

Room No. S 33 Tele: 080-22185169 Fax: 080-22185028 Email: rsyadav@nias. res.in Joined NIAS on: June 12, 2023

Research Contributions

Criteria for selection of Small and Medium Reactor. A report entitled 'Technological Assessment of Select Small and Modular Nuclear Reactors (SMR)' is published. In this project guidelines for selection of SMR are provided. These are typically categorised into (a) Geo-political considerations for imported units (b) Fuel supply and management (c) Type of technology used (d) Proof about performance of technology and reference plant in the vendors country (e) Comparative study of various types of possible candidate SMRs.

A research report jointly authored by Rudrodip Majumdar, Raja Ram Singh Yadav, AV Krishnan and R Srikant was published.

Technological Assessment of Select (Imported) Light Water Reactors to Accelerate Nuclear power in India. This work targets use of probable imported LWRs to nuclear power generation in the country to achieve the commitment of Government of India of Net-Zero Carbon emission and capacity addition for non-fossil power generation. Report examines the options available for India like PHWRs, BWRs, MSRs and PWRs. Criteria for selection include (a) Geo-political relations with the vendor country (b) Lifetime fuel supply (c) Raggedness of Technology based on performance of operating plants (d) Possibility of manufacturing of equipment in Indian factories (e) Management of Technology.

Comparative Study of technological features units like AP-1000, APR-1400, VVER-1200, EPR1650 and ABWR was presented.

A proposal was sent to Director, BARC identifying the areas of cooperation between NIAS and DIAS (formed under BARC). Topics include (a) Non-power application of Nuclear Reactors (b) Comparative Study on the Role of Large Nuclear Reactors and Small Modular Reactors (SMRs) in India's Energy Landscape (c) Assessment of gap areas in indigenous capability to manufacture special materials and equipment (d) Study on Economics of Scales for SMRs (e) Comprehensive compilation of behaviour of materials in nuclear environment (with a specific focus on Structural Materials) (f) Concept design for an LWR-type (pressurized water reactor) indigenous SMR (g) Systematic study of the concept design for carbon capture from a largescale cement plant and techno-economic aspects associated with the conversion of captured carbon into Methanol.

Membership

Member, Research Advisory Board, CMTI, Bengaluru.



Other Activities

- > Chairperson for mentoring and monitoring of the projects of AMTDC at IIT-M Chennai which is developing technologies under Make-in-India Programme funded by Ministry of Heavy Industries.
- Helping industry in indigenization of critical nuclear components as import substitute. Two types of large size equipment for Kudankulam projects being executed in collaboration with Russia have since been indigenised at Volta Engineering Designs, Hyderabad.
- Was a member of panel discussion in the conference organized by India Nuclear Society for Regulatory aspects for rapid deployment of nuclear power.

SCHOOL OF HUMANITIES



Deepti Navarathna TV Raman Pai Chair Professor

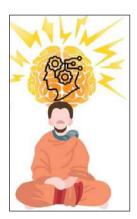
Room No. S 06 Tele: 080-22185073 Fax: 080-22185028 Email: deepti. navaratna@nias.res.in Joined NIAS on: March 2, 2022

Research Areas: Neuroscience of Music, Neuroeducation, Music in Education, Cognitive Musicology, Musical Hermeneutics.

Research Contributions:

Music, Brain and Creativity Laboratory: The Music, Brain and Creativity Laboratory (www.musicbrain.in) is engaged in interdisciplinary research at the intersection of music, education, neuroscience and creativity. The programme's research is geared towards applications of music in learning, education – such as arts-based strategies in education in the backdrop of NEP's paradigm shift from STEM to STEAM, UNESCO's goals of cognitive enhancement through music and multicultural education through music-based diplomacy.

En'chant Study: Cognitive Neuroscience of Chants: Funded by the Ministry of Education, Government of India, in this research study, the cognitive impact of chanting is studied using psychometric testing, EEG imaging and behavioural studies. An examination of the impact of neuro-validated chants on the working memory and phonological awareness of primary school children aged 5-7 is being undertaken. In the backdrop of the NEP 2020, which highlights the use of the arts in education, the findings of this study will further the case for using music as a cognitive enabler in early childhood development goals and curricular performance. As part of the project, we are currently working with 60 children in two schools





in Banashankari, Bengaluru. We have successfully completed first year review and reports and funds for second year have been granted.

Research Output: We are presenting the findings at one international conference in July 2025 as part of the Cognitive Neuroscience Society Conference in USA (virtual presentation). We have submitted a manuscript to Journal of Educational Neuroscience titled "Unlocking the Sanskrit Effect: Impact of Chanting on Working Memory in Children' as of April 2025.

Citta-Vidya Initiative and Leadership Programmes: In collaboration with Mr Raghu Ananthanarayan, Ritambhara Centre, 'Citta Vidya and Indian Psychology Initiative' at NIAS was launched in 2023, in the direction of creating a premiere centre for interdisciplinary research in Citta Vidya/Yoga neurocognition. The proposed centre integrates scholarship in Yogic psychology, augmenting the various ongoing research programmes at NIAS with shared mandates. A 5-day leadership programme titled "Leading from Within" was conducted in September 2024 under the initiative. The programme was well-received and attended by 15 participants from various science institutes of India and individual registrations. A second leadership programme is being conducted June 9 to 13, 2025 with participants from various scientific institutes across India.

Awards

- Marie Curie Award at the Rashtriya Mahila Vijnana Sammelana November 2024. Given to meritorious women in science doing inter-disciplinary research.
- Award for Research in Education National Elite Education Awards, April 2025. Given to persons brining research into educational paradigms and schools.
- > Bangalore Mirror and Vijaya Karnataka Excellence Award, February 2025. Given to persons who have excelled in various fields in Karnataka.

Lectures

- Your Brain on Music, Indian Institute of Science, Bengaluru, February 18, 2025.
- Keynote Address, Neuroaesthetics in South Indian Classical Music, National Seminar on Interdisciplinary Perspectives in Music Education and Research, Thiruvananthapuram, November 13, 2024.

Memberships

- > Doordarshan and AIR Audition and Selection Committee appointed by Prasar Bharati.
- > Invited member of the Society of Neuroscience, World Anthropology Forum and Society for Ethnomusicology.





FACULTY MEMBERS

Conflict Resolution and Peace Research Programme



D Suba ChandranProfessor and Dean
School of Conflict and
Security Studies

Room No. S 03 Tele: 080-22185142 Fax: 080-22185028 Email: subachandran@ nias.res.in Joined NIAS on: November 18, 2015

Research Areas: Global Politics is the primary research focus, analysing contemporary global developments through lectures, courses and the flagship publication – The World This Week. Second primary focus has been on area studies, with a special reference to Pakistan, China (and East Asia), Europe and Africa. All four Area Studies at NIAS have a monthly monitor as a primary outcome. Besides the daily and monthly focus, there is an effort to bring an annual analysis in the form of NIAS Annuals. In 2025, published four annuals so far – Global Politics, State of Conflicts, Indo-Arctic and Africa. Annuals on Europe, China and Pakistan are likely to be published during the second half of 2025. Finally, research focus has been on contemporary conflicts, with NIAS Conflict Weekly being the flagship publication.

Academic Courses

- Contemporary Global Politics: Issues, Theories and Trajectories for NIAS doctoral students, August to December 2024.
- Conflict Resolution and Peace Research, for NIAS doctoral students, August to December 2024 (In Collaboration with Dr Anshuman Behera)
- NIAS online course on Contemporary Global Politics, Global Politics, Regional Security and World Order for undergraduate and postgraduate students from different institutions.
- > NIAS online course on Contemporary South Asia, Contemporary South Asia: State of Politics, Economy, Society and Foreign Policy for undergraduate and postgraduate students from different institutions (In Collaboration with the Centre for South Asian Studies, Pondicherry University).

- State of Conflicts in 2025, GPPAC ISG (online), February 20, 2025.
- State of Global Politics in 2025, Madras Christian College, Chennai, February 10, 2025.
- Labour Migrants from South Asia: Issues and Concerns, COSATT Dialogue, Colombo, November 12, 2024.



- > Traditional and Non-Traditional Security Challenges in Asia Today: An Overview, NESA Workshop on Security Dynamics and Challenges in South and Central Asia, Bangkok, September 9 to 13, 2024.
- > The Pakistan Mindset, Centre for Naval War College, Goa, August 20, 2024
- > State and Climate Action in South Asia, GPPAC South Asia Conference, Kathmandu, December 17, 2024.
- > State of the World Order and India: Trajectories, Disruptions and Options, NCH University, Taiwan, August 17, 2024.
- ▶ Idea of Pakistan, Centre for Air War College, Secunderabad, July 29, 2024.
- > Contemporary Conflicts: Climate, Gaza, Ukraine and Africa, Tribhuvan University, Kathmandu, July 19, 2025.
- > China and India: The State of Relations and Trajectories, UoSC-CSAS Conference, Kathmandu, July 17, 2024.
- Contextualizing Ocean Governance, Indian Maritime University, Vishakhapatnam, April 15, 2024.



Anshuman Behera Associate Professor School of Conflict and Security Studies

Room No. F 34 Tele: 080-22185137 Fax: 080-22185028 Email: anshumanbehera@ nias.res.in Joined NIAS on: January 31, 2014

Research Areas: Democracy, Development and Conflict in India; Formal and Informal Decentralisation in Northeastern States in India (Special focus on Manipur and Mizoram); Cooperative Federalism and Local Governance in India; Socio-Economic Impact Assessment of Development projects and Corporate Social interventions; Political violence and conflict in South Asia; Maoist Conflict in India; Ethnic Conflict in Northeast India.

Academic Courses

- ➤ Internal Security Issues: Nation Building, Democracy and Development for the Master Students in Malviya Centre for Peace Research, BHU, March 4 to 8, 2025.
- ➤ Theoretical Constructs of Understanding Conflict and Peace for NIAS doctoral students, August 10 to December 25, 2024.
- Qualitative Research Methodology for NIAS doctoral students, August 10 to December 25, 2024.

- ➤ Internal Conflicts: A Challenge to Industry Potential, School of Commerce, Mount Carmel College, Bengaluru, March 14, 2025.
- Geopolitics and Geoeconomics in International Relations, Workshop on Trends in Studies of Geopolitics and International Studies, REVA University, Bengaluru, February 28, 2025.
- India's Civilisational Ties with the Southeast Asian Countries, 5th Himalaya-Hind Mahasagar Rashtra Samuh Conference, organized by the Forum for Awareness in National Security, Hansraj College, Delhi, January 30 and 31, 2025.



- Vasudhaiva Kutambakam as guiding principle of India's Foreign Policy, National Seminar on Bridging Ancient Wisdom and Modern Innovation for a Viksit Bharath, organized by ABRSM, Trivandrum, January 4, 2025.
- Cold War 2.0 and India: Non-Alignment, Multi-Alignment and Internationalism, National Seminar on Cold War 2.0 and India, organized by the Center of Excellence for Geopolitics and International Studies, REVA University, Bengaluru, December 13 and 14, 2024.
- Examining Manipur's Crisis: Pathways to Peace and Reconciliation, November 30, 2024.
- Fiscal Federalism and Economic Growth: Financial Governance in the Scheduled Areas of India, Conference on Exploring the Relationship Between Federalism and Economic Growth, jointly organized by the Department of Political Science, Delhi University and Hanns Seidel Stiftung, November 29, 2024.
- Maoist Insurgency in India, Lecture at Centre for National Security Studies, Ramaiah University, Bengaluru, November 29, 2024.
- Rethinking Global Politics: A Non-Western Discourse, organized by School of Law, PES University, Bengaluru, November 11, 2024.
- The Future of Jihadists Groups in Bangladesh Post Hasina Dispensation, Indic Research Forum, October 26, 2024.



International Strategic and Security Studies Programme



S Chandrashekar Honorary Visiting Professor School of Conflict and Security Studies

Room No. F 08 Tele: 080-22185084 Fax: 080-22185028 Email: schandra@nias. res.in Joined NIAS on: July 2, 2004

Research Areas: Space, Business, Corporate and National Strategies, Strategic Studies, Missiles, Nuclear Weapons, War and Deterrence, Technology and Development, Technological Competitiveness, Game Theory and Applications, Social Networks and Applications, Technology and Business, Innovation, Competitive Benchmarking, Crisis Management in Complex Systems.

Lecture

China's Space Capabilities, Closing Session of the Webinar on Space, organized by the Takshashila Foundation, August 24, 2024.

Memberships

- Member, Board of Trustees, RBANMS Group of Educational Institutions, Bengaluru.
- Member, Board of Governors, MVJ College of Engineering, Bengaluru.
- Member, Academic Council, Chennai Centre for China Studies (C3S).

Other Activities

- A book on Prof Satish Dhawan and His Role in the Creation of the Indian Space Programme has been completed. Jointly authored with YS Rajan it provides a first-person account of the evolution of the space effort in India. It combines the real happenings with people, incidents and events. It also weaves domestic, international and organizational politics into the happenings within ISRO during the Dhawan era. The manuscript is currently under review.
- ➤ Book titled 'China's Space Programme From the Era of Mao Zedong to Xi Jinping' that had been published under an Agreement between NIAS and Springer in May 2022 has achieved over 10000 downloads from various institutions in India and abroad. Hard and soft copies of the book are still in demand across all major countries including the US, Europe and China. Details are available at https://link.springer.com/book/10.1007/978-981-19-1504-8
- Was invited to take part in the Bangalore Space Security Dialogue, organized by the Takshashila Foundation and Dynamatic Technologies at the Aerospace Park, Bengaluru, December 11, 2024.
- Took part in a Closed-Door Gaming Workshop on Space Capabilities and Their Role in Crisis Management and War Fighting, organized by the Takshashila Foundation, November 14 and 15, 2024.
- Guest Faculty, Department of Geopolitics and International Relations, Manipal Academy for Higher Education.





Rajaram Nagappa Honorary Visiting Professor School of Conflict and Security Studies

Room No. F 07 Tele: 080-22185087 Fax: 080-22185028 Email: r.nagappa@ nias.res.in Joined NIAS on: February 1, 2007

Research Areas: Weapon Systems and Advances in Weapon Systems.

Lectures

- India-US Space Cooperation: Prospects and Challenges, Podcast with US-India Partners in Progress Project, Christ University, Bengaluru, November 23, 2024.
- ➤ Hypersonic Delivery Systems, NIAS-CISAC Meet on Strategic Threats of the 21st Century, November 13, 2024.
- ➤ Indian Defence Space Programme and Requirements (online), Indian Army, April 22, 2024.



PM Soundar Rajan Visiting Professor School of Conflict and Security Studies

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Research Areas: Advanced Weapon Systems; Fifth Generation Avionics Systems; Cyber Security; Defence Applications of AI; Air Power Assessment; Chinese Defence Technology Assessment; Lethal Autonomous Weapon Systems; Science Diplomacy; Hypersonic Weapon System Avionics and Vetronics Systems for Battle Tanks.

- ➤ High-Tech Border Security: Current and Emerging Trends, National Seminar on Advancing Border Security Through Technological Innovation: A Vision for Viksit Bharat@2047, Presidency College, Bengaluru, February 22, 2025.
- The Operational Usage of EW and AI in the Russia-Ukraine War, Interaction Session of Think Tanks with Indian Air Force, Air Force Station, New Delhi, January 16, 2025
- > Tactics and Technologies at Play in the Ukraine War, IEEE AESS Technology Conclave 2024, December 1, 2024.
- Presentation on Cyber Security and AI Technologies to the French Ambassador on Indo-Pacific Security Challenges, November 29, 2024.
- Avionics System Trends and Cyber Security, Software Development Institute, Indian Air Force, July 7, 2024.





N Ramani Visiting Professor School of Conflict and Security Studies

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Research Areas: Development of Tools for Missile and Space Asset Capability Assessment.



Prakash
Panneerselvam
Assistant Professor
School of Conflict and
Security Studies

Room No. F 34 Tele: 080-22185138 Fax: 080-22185028 Email: prakash.p@ nias.res.in Joined NIAS on: December 1, 2015

Research Areas: Maritime Security, International Relations (Japanese Studies), Defence and Strategic Studies.

Academic Course

Two-credit course on Methodology of Social Sciences and Typology of Research for NIAS doctoral students from January to April 2025.

Awards

- Research Fellow, Japan Foundation Indo-Pacific Partnership Programme (2023-2024).
- > Visiting Researcher, Graduate School of Law, Kobe University, Japan.
- Non-Resident Scholar, Research Institute for Indo-Pacific Affairs (RIIPA), Japan.

Lectures

Maritime Strategy, Naval Innovation, and Changing Dynamics of Power in the Indo-Pacific, Swaraj National Security Seminar, organized by CSM-CSSS, School of International Studies, Jawaharlal Nehru University, New Delhi, March 21 and 22, 2025.



- Panellist, Australia-India Deepening Maritime Cooperation for a Resilient Indo-Pacific, organized by Centre for Public Policy Research (CPPR) in collaboration with the Australia India Institute, Kochi, Kerala, March 12, 2025.
- Panellist, 29th ASEAN Roundtable Surviving Multipolarity: Does ASEAN Have a Strategy?, organized by the Association of Southeast Asian Nations and the National University of Singapore, October 30, 2024.
- India's Northeast and Japan's Development Role: Opportunity and Challenges, Kobe University, September 26, 2024.
- Changing Paradigm of India-Japan Maritime Security Cooperation in the 21st Century, Kobe University, June 11, 2024.

Memberships

- NAAC Representative, Board of Studies, Department of South and Central Asian Studies, Central University of Punjab.
- Member, Board of Studies, Department of Defence and Strategic Studies, Tiruvallur University, Vellore, Tamil Nadu.
- Member, Board of Studies, Department of Defence and Strategic Studies, Gurunanak College (autonomous), Chennai.



Consciousness Studies Programme



Sangeetha Menon
Professor and Dean
School of Humanities

Room No. F 06 Tele: 080-22185090 Fax: 080-22185028 Email: sangeetha. menon@nias.res.in Joined NIAS on: January 8, 1996

Research Areas: The broad area of research work is 'consciousness studies', and the specific focus is the experiential self, with: (i) the implications of experience, (ii) the place of emotions, self-identity and self-transformation, and (iii) the possible interdisciplinary dialogues that promote psychological health and deeper well-being. Work for the last five years suggests that the qualitative nature of consciousness is best understood by examining the brain-self interrelations and the challenges that the brain and the self-give each other. In this process, the methodologies to understand the outer body-sense and cognitive capabilities are insufficient to understand the inner self and its experiential quality. recent work and publications are in the areas of Medical Humanities; Indigenous Philosophies and Healing traditions.

Academic Course

> Two-credit course on Signs of Self continued with focus on The Method, Approaches and the Building of the Self, and how narrative formations are connected with the self for NIAS doctoral students, August to December 2024.

- Self and Wellbeing, Symposium organized by IIT Ropar, Department of Humanities and Social Sciences and Centre for Indigenous Knowledge Systems, March 21 and 22, 2025.
- ➤ Inclusive Ethnography and Self-Care, Conference on Culture, Society, and Future: Anthropology of Today and Tomorrow, organized by the Department of Anthropology, University of Madras, Chennai, held at Anthropology Museum, Department of Anthropology, University of Madras, March 19, 2025.
- ➤ The Importance of Humanism and The Philosophy of Self in the Context of an AI-Driven World, Panel Discussion on Artificial Intelligence, Ethics and Transcultural Innovation, organized by the Kyoto Institute of Philosophy and University of Bonn, March 1, 2025.
- ➤ Being a Humanistic Teacher to Navigate the Future AI Space, International Faculty Development Programme Lecture, for Department of English, Kristu Jayanthi College, Bengaluru, October 4, 2024. https://youtu.be/EqOqrXtSgK8
- ➤ Human Self, Conversational Chatbots and Their Philosophical Well Being, Plenary Lecture, 3rd GFYP International Conference on Philosophizing in India in the Digital Era, organized by the International Centre of the Sankaracharya University, Kalady, Kerala and the Indian Council of Philosophical Research, June 19, 2024.



- Annual MS Ramaiah Memorial Lecture 2024, organized by the MS Ramaiah Foundation, April 19, 2024.
- Diversity, Equity, Inclusion, and Accessibility (DEIA) in Science, Technology, Engineering, and Mathematics, Focus Group Discussion, organized by Office of PSA, at the Department of Materials Engineering, Indian Institute of Science, Bengaluru, April 10, 2024.

Membership

Member, Selection Committee Meeting organized by the Chankaya University, for the School of Arts, Humanities and Social Sciences.



Sisir Roy Honorary Visiting Professor School of Humanities

Room No. F 25 Tele: 080-22185143 Fax: 080-22185028 Email: sisirnias@nias. res.in Joined NIAS on: November 5, 2014

Research Areas: Contemplative practices and Modern Science; Quantum Physics and Consciousness; Data Analysis and Cosmological Redshift.

Lectures

- Lecture at International Conference on Quantum Physics and Ontology of Sunyata, Tibet House, New Delhi, March 8, 2025.
- World Confluence of Humanity, Power and Spirituality, Kanoria Foundation, Kolkata, December 27 and 28, 2024.
- Caturtham Visva-Veda-Vijanana-SAmmelam, Keynote Address, Sastra University, Tamil Nadu, December 22 to 25, 2024.

Other Activities

- ➤ Second Dialogue between Scientists and Sastrjna on Matter, Mind and Consciousness (along with Dr VV Binoy), funded by Hexagon Manufacturing Intelligence, India, March 24, 2025.
- First Dialogue between Scientists and Sastrjna on Matter, Mind and Consciousness (along with Dr VV Binoy), funded by Hexagon Manufacturing Intelligence, India. This was dedicated to Prof BV Sreekantan on his Birth Centenary Celebration, February 7, 2025.
- ➤ The Relevance of Traditional Wisdom in Modern Science on the occasion of Birth Centenary Celebration of Dr Raja Ramanna (along with Dr VV Binoy and Dr Rudrodip Majumdar), April 4, 2024.



Heritage, Science and Society Programme



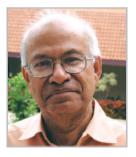
Sharada Srinivasan Professor School of Humanities

Room No. S 13 Tele: 080-22185125 Fax: 080-22185028 Email: sharadasrini@ nias.res.in Joined NIAS on: June 10, 2001

Research Areas: Archaeometallurgy.

- High-Tin Bronzes from Coastal Tamil Nadu Burial Sites and Harappan Connections, National Seminar on Archaeology as History, CP Ramaswamy Aiyar Indological Foundation, Chennai, March 29, 2025.
- Journey in Archaeometallurgy, Keynote Address on the occasion of International Women's Day, Bihar Museum, March 8, 2025.
- Journey in Archaeometallurgy, 5th Bibha Chowdhuri Memorial Lecture, Physical Research Laboratory, March 3, 2025. https://www.youtube.com/live/7ePYATD9RvQ
- Rare Delta Bronze Mirror Craft from Kerala: From Tradition to Contemporaneity, International Seminar on Asian Bronze, coinciding with the Exhibition on Asian Bronze at Rijksmuseum Amsterdam, February 9, 2025.
- Exploring Indian Ocean Connections in Iron Age-Early Historic Southern India, Annual Winter Lecture of York University, supported by Society of Antiquaries, UK, coinciding with Indian Ocean Worlds Conference, York University, December 13, 2024.
- Art and Technology of Metal Mirrors in South Indian Antiquity and South Indian Iron Age-Early Historic High-Tin Bronzes, University of Wisconsin Madison, Department of Anthropology and Archaeology, October 3 and 4, 2024. https://www.youtube.com/watch?v=84hZ0oS6Jmk





S Ranganathan Honorary Visiting Professor School of Humanities

Room No. F 25 Tele: 080-22185073 Fax: 080-22185028 Email: sranganathan@ nias.res.in Joined NIAS on: July 2, 2004

Research Areas: Materials Heritage.



Srikumar M Menon Associate Professor School of Humanities

Room No. F 33 Tele: 080-22185134 Fax: 080-22185028 Email: srikumar. menon@nias.res.in Joined NIAS on: March 1, 2016

Research Areas: Megalithic Monuments of India, Indian Temple Architecture, Archaeoastronomy.

Academic Course

An Introduction to the Built Heritage of India two credit course for NIAS doctoral students, August to November 2024.

Lectures

- ➤ Celestial Geometry: Sun-facing Monuments of South India, Paraspar Programme of the Office of Communications, Indian Institute of Science, Bengaluru, January 24, 2025.
- ➤ The Secret Life of Monuments, Public Talk, Bangalore International Centre, October 4, 2024.
- Riding the Sound Wave: Creating Music, Architectural Acoustics and the Tabla, Science Gallery, Bengaluru (along with Dr Biman Nath of RRI and Dr Shayan Garani Srinivasa of IISc), September 14, 2024.
- ➤ Vidyarathna Shri RS Panchamukhi Memorial Endowment Lecture Stories from Silent Stones: The Art of Stoneworking in Mediaeval Karnataka, The Mythic Society, Bengaluru, May 19, 2024.

Membership

Member, PhD Committee, Martin Luther Christian University, Shillong.





MB Rajani Associate Professor School of Humanities

Room No. S 19 Tele: 080-22185176 Fax: 080-22185028 Email: mbrajani@nias. res.in Joined NIAS on: January 1, 2015

Research Areas: Cultural Landscape Research; Landscape Archaeology; Geospatial Analysis of Cultural Heritage; Musicology and Music Heritage.

Academic Course

Two-credit course on GIS for Spatial Data Visualization and Analysis for NIAS doctoral students, August to December 2024.

Lectures

- Five Degrees of Variation at Nalanda: A Stellar Hypothesis (along with Dr Viraj Kumar), Mount Carmel College, Bengaluru, March 4, 2025.
- Beyond Boundaries: New Insights into Bodhgaya's Ancient Landscape, South Asia Beyond Border Lecture Series, IIC-Ashoka University, February 21, 2025.
- Presented Research on Bodhgaya, Workshop and Podium Discussion on The Xuanzang's Trail, Bihar Museum, Patna, May 14 and 15, 2024.



S Udayakumar Assistant Professor School of Humanities

Room No. F 36 Tele: 080-22185163 Fax: 080-22185028 Email: udayarch@nias. res.in Joined NIAS on: January 1, 2018

Research Areas: Archaeology, Experimental Archaeology, Archaeometallurgy, Material Culture and Ethnoarchaeology.

Academic Course

Two-credit course on Methods in Archaeology for NIAS doctoral students, January to May 2025.

- ➤ The Importance of Experimental Archaeology and Ethnoarchaeology in Technical Studies of Material Culture, Deccan College PG and Research Institute, Pune, March 6, 2025.
- Experimental Archaeology of Bone Tools Making Techniques, Somaiya Vidyavihar University, Mumbai, March 4 and 5, 2025.
- An Archaeo-Experimental Approach to Understanding the Indian Metal Heritage of Bronze Images of Harappan Civilization, Indus Valley 100 National Conference on Indus Civilization: Its Culture and People Archaeological Insights, DG Vaishnav College and Centre for South Indian Studies, Chennai, March 3, 2025.



- South Indian Bronze Casting, Workshop on 100 Years of Harappa: Through Bronze Age, NIAS, February 6 and 7, 2025.
- > A Current Wisdom of Indian Metal Heritage and Craftsmanship: Technological Perspective, NMKRV College for Women, Bengaluru, May 18, 2024.
- > Trace, Observe and Understanding the Metal and Metal Craftsmanship in India, World Heritage Day Popular Talk, IGRMS, Mysuru, April 18, 2024.



Diya Mukherjee Post-Doctoral Associate School of Humanities

Room No: A 3
Tele: 080-22185053
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Email: diya.
mukherjee@nias.res.in

Joined NIAS on: May 31, 2021

Research Areas: Harappan Studies, Archaeo-metallurgy, Ethnography, and Ethnoarchaeology and Experimental Archaeology.

Academic Course

Two lectures on Harappan Ceramic Technology and Harappan Beads for NIAS doctoral students (along with Dr S Udayakumar's Coursework Methods in Archaeology) on April 7, 2025 and April 28, 2025.

- Ancient Alchemy: Echoes of Metal in the Harappan Era and Its Legacy in the Modern World, as a part of Bronze Through Time as a Celebration of the Discovery of the Harappan Civilization, organized for Tamil Nadu State Department, Archaeology at NIAS, March 26 to 28, 2025.
- ➤ Crafting History of the Ancient Artistry from Wax to Wonder: Exploring Harappan Legacy of Lost Wax Casting, National Seminar on 100 Years Discovery of the Harappan Civilization, organized by Centre for South Indian Studies, Chennai in collaboration with DG Govardhan College, Chennai, March 3 and 4, 2025.
- Poster Presentation on Forging History: Experimental Studies on Ancient Copper Smelting, as a part of 100th Year Celebration of the Discovery of Harappan Civilization, theme Bronze Through Ages, NIAS, February 6 and 7, 2025.
- Metallurgical Marvels: The Bronze Age of the Harappan Civilization for the Bronze through Time, as a part of the Discovery of the 100 Years of the Harappan Civilization, NIAS, February 6 and 7, 2025.
- Harappan Technology: A Journey through Time, Its Continuity and Survival, National Seminar on 100 Years Discovery of the Harappan Civilization: Old Problems and New Perspectives, organized by Indian Council of Historical Studies (ICHR) in collaboration with Sahitya Sansthan Janardan Rai Nagar Rajasthan Vidyapeeth University, Udaipur, September 20 and 21, 2024.
- ➤ The Traditional Knowledge System and Its Current Perspective: An Ethno-archaeological Perspective to Understand the Ancient Investment Casting, 51st National Conference on Conservation, Technology and Scientific Study of Ancient and Historic Metals, organized by Indian Association for the Study of Conservation of Cultural Property, New Delhi in association with Maharana of Mewar Charitable Foundation Udaipur held at City Palace Museum, Udaipur, September 14 and 15, 2024.



Animal Behaviour and Cognition Programme



Sindhu Radhakrishna Professor School of Natural Sciences and Engineering

Room No. S 23 Tele: 080-22185115 Fax: 080-22185028 Email: sindhu@nias. res.in Joined NIAS on: September 1, 2001

Research Areas: Animal Behaviour and Cognition, Primate Behavioural Ecology, Human-Animal Studies, Environmental Decision-Making, Human-Wildlife Conflict, Conservation Biology, Environmental Education.

Academic Course

Two-credit course on Animal Behaviour and Cognition for NIAS doctoral students, September to December 2024.

Lectures

- Shedding Light on the Ecological Niche Breadth of the Grey Slender Loris (with Ashisha Kannadasan), 15th Student Conference on Conservation Science, Bengaluru, October 24, 2024.
- The Vermin Campaign for the Wild Pig in Kerala, India (with Athira Balakrishnan), Pathways Europe 2024 Conference, Cordoba, Spain, October 2024.
- Conservation is a Double-Edged Sword: Lessons from the Vermin Campaign for the Wild Pig in Kerala, India (with Athira Balakrishnan A), 60th Meeting of the Association for Tropical Biology and Conservation, Kigali, Rwanda, July 2024.

Memberships

- > Associate Editor, Frontiers in Conservation Science, 2022 onwards.
- Associate Editor, Resonance, 2023 onwards.
- ➤ Commission Member, IUCN SSC Primate Specialist Group S. Asia, 2013 onwards.

Other Activities

- Published two papers on human-macaque interactions in a special issue in the International Journal of Primatology.
- ➤ Co-authoring a primatology textbook Primates in a Changing World with Dr Erin Riley from San Diego University and Dr Katherine Jack from Tulane University. The book is scheduled to be published in 2026.





Anindya Sinha Professor School of Natural Sciences and Engineering

Room No. S 22 Tele: 080-22185117 Fax: 080-22185028 Email: asinha@nias. res.in Joined NIAS on: November 15, 1996

Research Areas: Mammalian Behavioural Ecology and Cognitive Psychology, Animal Population and Behavioural Genetics, Evolutionary Biology, Conservation Studies, Urban Ecologies and Human–Nonhuman Relationships, Other-than-Human Studies, Indigenous Knowledge Systems, Cultural Heritage and Performance Studies, Philosophy of Biology

Academic Courses

- Two-credit course on Philosophy of Biology and Conservation for master's degree students of the Postgraduate Programme in Wildlife Biology and Conservation, National Centre for Biological Sciences, Bengaluru, February to March 2025.
- ➤ Lectures on Evolutionary Behavioural Ecology, Observational Studies on Anthropophilic Indian Macaques and Observational Methods in Nonhuman Studies, delivered as part of a two-credit course on Behavioural Ecology for master's degree students of the Postgraduate Programme in Wildlife Biology and Conservation, National Centre for Biological Sciences, Bengaluru, March 2025.

Awards

- South-North Mobility Grant 2024, Local Heritage, Environment and Globalisation/ PALOC - French National Institute for Research in Sustainable Development/IRD, Paris, France, September to November 2024.
- Nominated Associate Research Fellow, Centre for Local Heritage, Environment and Globalisation (PALOC), UMR 208, French National Research Institute for Sustainable Development (IRD), Marseille and Paris, France, September 2024 to August 2026.

- Consciousness in the Wild: Natural Observations of the Nonhuman Primate Mind, Invited Lecture in Honour of Ratan Lal Brahmachary, IBM 2025: Eighth India Biodiversity Meet 2025, Indian Statistical Institute, Kolkata, March 24, 2025.
- Being Macaque: Our Complex Coexistence with Urban and Synurbising Macaques, Institute Colloquium, National Institute of Science Education and Research, Bhubaneswar, March 13, 2025.
- The Macaque in the City: Our Complex Coexistence with Urban Macaques, Invited Lecture, Sci560 Public Lectures, Science Gallery Bengaluru, February 15, 2025.
- Our Oneness with Nature...and with Monkeys! Invited Lecture, Open Day, Bidiru Learning Centre, Bengaluru, February 9, 2025.
- ➤ The IBO Tests: Principles and Practice, Orientation Programme on the International Olympiads, Jagadis Bose National Science Talent Search, Kolkata, January 31, 2025.



- A Brave New World: The Way Ahead, Keynote Lecture, Annual Award Function, Jagadis Bose National Science Talent Search, Kolkata, January 25, 2025.
- A Beautiful Mind: Social Cognition and Consciousness in Bonnet Macaques, Invited Lecture, Jagadis Bose National Science Talent Search, Kolkata, January 25, 2025
- Of Macaques and Men: Human-Macaque Lifeworlds in the Indian Anthropocene, Invited Lecture, The Real Elephant Collective, Gudalur, January 14, 2025.
- Wetlands in Your Backyard, Orientation Programme on Inter-relationships Within the East Kolkata Wetland Ecosystem, Disappearing Dialogues, Kolkata, January 3, 2025.
- From Collaborations to Disruptions: More-than-Human Lifeworlds with Macaques and Elephants in India, Local Heritage, Environment and Globalisation/PALOC French National Institute for Research in Sustainable Development/IRD, Paris, France, Invited Lecture 2, November 21, 2024.
- A Brave New World: A Synthesis of More-than-Human Social Sciences and Nonhuman Ethno-Ethologies, Invited Lecture 1, Local Heritage, Environment and Globalisation/PALOC French National Institute for Research in Sustainable Development/IRD, Paris, France, November 19, 2024.
- Macaque Lifeworlds: Complex Human-Macaque Relationships in the Indian Anthropocene, Conference on More-than-Human Perspectives: Rethinking Interspecies Relationships and Lifeworlds in India, National Museum of Natural History, Paris, France, November 12, 2024.
- ➤ Complex Human-Macaque Friendships in India, Invited Lecture, Centre Recherche en Psychologie et Neurosciences, Aix-Marseille Université, Marseille, France, September 9, 2024.
- ➤ The Macaque in the City: Complex Human-Macaque Lifeworlds in the Indian Anthropocene, Keynote Lecture, Urban Animals in the Age of Extinction: An Aesthetic, Affective, Ecological, Historical Exploration of Humans and Animals in Crisis in India: An International Conference, FLAME University, Pune, August 28, 2024.
- Echoes: Nurturing New Approaches to Practices and Pedagogies, Panel Discussion on Sustainability and Arts Practices for Climate and Community Resilience, Disappearing Dialogues, Kolkata and Arthshila Santiniketan, Shantiniketan, August 17, 2024.
- Changing Ecologies, Transforming Lives: Complex Human-Macaque Lifeworlds in the Indian Anthropocene, Invited Webinar, Coexistence in Practice Webinar Series, Coexistence Consortium, Bengaluru, July 24, 2024.
- The Macaque in the City: Affective, Negotiated Macaque—Human Relationships in Urban India, Symposium on Impact of Anthropogenic Factors on Animal Social Behaviour, Indian Wildlife Ecology Conference 2024, Bengaluru, June 16, 2024.
- Consciousness in the Wild: Natural Observations of the Nonhuman Primate Mind, Invited Lecture, Second Animal Consciousness Conference, Kathmandu, Nepal, May 4, 2024.

Memberships and Honorary Appointments

- Member, Screening Committee for Selection of Faculty, Department of Cognitive and Brain Sciences, Indian Institute of Technology, Gandhinagar, March 21, 2025.
- Member, Screening Committee for Selection of Faculty, Department of Cognitive and Brain Sciences, Indian Institute of Technology, Gandhinagar, October 7, 2024.
- Member, Committee for Selection of Fellowship Coordinator, Coexistence Consortium, University of Transdisciplinary Health Sciences and Technology, Bengaluru, July 19, 2024.
- Member, Science Committee, Indian Wildlife Ecology Conference 2024, National Centre for Biological Sciences, Bengaluru, June 14 to 16, 2024.
- Member, Committee for Selection of National Students, Postgraduate Programme in Wildlife Biology and Conservation, National Centre for Biological Sciences, Bengaluru, May 27 to 30, 2024.



- Member, Committee for Selection of International Students, Postgraduate Programme in Wildlife Biology and Conservation, National Centre for Biological Sciences, Bengaluru, April 8 and 9, 2024.
- Adjunct Teaching Faculty, Postgraduate Programme in Wildlife Biology and Conservation, National Centre for Biological Sciences, Bengaluru, August 2010 onwards.
- > Adjunct Faculty, Centre for Neuroscience, Indian Institute of Science, Bengaluru, June 2011 onwards.
- Scientific Advisor and Research Coordinator, Dhole's Den Research Foundation, Bandipur National Park, October 2012 onwards.
- > Vice President, Association for Teachers in the Biological Sciences, Mumbai, India; May 2015 onwards.
- Honorary Research Fellow, School of Humanities, University of Exeter, Exeter, United Kingdom, August 2015 onwards.
- Member, Conservation Committee, International Primatological Society, January 2019 onwards.
- Affiliate Senior Scientist, Centre for Wildlife Studies, Bengaluru, July 2020 onwards.
- Member, Subsection on Primates in Human Culture, IUCN/SSC Primate Specialist Group Section on Human-Primate Interactions, Species Survival Commission of the International Union for the Conservation of Nature, Gland, Switzerland, July 2020 onwards.
- Member, Subsection on Urban Primates, IUCN/SSC Primate Specialist Group Section on Human-Primate Interactions, Species Survival Commission of the International Union for the Conservation of Nature, Gland, Switzerland, July 2020 onwards.
- Member, Institute of Public Health Society, Bengaluru, October 2020 onwards.
- Member, Governing Board, Institute of Public Health, Bengaluru, July 2021 onwards.
- Member, IUCN/SSC Primate Specialist Group South Asia Section, Species Survival Commission of the International Union for the Conservation of Nature, Gland, Switzerland, March 2013 onwards, renominated from October 2021 to September 2025.
- Member, Governing Board, The Lion-Tailed Macaque Project, Odense, Denmark, November 2021 onwards.
- External Member, Combined Undergraduate and Postgraduate Board of Studies for Environmental Biology and Wildlife Sciences, Cotton University, Guwahati, March 2022 onwards.
- Adjunct Faculty, Manipal Academy of Higher Education, Manipal, April 2022 onwards.
- Member, Coexistence Consortium, Bengaluru, October 2022 onwards.
- Professor of Practice, University of Trans-Disciplinary Health Sciences and Technology, Bengaluru, December 2023 onwards.
- Associate Research Fellow, Centre for Local Heritage, Environment and Globalisation (PALOC), UMR 208, French National Research Institute for Sustainable Development (IRD), Marseille and Paris, France, September 2024 onwards.



Complex Systems Programme



Nithin NagarajAssociate Professor
School of Humanities

Room No. F 32 Tele: 080-22185126 Fax: 080-22185028 Email: nithin@nias. res.in Joined NIAS on: October 15, 2015

Research Areas: Nonlinear Dynamics, Chaos and Information Theory and Its Applications; Learning in Complex Systems – Machine Learning, Brain-inspired Artificial Intelligence; Causal Reasoning in Complex Systems; Dynamics on Networks; Modeling and Analysis of Complex Systems such as Biological Systems (Brain Networks), Earth Systems, Climate Networks, Communication Systems and Language Models; Scientific Theories of Consciousness, Causality Testing in Neuroscience.

Academic Courses

- > Two-credit course on Introduction to Mathematical Methods and Its Applications for NIAS doctoral students, January to May 2025.
- ➤ Two-credit course on What is Mathematics? for NIAS doctoral students, January to May 2025.
- > Computational Neuroscience Module for NIMHANS MSc Students, December 2024 to January 2025.
- Two-credit course on Qualitative Methods: Module on Philosophy of Science for NIAS doctoral students, August to December 2024.

Award

➤ Distinguished Alumnus for outstanding service and contribution towards Research and Education, NITK Surathkal Alumni Association (Bengaluru Chapter), September 22, 2024.

- Neurochaos Learning: A New Paradigm for Machine Learning, online webinar organized by IEEE SB and Department of Electronics and Communications Engineering, Amrita Vishwa Vidyapeetham, Chennai Campus, March 3, 2025.
- ➤ 'ABC': AI-Brain-Consciousness an unsolved puzzle of the 21st century, International Event on Artificial Intelligence (AI), Ethics and Transcultural Innovation, organized by University of Bonn (Germany) and the Kyoto Institute of Philosophy (Japan), Bengaluru, March 2, 2025.
- ➤ Welcome to the AI Revolution (Emerging Debates, Prospects and Challenges), Summer Workshop for the NIAS Education for Gifted and Talented Programme, February 10, 2025.



- ➤ Is Computer Networking Know-How Useful in Other Fields?, Panel Discussion, COMSNETS 2025: 17th International Conference on COMmunication Systems and NETworkS, Chancery Pavilion Hotel, Residency Road, Bengaluru, January 8, 2025.
- Neurochaos Learning, Third International Conference on Data, Decision and Systems (ICDDS-2024), PES University, Bengaluru, December 6, 2024.
- Guest of Honor, 'RoboFiesta', National Level Inter-College Technical Fest, RV Institute of Technology and Management, Bengaluru, December 3, 2024.
- Research Methodology, as a part of 18th Faculty Induction Programme (Guru Dakshata), UGC Malaviya Mission Teacher Training Centre, University of Calicut (online), November 30, 2024.
- A Primer on Machine Learning; Neurochaos Learning (Brain-inspired Machine Learning), Climate Dynamics and Networks (CLDN 2024), ICTS-TIFR, Bengaluru, November 15, 2024.
- Chaos in 1D Maps (is all you need!), Climate Dynamics And Networks (CLDN 2024), ICTS-TIFR, Bengaluru, November 11, 2024.
- The AI Revolution: the Good, the Bad and the Ugly, Accelerator Thought Leader @ 3rd Edition of ABB Accelerator, ABB Innovation Center, Bengaluru, September 26, 2024.
- ABC: AI-Brain-Consciousness, the Incompatible Trinity of the 21st Century, Zoho R&D Labs, Zoho Corporation, Kottarakara, Kerala, September 12, 2024.
- > The AI Revolution: From Turing to ChatGPT and Beyond, Departments of Physics and Mathematics, Amrita School of Physical Sciences, Amrita Vishwa Vidyapeetham, Amritapuri Campus, September 4, 2024.
- ➤ Borders of Consciousness, Departments of Physics and Mathematics at Amrita School of Physical Sciences, Amrita Vishwa Vidyapeetham, Amritapuri Campus, September 4, 2024.
- Artificial Intelligence in Healthcare Applications, as a part of "Deeksharambh" (orientation programme for first semester students of Department of ECE), Faculty of Engineering and Technology, Jain University, Bengaluru, August 14, 2024.
- The Complex Brain: Network Causal Activity, Levels of Consciousness and Meditation, First Workshop on Neuroscience of Consciousness (NeuroCon1), Center for Neuroscience, IISc, Bengaluru, June 16, 2024.
- Principal Component Analysis and its Applications, as a part of EEE642: Machine Learning Course, Department of Electrical and Electronics Engineering, MSRIT, Bengaluru, May 24, 2024.
- Introduction to Support Vector Machines and Support Vector Regression, EEE642: Machine Learning Course, Department of Electrical and Electronics Engineering, MSRIT Bengaluru, May 20, 2024.

- > Senior Member of IEEE, October 2019 onwards.
- Invited to serve as a member of the Advisory board of the Society for Nonlinear and Complex Systems (SONCOS), March 2025.



Energy and Environment Programme



R Srikanth Professor and Dean School of Natural Sciences and Engineering

Room No. S 11 Tele: 080-22185135 Fax: 080-22185028 Email: rsrikanth@nias. res.in Joined NIAS on: August 22, 2016

Research Areas: Energy and Environment, Minerals, Sustainable Development, Public Policy.

Lectures

Besides giving talks in various training programmes organized by NIAS faculty at NIAS, Prof R Srikanth was invited to deliver a talk on India's Energy Transition to senior officers of the Indian Navy and Indian Air Force at the prestigious Naval War College in Goa on July 16, 2024. He was also invited by IIT Madras and IIT Kanpur to give talks on the Role of Nuclear Power in India's Energy Transition on October 5, 2024 and March 20, 2025, respectively. He was also an invited speaker at the Nuclear Energy Conclave organized by the India Energy Forum and the Nuclear Power Corporation of India on March 11, 2025.



DK SrivastavaHonorary Visiting
Professor and INSA
Senior Scientist

Room No. S 12 Tele: 080-22185133 Fax: 080-22185028 Email: dinesh. srivastava@nias.res.in Joined NIAS on: August 5, 2019

Research Areas: International Collaborations in Basic Sciences, Science Outreach, Climate Change Concerns.

- Climate Change and Energy Options for a Sustainable Future, Indian Institute of Technology, Roorkee, March 2025.
- Climate Change and Energy Options for a Sustainable Future, Cochin University of Science and Technology, Cochin, February 2025.
- Dr R Chidambaram: The Silent Revolutionary, NASI Bengaluru Chapter, IISc, Bengaluru, February 2025.



- Climate Change and Energy Options for a Sustainable Future, Gifted Children Programme, NIAS, February 2025.
- Climate Change and Energy Options for a Sustainable Future, Valley School, Bengaluru, February 2025.
- Why Should We Do Basic Research?, Cochin University of Science and Technology, Cochin, February 2025.
- Like Nectar to My Ears: Mother Tongue, MNNIT, Prayagraj, February 2025.
- Discovery of Quark Gluon Plasma, Indian Institute of Science, Education, and Research, Berhampur, January 2025.
- Growth of Nuclear Physics in the Country Since the Time of Dr Raja Ramanna, Bhabha Atomic Research Centre, Mumbai, January 2025.
- > Dr Raja Ramanna: A Nurturer of Institutes and Basic Research in Nuclear Physics in India, Bangalore University, Bengaluru, January 2025.
- Nuclear Weapons, NIAS, January 2025.
- Why Should We Study Nuclear Physics, Inter University Accelerator Centre, New Delhi, January 2025.
- Climate Change and Energy Options for a Sustainable Future, Vivekanand Education Society Institute of Technology, Mumbai, December 2024.
- Summary Talk, DAE Symposium on Nuclear Physics, December 2024.
- > Climate Change and Energy Options for a Sustainable Future, Lucknow University, November 2024.
- Nuclear Energy and Concerns of Nuclear Safety: Fukushima: Thirteen Years Later Lessons in Nuclear Safety and Nuclear Energy, Christ University, Bengaluru, September 24, 2024.
- > Growth of Science and Technology in China, NIAS, September 2024.
- Climate Change and Energy Options for a Sustainable Future, Vellore Institute of Technology, Vellore, September 2024.
- Fifty Years After Pokhran How India Braved Technology Sanctions: Impact on Basic Research in Nuclear Sciences, Krishtu Jayanti College, Bengaluru, July 2024.

- Member, Editorial Board, Scientific Reports, Nature.
- > Member, Editorial Board, MDPI Physics.
- Member, Selection Committees, National and International Advisory Committees of National and International Symposia and Workshops on Nuclear Physics.

Other Activities

Dr Raja Ramanna Birth Centenary Celebration Event – Nuclear Physics Research in India at NIAS, September 2, 2024 (along with Dr Rudrodip Majumder).





Tejal KanitkarAssociate Professor
School of Natural
Sciences and
Engineering

Room No. S 32 Tele: 080-22185167 Fax: 080-22185028 Email: tejalk@nias. res.in Joined NIAS on: June 14, 2019

Research Areas: Climate Change Mitigation, Climate Policy and Negotiations; Integrated Assessment Modelling; Energy-Environment-Economy Linkages; Just Transitions; Energy Policy; Social and Economic Impact Assessment: Agriculture, Transport, Energy.

Academic Course

 A two-credit elective course on Contemporary Debates in Sustainable Development and Climate Change for NIAS doctoral students, January to May 2025.

Lectures

- Climate Justice and Equitable Futures: What is Missing in IPCC Scenarios and How to Go Beyond, Heinrich Boell Stiftung, Berlin (online), February 14, 2025.
- ➤ India's Domestic Climate Policy in light of COP29, 37th NIAS Programme for Senior Executives, January 22, 2025.
- The Climate Crisis and the North-South Divide, Partners for a New Economy, Belgium, November 7, 2024.
- > (The absence of) Equity in IAMs, 17th Annual Meeting of the Integrated Assessment Modelling Consortium, Seoul, South Korea, November 6, 2024.
- ➤ Just and Equitable Transitions: The Global and Indian Context, International Labour Organization (ILO), New Delhi, September 11, 2024.

Memberships

- ▶ Member, Government of India Delegation to the 29th Conference of Parties (COP-28) and the 61st Session of the Subsidiary Bodies under the UNFCCC, Baku, Azerbaijan, November 2023.
- Member, Government of India Delegation to the 61st Session of the Intergovernmental Panel on Climate Change (IPCC), Bulgaria, July 2024.
- ➤ Member, Government of India Delegation to the 62nd Session of the Intergovernmental Panel on Climate Change (IPCC), China, February 2025.
- Member, Technical Advisory Committee of Experts, for India's 4th National Communication and Biennial Transparency Reporting, constituted by the Ministry of Environment, Forests, and Climate Change (MoEF&CC), Government of India, 2023-2026.
- Member, Working Group on Cost Disabilities incurred by the State of Kerala on account of the effects of climate change, Government of Kerala, 2024.
- ➤ Member, Expert Committee to examine coastal erosion due to the Vizhinjam Port, Government of Kerala, 2023-24.



Other Activities

- Webinar on Equitable and Sustainable Climate Futures, organized to disseminate results of work on equity-based global emissions scenarios. Supported by the Heinrich Boll Stiftung and Third World Network, February 14, 2025.
- > Technical Exchange Workshop on Low Carbon Modelling European Union Climate Dialogues Project, July 18, 2024. This workshop was part of the EUCD project, to enable exchange between the modelling communities in India. The objective was to seek inputs and improvements in model linkages and model comparison, as well as to facilitate the process of informing policymakers about various modelling activities and their relevance.



Rudrodip Majumdar Assistant Professor School of Natural Sciences and Engineering

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Research Areas

- Modeling of the Solar Thermal and other Renewable Energy Systems,
- Modeling of Energy Transition in Indian Road Transport Sector,
- Case Studies of Water-Energy Nexus for the Water-stressed Regions in India,
- Techno-Economic Analysis of Green Hydrogen Ecosystem,
- Evaluation of Resource Security for Critical Energy Materials,
- Waste-to-Wealth (Recovery, Recycle, and Reuse)

Academic Course

Advanced Energy Systems for NIAS doctoral students, January to April 2025.

- Sustainable Energy: Unlocking the Potential Challenges, Panel Discussion on Indian Economy 2025: Contemporary Challenges, Mount Carmel College, Bengaluru, March 14, 2025.
- Promoting eCooking in Institutions, and Its Transformational Potential for Achieving Climate, Health, Cost and Time Benefits, Panel Discussion, International Energy Festival of Kerala (IEFK) 2025, organized by Energy Management Centre-Kerala, Thiruvananthapuram, February 9, 2025.
- Opportunities and Way Forward for Rare Earth Industry Ecosystem in India, Meeting on the Role of Rare Earth Metals, Alloys and Compounds for Self-Reliant India (REMAC – 2024), Anushaktinagar, Mumbai, December 12, 2024.
- ➤ Energy Transition and Sustainable Road Transportation, Panel Discussion, 18th EXCEED Conference, organized by the Sustainable Development Foundation and supported by the Ministry of Road Transport and Highways, Government of India, New Delhi, December 3, 2024.
- ➤ Role of DISCOMs in Large-Scale Scaling Up of eCooking, Modern Energy Cooking Forum 2024, New Delhi, September 27, 2024.



Evidence-Based Approach to Assess the Energy Transition in the Residential Cooking Sector in India, Special Session – Research on eCooking, Modern Energy Cooking Forum 2024, New Delhi, September 27, 2024.

Membership

Review Editor of 'Frontiers in Energy Research-Energy Storage Section' from January 6, 2023 (This honorary appointment was nomination-based).

Other Activities

- Organized the NIAS International Symposium on Nuclear Power to Achieve Net Zero with Energy Security for India, as a key deliverable of the project funded by the International Sustainable Energy Foundation (ISEF), October 21, 2024.
- ➤ Coordinated the thematic meeting on Nuclear Physics Research in India" at NIAS as part of Dr Raja Ramanna's Birth Centenary Celebrations, September 2, 2024.
- Co-coordinated the panel discussion on the theme "The Relevance of Traditional Wisdom in Modern Science" at NIAS as part of Dr Raja Ramanna's Birth Centenary Celebrations, April 4, 2024.



Jithin Jose
Post-Doctoral
Associate
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Engineering

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nias.res.in

Joined NIAS on: October 18, 2023

Research Areas: Air Quality, Emission Inventory, Receptor Modeling, Dispersion Modeling, Health Risk Assessment.



Science Communication Programme



VV Binoy Associate Professor School of Natural Sciences and Engineering

Room No. Laboratory Tele: 080-22185156 Fax: 080-22185028 Email: vvbinoy@nias. res.in Joined NIAS on: September 2, 2010

Research Areas: Social Cognition, Animal Cognition, Science of Science Communication

Academic Courses

- > Two-credit course on Research and Publication Ethics (along with Prof Narendra Pani) for NIAS doctoral students, August to December 2024.
- Two-credit course on Animal Behaviour and Cognition for NIAS doctoral students, August to December 2024.
- > Two-credit course on Conservation Psychology for MSc and PhD students of ecology and environmental studies. This course was jointly organized by the Academy for Conservation Science and Sustainability Studies, Ashoka Trust for Research in Ecology, and the Environment (ATREE) and University of Trans-Disciplinary Health Sciences and Technology (TDU), Bengaluru, August 2024 to January 2025.

- ➤ AI Ethics in the Context of Human and Animal Cognition Research, Artificial Intelligence, Ethics and Transcultural Innovation, jointly organized by Kyoto Institute of Philosophy and Center for Science and Thought (University of Bonn), Bengaluru, March 1, 2025.
- Scientific Thinking, Indira Priyadarshini School, Bengaluru, December 19, 2024.
- ➤ The Science of Mind and Consciousness, Interactive Programme for School Children, Swaminarayan Gurukul Vishwavidya Pratishthanam, Ahmedabad, December 1, 2024.
- Wellbeing in Animals and Human, Round Table Meeting on Matter, Mind, Consciousness, organized by the Swaminarayan Gurukul Vishwavidya Pratishthanam, Ahmedabad, December 1, 2024.
- > Students, Citizen Science and Climate Change, Workshop for the 'Student-Scientists' from the College Nodes of Karnataka, Alvas Educational Foundation, Mangalore, November 15, 2024.
- > Behaviour, Cognition and Consciousness, Student Scientist Interaction with the Students of the Central University of Karnataka, October 21, 2024.
- ➤ In Pursuit of Wellbeing, Conference on Science and Spirituality. jointly organized by the Indian Space Research Organization and Hindu Dharma Acharya Sabha, Ahmedabad, September 14, 2024.
- Psychological Barriers to Pro-Environmental Behaviours, Central Manufacturing Technology Institute, Bengaluru, August 22, 2024.



- Coast and Climate Change. A Student-Scientist, workshop on Coast and Climate Change, Puthiyathura, Thiruvananthapuram, May 25, 2024.
- Citizen Science and Open Engagement of Societal Actors, workshop on Introduction to UNESCO Open Science Framework, organized by UNESCO Chair in Community-Based Research, DST-Centre for Policy Research, Indian Institute of Science, Bengaluru, and OSSAN, April 3, 2024.

- Fellow, Intercontinental Academia: University-Based Institutes for Advanced Study, A global network of 44 institutes of advanced studies.
- > External Affiliate, Krasnow Institute of Advanced Study, George Mason University, USA.
- Representative, UNESCO UniTwin Complex Systems Digital Campus (CS-DC).
- Member, IUCN Freshwater Specialist Group South Asia.
- > Member, IUCN Fish Conservation Network South Asia.
- Member, Executive Committee, Ethological Society of India.



M Sai Baba Honorary Visiting Professor Room No. S 06 Tele: 080-22185066 Fax: 080-22185028 Email: msaibaba@ nias.res.in

Joined NIAS on: October 6, 2017

Research Areas: Science and Risk Communication; Human Reliability Programme; Capacity Building: Enhance the preparedness to handle nuclear and other radioactive materials

- Interacting and Communicating with the Public, Relating to Nuclear Technology, Workshop on Handling Nuclear and Other Radioactive Materials with Indian Security Agencies, jointly organized by NIAS and Amity University Uttar Pradesh, Amity University, Noida, March 29, 2025.
- Nuclear Technology and Energy Security and Non-Energy Application of Nuclear Technology, Workshop on Handling Nuclear and other Radioactive Materials with Indian Security Agencies, jointly organized by NIAS and Amity Institute of Nuclear Science and Technology, Amity University Uttar Pradesh, Noida, March 25, 2025.
- ➤ Human Reliability Programme and Nuclear Safety and Security, National Conference on Reliability and Safety (NCRS) 2025, Amity Institute of Nuclear Science and Technology, Amity University Uttar Pradesh, Noida, March 20, 2025.
- ➤ Information Resources Management in the Era of Evolving Digital Age, Theme Meeting on Embracing the Digital Age: Re-imaging Library Resources Management, Indira Gandhi Centre for Atomic Research, Kalpakkam, January 24, 2025.
- Puppets and Materials, Inaugural Address, Seminar on Puppets and Materials, DHATU International Puppet Festival, Mandal Cultural Centre, Bengaluru, January 3 2025.



- Interacting and Communicating with the Public While Handling Radiological Sources, Discussion Meeting on Handling Nuclear and Other Radiological Materials with Indian Security Agencies, NIAS, December 5, 2024.
- Capacity Building needs for Enhancing the Preparedness of Security Agencies to Handle Nuclear and other Radioactive Materials, Panel Discussion, Discussion Meeting on Handling Nuclear and Other Radiological Materials with Indian Security Agencies, NIAS, December 5, 2024.
- Nuclear Technology and Energy Security and Non-Energy Application of Nuclear Technology, Participants of the Discussion Meeting on Handling Nuclear and Other Radiological Materials with Indian Security Agencies, NIAS, December 4, 2025.
- New Education Policy@4 and Beyond, Symbiosis Institute of Technology, Hyderabad, November 11, 2024.
- Risk Communication in Nuclear Safety and Security, Regional (Asia-Pacific) Workshop on Radiation Detection Systems for Safety, Security and Societal Applications, Amity Institute of Nuclear Science and Technology, Amity University, October 19, 2024.
- Human Reliability Programme and Nuclear Safety and Security, Centre for Air Power Studies, New Delhi, October 16, 2024.
- ➤ Capacity Building and Techno-Commercial Viability Studies, Concept Design of Micro Modular Reactors (MMRs), Discussion Meeting, IIT Madras, October 6, 2024.
- Nuclear Security, Panel Discussion on Nuclear Security, organized by Observer Research Foundation, New Delhi, August 27, 2024.

- Member, External Research Recognition Committee, School of Sustainability Studies, Department of Public Health, MIT-World Peace University, Pune.
- Member, GINSERV's Incubator Seed Management Committee. The committee evaluates Startup Seed fund applications under the Startup India Seed Fund Scheme.
- Member, Advisory Board, Governing Council of Hindustan Institute of Maritime Training Group of Educational Institutions, Chennai.
- Member, Editorial Board, International Journal of Nuclear Knowledge Management, published by WONUC.



V Bhujanga Rao Honorary Visiting Professor

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nias.res.in

Joined NIAS on: April 20, 2016

Research Areas: Medical Implants/Devices; Grassroots Innovation; Defence Manufacturing Technologies; Acoustics, Science, Technology and Innovation.



Other Members



Ramya Bala Prabhakaran DST-INSPIRE Faculty Fellow School of Natural Sciences and Engineering

Room No. S 15 Tel: 080-22185129 Fax: 080-22185028 Email: pramyabala@ nias.res.in Joined NIAS on: August 16, 2021

Research Areas: Paleoecology, Paleoclimatology, Forest dynamics.

Academic Course

Two-credit Course on A Primer to Reconstructing Environmental and Climatic History for NIAS doctoral students, August to December 2024.

Awards

- INQUA Early Career Researcher Award for training in France for 5 months.
- > Invited to the Women in Tech Leadership Roundtable, supported by Australia-India Women's Leadership Forum (AIWLF).
- ➤ Invited to be part of Women in Tech Network by the Australian Consulate-General, Bengaluru, April 2024.

- Protecting the Alpine in the Tropical: Challenges in Montane Grassland Management in the Nilgiris Plateau, PAGES-DiverseK Workshop, Innsbruck, Austria, October 3, 2024.
- Antiquity of the Montane Grasslands of the Nilgiris Plateau Paleoecology, Colonial Management, Invasives A Way Forward?, PAGES-DiverseK Workshop, Antaravananivo, Madagascar, September 26, 2024.
- Learning from the Past: Collaborating Across Times for Landscape Management for Conservation, Indian Wildlife Ecology Conference (IWEC 2024), Bengaluru, June 16, 2024.
- Understanding Paleoenvironments and Historical Land-Use Around a Culturally Modified Hill-Top Reservoir at Kadebagilu, Tungabhadra River Valley, Second Indian Quaternary Congress (IQC), Mohali, June 3, 2024.





Shaik Vazeed Pasha Post-Doctoral Associate School of Natural Sciences and Engineering

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drvazeedpasha@nias.

res.in

Joined NIAS on: September 16, 2021

Research Areas: Terrestrial Carbon Cycle, Forestry, Remote Sensing, Spatial Modelling, Ecology, Human-Wildlife Conflicts.



Vani Kulkarni DBT BioCARe Fellow School of Natural Sciences and Engineering

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nias.res.in

Joined NIAS on: January 1, 2024

Research Areas: Animal Behaviour, Gut Microbiome Studies, Phylogenetics, Bioinformatics.



Education Programme



Anitha Kurup Professor School of Social Sciences

Room No. S 05 Tele: 080-22185144 Fax: 080-22185028 Email: bkanitha@nias. res.in Joined NIAS on: January 2, 1995

Research Areas: Sociology of Education, Education Leadership, Gender and Science, Education of the Gifted and Talented, Learning Analytics and Education Technology.

Academic Courses

- ➤ Two-credit course on Introduction to Education Research for NIAS doctoral students, August to December 2024.
- Two-credit course on Education and Migration for NIAS doctoral students, August to December 2024.

Award

> Garden City University International Women's Day Award, March 7, 2025.

- Gender Policies and Education, Student Research Conference on SAMAH 2024-25, MAHE University, Bengaluru Campus, March 20, 2025.
- ➤ Role of Parents in Supporting and Nurturing Gifted Children, Silveroaks International School during the Inauguration of the NIAS Advanced Learning Centres at Oakbay Silveroaks International School, Vaisak, September 18, 2024.
- Gifted Education and National Education Policy 2020 to Teachers from Jawaharlal Navodaya Schools, Kendriya Vidyalaya and Army Public Schools as part of the Research Project on Education for the Gifted and Talented, August 25, 2024.
- Education for the Gifted: A Paradigm Shift for Developing Countries for Teachers of Silveroaks International Schools in Telangana and Andhra Pradesh, August 14, 2024.
- The Many Facets of Gifted Children and their Identification for Schools in Karnataka, Andhra Pradesh and Telangana, July 16, 2024.
- The Many Facets of Gifted Children and their Identification for Army Public Schools Across India, July 15, 2024.
- Education for the Gifted: A Paradigm Shift for Developing Countries for Schools in Karnataka, Andhra Pradesh and Telangana, July 15, 2024.
- Gifted Education and National Education Policy 2020 and NIAS EGT, Orientation Training for Army Public Schools Across India, July 10, 2024.
- ➤ Gifted Education and National Education Policy 2020 and NIAS EGT, Orientation Training for Army Public Schools across India, July 9, 2024.



- Member, Doctoral Programme Committee, Kristu Jayanthi College, Bengaluru March 2024 onwards.
- Expert Member, for Literacy and School Education and Higher Education, Government of Karnataka, 2018 onwards.
- Member, Expert Committee on Learning Science, Vidyashilp University, 2021onwards.
- Member, Doctoral Programme Committee, Christ University, 2023 onwards.
- Expert Member, Mahatma Gandhi University for the STRIDE Research Project, 2018 to 2025.
- Advisor, Education Expert, Public Affairs, centre, Bengaluru, 2021 onwards.
- Member, Ethics Committee, Centre for Brain Research, 2018 onwards.
- Member, Ethics Committee, NIMHANS, 2021- 2025.
- Member, Stem Cell Research Committee, Centre for Brain Research, Bengaluru, February 2023 onwards.
- > Education Expert for Karnataka Evaluation Authority, Government of Karnataka.
- Advisor, Research and Innovation Council, Vidyashilp University.
- Member, Technical Committee, Karnataka Evaluation Authority, Government of Karnataka.
- Advisor, Research and Innovation Council, Vidyashilp University, Bengaluru.
- Member, Expert Committee for Sustainable development Goals (Education-4), Planning Department, Government of Karnataka, 2017 onwards.
- Member, Comparative Education Society of India, 2017 onwards.



Jeebanlata Salam Assistant Professor School of Social Sciences

Room No. S 21 Tele: 080-22185120 Fax: 080-22185028 Email: jeebanlata@ nias.res.in Joined NIAS on: February 22, 2016

Research Areas: Sociology of Education, Social Exclusion and Education, Education Policies Vocational Skill Education, Ethnicity and Identity.

Academic Courses

- Introduction to Education Research for NIAS doctoral students, August to December 2024.
- ➤ Methodology of Social Science and Typology of Research for NIAS doctoral students, January to May 2025.

Lecture

➤ Bridging Ecological Vocational Training and Higher Education: A Pathway to Sustainable Learning and Employment in India, Conference on Ecological Humanities, Social Sciences and Pedagogies in Higher Education: Theory and Practice, organized by the Department of Humanities and Social Sciences in Collaboration with BITS, Pilani, KK Birla Goa Campus, February 18, 2025.





Malavika Kapur Honorary Visiting Professor School of Social Sciences

Room No. F 05 Tele: 080-22185091 Fax: 080-22185028 Email: malavika. kapur@nias.res.in Joined NIAS on: May 1, 2003

- ➤ Panellist, Panel Discussion on Continuing Medical Education, organized by National Drug Dependence Treatment Centre and Department of Psychiatry, AIIMS, New Delhi, February 9, 2025.
- > Two lectures (i) From Freud to Zuckerberg and Back and (ii) Lost Multilingualism in Child for students of Delhi University North and South Campus, held at North Campus, February 8, 2025.



Inequality and Human Development Programme



Narendar Pani JRD Tata Chair Visiting Professor and Dean School of Social Sciences

Room No. S 08 Tele: 080-22185145 Fax: 080-22185028 Email: narendar@nias. res.in Joined NIAS on: April 9, 2007

Research Areas: Causes and Consequences of Inequality, Neo-Gandhian Approaches to Societal Processes, Conceptualisation of Sustainability; and Theorisation of Conflict.

Academic Course

Research and Publication Ethics for NIAS doctoral students, August to December 2024.

Lectures

- Led a Day-long Workshop on Inequality and Public Policy, National Law School of India University, Bengaluru, September 5, 2024.
- Public Policy Beyond State Intervention: A View from Rural India, School of Public Policy and Global Affairs, University of British Columbia, Vancouver, July 16, 2024.

Membership

Member of a three-member expert committee to advise the Government of Karnataka on its case to the Sixteenth Finance Commission.



Anant Kamath Assistant Professor School of Social Sciences

Room No. F-32 Tele: 080-22185128 Fax: 080-22185028 Email: anant.kamath@ nias.res.in Joined NIAS on: September 1, 2020

Research Areas: Technological Change, Political Economy of Development, Economic-Sociology.

Academic Courses

- ➤ Introduction to Inequality, co-taught with Inequality and Human Development Programme faculty colleagues for NIAS doctoral students, August to December 2024.
- > Perspectives on Technology, for NIAS doctoral students, January to March 2025.



- Economics, a one module course taught to BSc/BTech students at Indian Institute of Science, Bengaluru, August 2024.
- > Growth and Development, One Semester Course for MA Economics students, Christ University, Bengaluru, July to November 2024.

Lectures

- Understanding Contemporary Urban Inequality, Department of Economics, St Joseph's University, Bengaluru, February 5, 2025.
- > Understanding Contemporary Urban Inequalities in India, Department of English and Cultural Studies, Christ University, Bengaluru, January 23, 2025.
- Narratives and Social Justice among the Marginalised, Department of English and Cultural Studies, Christ University, Bengaluru, December 3, 2024.
- > State of the Indian Economy, Asian Economies and the World Economic Outlook, coordinated by the Swiss-Asian Chamber of Commerce, Zurich, September 19, 2024.
- Frugal Technologies, Disadvantaged Social Groups, and Some Critical Policy Suggestions, IISc Paraspar Lecture Series, August 22, 2024.
- > Inequality Conversations, hosted by Indian Institute of Management Bengaluru, June 21, 2024.



Chetan Choithani Assistant Professor School of Social Sciences

Room No. S-34 Tele: 080-22185171 Fax: 080-22185028 Email: cchoithani@ nias.res.in Joined NIAS on: October 1, 2020

Research Areas: Development, Livelihoods, Rural-Urban Transition and Linkages, Migration and Urbanization, Food and Nutritional Security, Gender, Population and Health.

Academic Courses

- ➤ Introduction to Inequality, for NIAS doctoral students offered jointly with Dr Anant Kamath, August to December 2024.
- Migration, Urbanization and Exclusion, for NIAS doctoral students, August to December 2024.

- ➢ Bottom-led Rural-Urban Transition in India, Panel Discussion in the 2nd Edition of the Inclusive Development Conference on Housing and Urban Land Management in an Unequal World, National Law School of India University, Bengaluru, March 6, 2025.
- ➤ Urban Beyond the Metropolis: Understanding Contemporary Urban Realities in India, Christ University, Bengaluru, January 23, 2025.
- Mobility/Immobility: Across Rural Urban Transitions, Invited Masterclass, organized by Indian Institute of Human Settlements, Bengaluru for researchers



and practitioners working on the Macarthur Foundation funded project on the interlinkages between Just Energy Transition and Climate Migration, December 16, 2024.

- Migration and Livelihoods, Christ University, Bengaluru, August 19, 2024.
- Understanding Migration through Socially Reproductive Labour in India, Two-Day Workshop on New Approaches to Economy and Society: Exploring Popular Economy as a Research Agenda, IIT-Mandi, Himachal Pradesh, organized by the New Political Economy Initiative (NPEI) of IIT-Bombay, April 20 and 21, 2024.



Debosree BanerjeeAssistant Professor
School of Social
Sciences

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Research Areas: Growth, Inequality, Poverty, Human Development, Environmental Economics.

Academic Course

Quantitative Research Method for NIAS doctoral students, August to December 2024.

Lecture

Understanding the Components of Blue Economy and Its Functioning In, Workshop on Blue Economy, NIAS, February 24 and 25, 2025.



Nisar Kannangara Post-Doctoral Associate School of Social Sciences

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Joined NIAS on: February 25, 2021

Research Areas: Climate Change, Human Development





Mahima Upadhyay Post-Doctoral Associate School of Social Sciences

Room No. A 04 Tele: 080-22185054 Fax: 080-22185028 Email: mahima@nias. res.in Joined NIAS on: August 1, 2022

Research Areas: Public Policy and Institutions, Gender Inequalities, Local Governance and Natural Resource Management.



SS Meenakshisundaram Visiting Professor School of Social Sciences

Room No. F 20 Tele: 080-22185070 Fax: 080-22185028 Email: msundaram@ nias.res.in Joined NIAS on: December 10, 2004

- ➤ Local Government Financing, Gulati Institute for Finance and Taxation, Thiruvananthapuram, March 21, 2025.
- Decentralization and Local Governance, National Seminar on Public Policy and Governance, Kristu Jayanti College, Bengaluru, March 12, 2025.
- ➢ Democratic Decentralization: Experience of Kerala and Karnataka, Government of Kerala, as a part of the International Congress on Kerala Studies at Kannur, Kerala, February 24, 2025.
- ➤ Water Challenges in the Anthropocene Towards Resilience and Sustainability, Indian Institute of Technology Chennai, February 8, 2025.
- > Inaugural Address, Conference on Recent Trends in Pure and Applied Mathematics', Kristu Jayanti College, Bengaluru, January 30, 2025.
- ▶ Democratic Decentralization: PRIs in India, Christ University, Bengaluru, January 15, 2025.



- Critical Operational Issues and social and environmental Safe guards— case of NREGA in India (online), webinar organized by ITC-ILO, Geneva for Developing Countries, November 27, 2024.
- Empowerment through collaboration: Best practices in SHGs and Federations, India Sanitation Conclave, organized by FICCI, New Delhi, November 26, 2024.
- History of Panchayatiraj in India—Challenges and Prospects (online), PRADHAN, Ranchi, Jharkand, August 10, 2024.
- Origin of Panchayatiraj system in Karnataka and India, Abdul Nazeer Sab State Institute for Rural Development, Mysuru, June 3, 2024.
- Own Source Revenue for Gram Panchayats in India, National Institute for Rural Development and Panchayatiraj (NIRDPR), Hyderabad, May 27, 2024.

- > Chairman, India Wash Forum, New Delhi.
- > Chairman, MYRADA, MYKAPS and a few institutions promoted by them.
- > Chairman, Academic Council for the Green Skills Academy, Bengaluru.
- > Chairman, Expert committee for minimizing stress levels in Gram Panchayat functionaries in Karnataka constituted by the Government of Karnataka.
- Member, Board of Management, Centre for Sustainable Development, Bengaluru.
- Member, Board of Management, Institute of Social Sciences, New Delhi.
- Member, Board of Management, IIPA, Karnataka Regional Branch, Bengaluru.
- Member, Board of Management, DHAN Panchayat Development Foundation, Madurai.
- Member, Academic Council, Karnataka State Rural Development and Panchayat Raj University, Gadag.
- Member, Guidance Committee to the School of Local Governance at NIRD & PR, Hyderabad.
- Member, Interface committee for the programme on Science, Technology, Research and Applications promoted by the Department of Space, Government of India.
- Member, Editorial Advisory Board of Aarthica Charche: The FPI journal of Economics and Governance, Government of Karnataka.



Urban and Mobility Studies Programme



Carol Upadhya Honorary Visiting Professor School of Social Sciences

Room No. S 07 Tele: 080-22185141 Fax: 080-22185028 Email: carol. upadhya@nias.res.in Joined NIAS on: September 1, 2003

Research Areas: Urbanization, Labour Mobilities, Rural-Urban Transformations, Local Economies, Circular Labour Migration. Recent research has examined the social and economic impacts of urbanisation and real estate-led development in Bengaluru and the Amaravati greenfield city project in Andhra Pradesh, and labour contracting in the construction sector in Bengaluru.

Academic Course

Delivered four lectures in the Economy and Society Winter School organized by the New Political Economy Initiative at IIT Bombay, held at the Indian Institute of Management, Kozhikode, December 11 and 12, 2024.

- Amaravati as India's Urban Future? Landscape of Value Struggles in a New City Project, Workshop on Urban Futures, organized by ICAS-MP and the Max Planck Institute, New Delhi, February 25 to 27, 2025.
- Presented and screened the Coding Culture films, produced by NIAS two decades ago, at the Sci560 Film Festival organized by Bengaluru Science Gallery, Bangalore International Centre, February 2, 2025.
- Provincial Urbanization: Accumulation through Land and Caste in Amaravati, Keynote Address, Conference on Re-fashioning Urbanism, New Delhi, January 21 to 23, 2025.
- ➤ Caste, Provincial Capital, and Accumulation through Land in Amaravati, Conference on Economy and Society in Contemporary India, Indian Institute of Technology Bombay, January 9 to 11, 2025.
- ➤ Building the City: Managing Mobile Labour in Bengaluru's Construction Industry, Science Gallery, Bengaluru, December 21, 2024.
- ➤ Digitalizing Worker Welfare: Social Rights of Migrant Construction Labour in Bengaluru, India (co-written with Dr Aardra Surendran), Development Studies Association Conference 2024, Panel 23: Informality, Migration and Social Rights: Challenges, Innovation and Representation, SOAS, University of London, June 26 to 28, 2024.
- Agrarian Land, Urban Property, and Uneven Development in India, South-to-South Dialogue Webinar, organized by Sydney School of Architecture, Design and Planning, University of Sydney, June 14, 2024.



Mobilizing Value: Labour Contracting Chains in India's Construction Industry (co-written with Dr Aardra Surendran), International Labour Process Conference 2024, University of Göttingen, Germany, April 3 to 5, 2024.

Memberships

- Co-editor, Journal of South Asian Development (SAGE).
- Chair, Research Ethics Committee, Department of Liberal Arts, Humanities and Social. Sciences (DLHS), Manipal Academy of Higher Education (MAHE), Bengaluru Campus.

Other Activities

- Participated in the workshop Beyond the Metros: Governance and Social Change in India's Small Towns and Urban Peripheries, organized by Center for Advanced Study of India at the University of Pennsylvania in partnership with University of Pennsylvania Institute for Advanced Study of India, New Delhi, March 18, 2025.
- Presented the book 'Chronicles of a Global City' in a Book Panel at Alliance Literary Festival, Alliance University, Bengaluru, February 13 to 15, 2025.



Supriya RoyChowdhury Honorary Visiting Professor School of Social Sciences

Room No. S 15 Tel: 080-22185148 Fax: 080-22185028 Email: supriya@nias. res.in Joined NIAS on: February 1, 2021

Research Areas: Urbanization, Labour Mobilities, Rural-Urban Transformations, Local Economies, Circular Labour Migration.

Academic Course

Work and Workers in 21st Century India, course offered at the National Law School of India University, Bengaluru, March 4 to May 15, 2025.

- Climate Change and Migration in the Sundarbans, Workshop on Blue Economy and Economic Accounting in the Sundarbans, NIAS, February 24, 2025.
- Women Workers in Global Supply Chains: Apparels Export Industry in Karnataka, Panel on Rethinking Capitalist Development: Enduring Relevance and New Insights, Annual Conference of the Indian Society of Labour Economics, ISEC, Bengaluru, January 9 to 11, 2025.
- ➤ Migration and Employment Policy, NIAS- DST Programme on Policy for Science and Science for Policy, December 18, 2024.
- Demystifying Work: Care Economy and Decent Work in Increasing Women's Participation in the Economy: Policy Consultation on Care Work, organized by Freidrich Erbert Stiftung, New Delhi and Women's Voice, Bengaluru, Hyatt Centric, Bengaluru, October 30, 2024.



- Launch of Report on Garment Workers' Lives, Bangalore International Centre: Presentation of Report. Sponsored by STITCH, Netherlands and CIVIDEP, Bengaluru, October 3, 2024.
- Migration, Urbanization and Women, 5th Lecture of the Monthly Special Lecture, Netaji Subhash Open University, University of Kalyani, West Bengal, series organized by the Discipline of Sociology under the aegis of School of Social Sciences, September 26, 2024.
- Freedom of Association, Collective Bargaining and Workers' Rights in Garment Industry Clusters, Symposium on Strengthening the Voice of Garment Workers: Discussion with Central Trade Unions, India Habitat Centre, New Delhi (sponsored by CIVIDEP India), September 5, 2024,
- > Work, Agency and Collective Action: Garment Industry in Bangalore, Annual Meeting of the Development Studies Association, SOAS, London, June 26 to 28, 2024.
- Democracy, Dissent and Dialogue, Presentation in Panel, NIAS, May 29, 2024.

> Trustee, CIVIC, Bengaluru.



Aleena Sebastian Assistant Professor School of Social Sciences

Room No. F 35 Tel: 080-22185161 Fax: 080-22185028 Email: aleena. sebastian@nias.res.in Joined NIAS on: June 1, 2021

Research Areas: Health Policy, Gender and Sexuality, Urban Studies.

Academic Courses

- Two-credit course on Doing Urban Studies: Themes and Approaches for NIAS doctoral students, August to December 2024.
- ➤ Two-credit course on Gender in Context: Understanding Identities, Roles and Inequalities for NIAS doctoral students, January to May 2025.

Award

A Conference Scholarship Award to attend AIDS 2024, the 25th International AIDS Conference at Munich, Germany, July 20 to 26, 2024; Scholarship Reference Number: S-159894.

- Translating Research into Policy: Insights from Community-Driven Health Research, Christ University, Bengaluru, March 20, 2025.
- ➢ Bridging the Gap: Gender Equality for Sustainable Development, Christ University, Bengaluru, organized by the Sustainable Development Goals Cell, Department of Economics, Christ University, March 7, 2025.



- ➤ Panel Presentation on PrEP in India: Current Status and Future Discussions, AIDSCON-13, National HIV/AIDS Conference, organized by the Chandigarh State AIDS Control Society and supported by the National AIDS Control Organization (NACO), Chandigarh, February10 and 11, 2025.
- Integrating Viral Hepatitis Services into Targeted HIV Intervention Programmes for Sexual and Gender Minorities: Insights from a Qualitative Study in Chennai, AIDSCON-13, National HIV/AIDS Conference, organized by the Chandigarh State AIDS Control Society and supported by the National AIDS Control Organization (NACO), Chandigarh, February10 and 11, 2025.
- Navigating Love and Identity: The Role of Romantic Partnerships on Gender Affirmation and Mental Health of Transmasculine Persons in India, First Asia Pacific and Third National (India) Conference on LGBTIQ+ Health at PGIMER Chandigarh, September 26 to 28, 2024.
- Kinship, Maritime Trade and Urban Identity: The Case of Matrilineal Muslim Merchants in the Malabar Coast, Public Lecture, RV University, Bengaluru, September 23, 2024.

- Member, International AIDS Society (IAS).
- > Member, Indian Sociological Society (ISS).
- Member, Indian Association for the Study of Sexually Transmitted Diseases and AIDS.



Director



Shailesh Nayak Director

Room No. F 15 Tele: 080-23601969 Fax: 080-22185076 Email: director@nias. res.in Joined NIAS on: March 19, 2018

Research Areas: Earth System Science, Blue Economy, Science Diplomacy, Sustainability.

Awards

- Degree of Doctor of Science (Honoris Causa), Graphic Era Deemed to be University, Dehradun, May 19, 2024.
- Distinguished Honorary Professor, IIT Gandhinagar, Gujarat, April 2024 (Two Years).

Professional Assignments

- Life Trustee, India International Centre, New Delhi.
- > Editor-in- Chief, Journal of the Indian Society of Remote Sensing, Dehradun.
- Fellow, Indian National Science Academy, New Delhi.
- Fellow, National Academy of Sciences, India (NASI), Allahabad.
- Fellow, Indian Academy of Sciences (IASc), Bengaluru.
- > Fellow, International Society of Photogrammetry, Remote Sensing and Spatial Sciences.
- Regional Member for Asia, International Society of Photogrammetry, Remote Sensing and Spatial Sciences (ISPRS).
- Member, International Science Advisory Committee, ISPRS.
- Member, Board of Trustees, the ISPRS Foundation.
- Academician, International Academy of Astronautics (IAA), Paris.
- President, Mangrove Society of India (MSI), Goa.

Research Council

- Chair, Research Council, ESSO-National Centre for Polar and Ocean Research (NCPOR), Goa.
- > Chair, Research Council, Wadia Institute of Himalayan Geology (WIHG), Dehradun.
- Chair, Blue Flag National Jury India.
- Chair, Research Council, CSIR-National Geophysical Research Institute (CSIR-NGRI), Hyderabad.
- Mentor, CSIR-National Geophysical Research Institute (CSIR-NGRI), Hyderabad.



Governing Board

- Member, Board of Indian National Space Promotion Authorization Centre (IN-SPACe), Department of Space, Government of India.
- Member, Governing Board, Foundation for Ecological Security, Anand.
- Member, Governing Council, Indian Council of World, New Delhi.
- Member, Planning Board, Indian Maritime University, Chennai.

Projects Related

- Chair, Project Appraisal and Monitoring Committee for collaborative Projects under Deep Ocean Missions, Ministry of Earth Sciences, Government of India, Delhi.
- > Chair, Programme Advisory Committee-Koyna Deep Borehole Research, Ministry of Earth Sciences, Delhi.
- Co-Chair, Monsoon Mission-III, Ministry of Earth Sciences, Government of India, Delhi.
- > Chair, Expert Committee, CRZ, MoEF, Government of India, Delhi.
- Chair, Screening-cum-Expert Committee, Facility Creation Projects, CSIR, Government of India, Delhi.
- Chair, Constitution of External Expert Committee under FCP 2.0 and Pilot Plant Categories of CSPS-2024, CSIR, Government of India, Delhi.
- Chair, Expert Committee for IN-SPACe Seed Fund Scheme for Agriculture Sector, Government of India, Department of Space.
- Chair, National Coordination Committee on INQUA 2027, BSIP, Lucknow.
- Chair, GIS Academia Council of India (GACI), ESRI India Technologies Private Limited, Noida.
- Distinguished Expert, Rashtriya Vigyan Puraskar Committee (RVPC), Ministry of Science and Technology, New Delhi.
- Member, Advisory Committee on National Environment, Forest and Climate Disaster Management Plan, NIDM, New Delhi.
- Member, Project Monitoring and Evaluation Committee (PMEC) for the Project 'Venture for IAG (Industry, Academia and Government) collaboration in S&T to Augment its Access and Reach (VISTAAR)', Office of PSA, Government of India, New Delhi.
- Member, Technology Advisory Group for the Empowered Technology Group, Office of PSA, Government of India, New Delhi.

Administration Related

- Chair, Committee for review of Recruitment Rules and the recruitment process of scientists in CSIR, CSIR, Delhi.
- > Chair, Committee on Performance Review Mechanism for Directors of CSIR Labs, CSIR, Delhi.
- > Chair, External Expert Committee to examine, evaluate, shortlist, grade and recommend proposals under FCP 2.0 and Pilot Plant Categories of CSPS-2024.
- Chair, to review, supervise and provide overarching guidance to Administrative Staff College of India, Hyderabad, engaged carrying out benchmarking of CWPRS, Pune.

- Climate Change Implications, National Science Day, CSIR-National Aerospace Laboratories, Bengaluru, February 28, 2025.
- Water and Ocean: Grand Challenges in India, IITB Schmidt Workshop on FLOW: Forging Leading-Edge Water Cycle and Ocean Research Centre for Climate Studies, IIT Bombay, February 10, 2025.
- Towards Sustainable Blue Economy, Public Lecture, CSIR-NIO Diamond Jubilee Celebration, Goa, January 10, 2025.



- ➤ Building from Scratch: The Tsunami Warning System, Keynote Address, Conclave to Commemorate 20 Years of the Indian Ocean Tsunami, ESSO-Indian National Centre for Ocean Information Services, Hyderabad, December 26, 2024.
- Towards Sustainable Blue Economy, 9th Vikram Sarabhai Oration Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, December 5, 2024.
- Climate Change: Implications and Way Forward, Plenary Talk, National Seminar on Current Trends in Atmospheric and Oceanic Processes related to Climate Change Studies (Curtain Raise), Andhra University, Visakhapatnam, September 18, 2024.
- Himalayan Environment: A Need for Preservation, Inaugural Talk, Global Summit, Himalaya Calling 2024: Global Summit for Challenges and Opportunities in the Himalayan Region, UPES, Dehradun, September 9, 2024.
- ➤ Wetland Ecosystems and Climate Risks: Policy and Governance, 1st Bimonthly Online Lecture Series, Association of Quaternary Researchers, India, INQUA 2027, MoES, Delhi, September 7, 2024.
- ➤ Earth Observation from Space: Benefits for Humanity. Karunakaran Memorial Lecture, ESSO-National Centre for Earth Science Studies, Thiruvananthapuram, August 28, 2024.
- Dbserving Earth from Space: Benefits for Humanity. Keynote Address, 7th INAE-NAEK Workshop on Current Status and Cooperation Plan of Satellites for Observing the Earth, August 19, 2024.
- India's Space Saga for Earth System Science and Blue Economy, Keynote Talk, Workshop on Application of Space Technology for Earth System ESSO-INCOIS and ISRO-NRSC, August 6, 2024.
- Climate Change and Sustainability, Keynote Speech, International Conference on Political Dynamics, Technological Breakthroughs and Social Innovations: Building an International Network Towards a Sustainable Future, Christ University, Bengaluru, July 24, 2024.
- ➤ Vision of Earth System Science, Foundation Day Lecture, CSIR Fourth Paradigm Institute (CSIR-4PI), Bengaluru, July 15, 2024.
- From Ocean Science to Sustainable Blue Economy, Research and Information System, New Delhi, July 11, 2024.
- Earth System Science for the Benefit of Humanity, Divecha Centre for Climate Change, Indian Institute of Science, Bengaluru, June 18, 2024.
- Sustainable Groundwater Management for Water Security, Keynote Address, National Conference on Sustainable Groundwater Management for Water Security, Karnataka Science and Technology Academy, Bengaluru, June 19, 2024.
- Multi-Stakeholder Actions for Combating Desertification and Droughts through Water Transversality, Online Talk at the High-Level Policy Dialogue, India Water Foundation, Noida, June 14, 2024.
- > Earth System Science: A Perspective, Wadia Institute of Himalayan Geology, Dehradun, May 24, 2024.
- Antarctica and Climate Change, 46th Antarctic Treaty Consultative Meeting (ATCM-46) and the 26th Committee for Environmental Protection Meeting, Hyatt-Lulu Bolgatty International Convention Centre, Kochi, organized by NCPOR, Goa, May 21, 2024.
- > Towards Understanding of Triggered Earthquakes, CSIR AMRIT Lecture, CSIR Headquarters Auditorium, Delhi, April 23, 2024.
- Vision of Earth Sciences in the Amrit Kaal, Earth System Science Organization, Indian Institute of Tropical Meteorology, Pune. April 22, 2024.
- ▶ Benefits of Earth System Science in India. Golden jubilee IOE Distinguished Lecture, Centre for Earth, Ocean and Atmospheric Sciences, Hyderabad University, Hyderabad. April 15, 2024.
- India's Water Future. Asia Centre, Bengaluru. April 2, 2024.
- ➤ Importance of Earth System Science. 2nd Nanabhoy Moos Foundation Lecture, Indian Institute of Geomagnetism, Navi Mumbai. April 1, 2024.



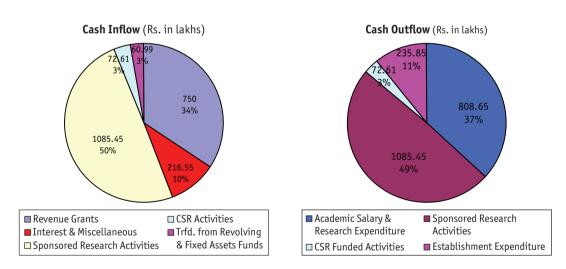


ADMINISTRATION

As a registered society, NIAS derives its administrative and financial authority through the society, represented by the general body. The Council of Management, which is currently chaired by Shri S Ramadorai, is vested with full power and authority to do all acts, deeds, etc. which are necessary for the promotion and fulfilment of the objectives set out in the Memorandum of Association. The Director, presently Dr Shailesh Nayak is the chief executive and exercises general, administrative, and financial control over the affairs of NIAS. The Director is assisted in the administrative and finance matters by the Head, Admin. and Finance.

Besides management of all resources such as infrastructure, finance, human resources, estates etc., general administrative matters are also handled by Head, Admin. and Finance. Administration enables the recruitment and deployment of staff, servicing their needs and empowering them to effectively contribute to the objectives of NIAS. It services the students' programme in which seventy-seven students work for their PhD degrees. The administration also takes care of the campus, its facilities such as the Auditorium, lecture halls, meeting rooms, classrooms, guesthouse, dining halls, etc. and all other infrastructure of NIAS. The administration also plays a unique role in conducting various programmes including training courses. Procurement of materials and consumables, maintenance of facilities, inventory control, etc. are also done by the Administration. Compliance with various statutory requirements such as Provident Fund, Professional Tax, Income Tax, etc., is also taken care by Administration. The administrative setup consists of, in addition to the Head-Administration, an Office Manager, two Assistant Managers in the area of Accounts and Finance and IT and other Secretarial/Office/ Supporting Staff, in all numbering 29.

Finance management, accounting, auditing (internal and statutory), resource mobilization and expenditure control are carried out systematically. An overview of finances for the year 2024-25 is given below:



NIAS has a specified investment of Rs.1018.10 lakhs (exclusive of project funds) as of March 31, 2025.

During the year, the Institute has received 27 new research projects with a total value of Rs.1632.27 lakhs. The total value of projects handled during the year, including the projects sanctioned in the earlier years was Rs.3896.61 lakhs. This is inclusive of CSR funded initiatives. The foreign exchange component included in this sum was Rs.972.94 lakhs.





P Srinivasa Aithal Head, Administration and Finance

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Joined NIAS on: November 1, 1995



C Arul Anand Office Manager

Room No. Admin Block Tele: 080-22185029 Fax: 080-22185028

Email: manager@nias.res.in

Joined NIAS on: April 1, 2024



B Lalu (till April 15, 2024) Office Manager

Room No. Admin Block Tele: 080-22185029 Fax: 080-22185028

Email: manager@nias.res.in

Joined NIAS on: April 16, 2012



P Satish Bhat Assistant Manager (Accounts and Finance)

Room No. Admin Block Tele: 080-22185023 Fax: 080-22185028

Email: accounts@nias.res.in

Joined NIAS on: June 22, 2009





Ramprasad R Assistant Manager (IT)

Room No. Admin Block Tele: 080-22185179 Fax: 080-22185028

Email: ramprasad@nias.res.in

Joined NIAS on: December 27, 2021



V Girija Administrative Coordinator

Room No. Admin Block Tele: 080-22185025 Fax: 080-22185028 Email: girija@nias.res.in

Joined NIAS on: March 26, 1992



KS Rama Krishna (till July 31, 2024) Administrative Coordinator

Room No. Admin Block Tele: 080-22185132 Fax: 080-22185028 Email: ksr@nias.res.in

Joined NIAS on: December 10, 1990



S Lalitha Administrative Coordinator

Room No. F 15 Tele: 080-22185075 Fax: 080-22185028 Email: lalitha@nias.res.in

Joined NIAS on: October 1, 1992



VB Mariyammal Senior Executive Assistant

Room No: F 15 Tele: 080-22185078 Fax: 080-22185028 Email: mari@nias.res.in

Joined NIAS on: December 1, 2006





JN Sandhya Administrative Coordinator

Room No. Admin Block Tele: 080-22185024 Fax: 080-22185028

Email: jnsandhya@nias.res.in

Joined NIAS on: February 11, 1997



R Vijayalakshmi (till May 31, 2024) Senior Executive Assistant

Room No. Library Tele: 080-22185021 Fax: 080-22185028

Email: vlakshmi@nias.res.in

Joined NIAS on: October 9, 1996



V Ravisha Executive Assistant (Accounts)

Room No. Admin Block Tele: 080-22185030 Fax: 080-22185028 Email: ravisha@nias.res.in

Joined NIAS on: February 3, 2020



MS Shivakumar Executive Assistant (Accounts & Admin)

Room No. Admin Block Tele: 080-22185030 Fax: 080-22185028 Email: skumar@nias.res.in

Joined NIAS on: July 7, 2008



AS Mary Stella Executive Assistant

Room No. Reception Tele: 080-22185000 Fax: 080-22185028 Email: stella@nias.res.in

Joined NIAS on: June 23, 1994





Guruprasanna TSJunior Executive Assistant (Technical)

Room No. G 10 Tele: 080-22185026 Fax: 080-22185028

Email: qurunias@nias.res.in

Joined NIAS on: May 3, 2021



Meghana BP Junior Executive Assistant (Library)

Room No. Library Tele: 080-22185092 Fax: 080-22185028

Email: meghana@nias.res.in

Joined NIAS on: June 24, 2024



Nagaraj P Junior Executive Assistant

Room No. Admin Block Tele: 080-22185027 Fax: 080-22185028 Email: nagaraj@nias.res.in

Joined NIAS on: November 20, 2023



Rajesh K
Junior Executive Assistant (Library)

Room No. Library Tele: 080-22185021 Fax: 080-22185028

Email: rajeshkotappa@nias.res.in

Joined NIAS on: March 1, 2023



VA RameshJunior Executive Assistant (Technical)

Room No. Auditorium Tele: 080-22185057 Fax: 080-22185028 Email: ramesh@nias.res.in

Joined NIAS on: July 1, 2011



SUPPORT STAFF



Left to Right Row-1: Shivakumar, N Rajesh, S Sampath, G Venugopal, Chandrashekar, N Ramesh. Row-2: SR Rathnam, Gajanana S Naik, G Nagaraja, Mujeeb Pasha, V Srinivasa, R Harish, Mohammed Umar.





B.R.V. Goud & Co.

Chartered Accountants No.37/1, 1st Floor M. N. Krishna Rao Road Basavanagudi Bengaluru-560 004

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF THE GOVERNING BODY OF NATIONAL INSTITUTE OF ADVANCED STUDIES, BENGALURU

Opinion

We have audited the accompanying financial statements of "National Institute Of Advanced Studies", Indian Institute of Science Campus, Mathikere, Bengaluru, Karnataka 560012, which comprises the Balance Sheet as at 31st March 2025, the Statement of Income & Expenditure for year then ended and a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- 1) In the case of Balance Sheet, of the state of affairs of the "National Institute Of Advanced Studies", as at 31st March 2025.
- 2) In case of Income and Expenditure Account, of Deficit, being Excess of Expenditure over Income for the year ended on that date.

Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) issued by Institute of Chartered Accountants of India. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are Independent of the Institute in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation of the financial statements. This responsibility also includes maintenance of adequate accounting records for safeguarding of the assets of the Institute and for preventing and detecting frauds and other irregularities; selection and application of appropriate implementation and maintenance of accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statement that give a true and fair view and are free from material misstatement, whether due to fraud or error.



Auditor's Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

We further report that:

- a) We have sought and obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purpose of our audit and have found them to be satisfactory.
- b) In our opinion, proper books of account as required by law have been kept by the Institute, so far as appears from our examination of those books.
- c) The Balance Sheet and Income and Expenditure Account dealt with by this report are in agreement with the books of accounts.

For B.R.V. Goud & Co... **Chartered Accountants**

Sd/-A B Shiva Subramanyam (Partner) (Membership No. 201108) (UDIN - 25201108BMJAPE8343)

(Firm Registration No. 000992S)

Place : Bengaluru

Dated: September 30, 2025



BALANCE SHEET AS AT MARCH 31, 2025

Particulars	As at March 31, 2025 (In Rupees)	As at March 31, 2024 (In Rupees)
FUNDS AND LIABILITIES		
Funds (a) Corpus Fund	90,210,000	90,210,000
(b) Fixed Assets Fund	53,653,183	57,151,978
(c) Sponsored Research Funds	95,530,584	56,203,852
(d) Other Funds	11,600,000	14,200,000
(e) Income & Expenditure Account	26,905,632	33,397,616
	277,899,399	251,163,446
Current Liabilities and Provisions		
(a) Current Liabilities	2,814,302	1,302,297
(b) Provision	2,715,391	12,482,130
	5,529,693	13,784,427
ТОТА	L 283,429,092	264,947,873
ASSETS		
(a) Fixed Assets	70,563,096	75,295,437
(b) Investments	78,305,500	78,305,500
(c) Loans and Advances	18,380,921	18,340,669
(d) Other Receivables	3,093,000	3,307,073
(e) Cash and Bank Balances	113,086,575	89,699,194
ТОТА	L 283,429,092	264,947,873

In terms of our report attached. For **B.R.V. Goud & Co.** Chartered Accountants

For National Institute of Advanced Studies

Sd/-A. B. Shivasubramanyam Partner Sd/-Dr. Shailesh Nayak Director Sd/-P. Srinivasa Aithal Head-Administration

Place: Bengaluru

Place: Bengaluru

Date: September 30, 2025

Date: September 30, 2025



INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 31, 2025

Particulars	For the year ended March 31, 2025 (In Rupees)	For the year ended March 31, 2024 (In Rupees)	
Income			
Grant income	194,305,223	191,841,471	
Other income	21,654,772	14,937,080	
Total Income	215,959,995	206,778,551	
Expenses			
Sponsored Research Expenditure	115,806,428	108,817,471	
Research Expenditure	80,864,934	75,490,242	
Establishment Expenditure	23,585,484	29,400,326	
Depreciation	4,795,133	5,197,153	
Total Expenses	225,051,979	218,905,192	
Excess of Expenditure over Income for the year carried to Balance Sheet	(9,091,984)	(12,126,641)	

In terms of our report attached. For **B.R.V. Goud & Co.** Chartered Accountants

For National Institute of Advanced Studies

Sd/-A. B. Shivasubramanyam Partner Sd/-Dr. Shailesh Nayak Director Sd/-P. Srinivasa Aithal Head-Administration

Place : Bengaluru Place : Bengaluru

Date: September 30, 2025 Date: September 30, 2025



NATIONAL INSTITUTE OF ADVANCED STUDIES

MATERIAL ACCOUNTING POLICIES AND NOTES ON ACCOUNTS FORMING PART OF THE FINANCIAL STATEMENTS AS AT MARCH 31, 2025

1) (a) Organization Overview:

The National Institute of Advanced Studies ("Society/Institute") is registered as a Society under the Karnataka Societies Registration Act, 1960, vide No.139/88-89 dated June 20, 1988.

The Society is registered under Section 12A (a) of the Income Tax Act, 1961, vide No. Accts/718/10A/VOL./A II/N-110, dated February 13, 1990, which has been renewed vide registration No.AAATN2269AE20214 dated 28 May 2021, till 31 March 2026.

Society is registered under Foreign Contribution (Regulation) Act, 1976 ("FCRA") vide registration no. 094420614 dated October 1, 1993.

Society is registered under 11-Clause (i) of first proviso to sub-section (5) of Section 80G of the Income Tax Act, 1961, vide No. AAATN2269AF20214, dated May 28, 2021. The exemption is valid till March 31, 2026.

FCRA authorities have renewed FCRA certificate for the period starting from April 1, 2022 to March 31, 2027 vide letter dated January 5, 2022.

Society is registered under Ministry of Corporate Affairs for Undertaking CSR Activities, vide Registration No.CSR00007662 DATED 04 June 2021.

(b) The main objectives of the Society include:

- I. To establish and develop an Institute of Advanced Studies in order to impart higher knowledge and conduct Research;
- II. To set up and sponsor research groups on problems relating to the development of the country and for identifying problems which require immediate study and resolution; and
- III. To provide programmers of varying duration for executives and officers of Government, Public and Private Enterprises, and Personnel of Universities, Defense services and the Professions, to broaden their cultural and academic background for the successful performance of their duties.

2) Material Accounting Policies:-

A. Basis of Preparation of Financial Statements:

The financial statements have been prepared in accordance with historical accounting convention and on the accrual basis of accounting. The Accounting Policies adopted in preparation of financial statements are consistent with those followed in the previous year.

B. Fixed Assets:

Fixed assets are stated at written down values i.e. cost of acquisition less accumulated depreciation. Cost of acquisition of fixed assets includes all direct expenses relating to acquisition of the asset.

C. Depreciation:

Depreciation on the fixed assets has been provided on written down value basis, in accordance with the rates prescribed under Income Tax Act, 1961.



D. Revenue Recognition:

- a) Donation/Revenue Grants are recognized as income in the Income and Expenditure Account in the period in which the collections are actually received.
- b) Earmarked grants are initially credited to a liability account in the Balance Sheet and are transferred to Income and Expenditure Account in the year in which and to the extent to which the Institute complies with the conditions attached to them.
- c) Interest Income is recognized in the time proportion basis taking into account the amount outstanding.
- d) Income from symposia, seminars and workshops are recognized as income as and when symposia, seminars and workshops are organized and held.

E. Foreign Exchange Transactions:

Transactions denominated in foreign currency are accounted at the transacted exchange rates.

F. Investments:

Investments are stated at cost less provision for diminution, other than temporary, in the value of such investments.

G. Employee Benefits:

Employee benefits include provident fund, gratuity fund and compensated absences.

Short Term Benefits:

Short term Employee Benefits are accounted as expenses in the income and expenditure account in the year in which service is rendered. These benefits include compensated absences, which are expected to occur within twelve months after the end of the period in which the employee renders the related service.

Post Employment Benefits and Other long term Employee Benefits:

Provident Fund contributions in respect of Employees' is deposited to the Employees' Provident Fund Organisation as per statutory rates.

For defined benefit plans in the form of gratuity fund, the cost of providing benefits is determined using the Projected Unit Credit method, with actuarial valuations being carried out at each Balance Sheet date. Actuarial gains and losses are recognized in the Income & Expenditure Account in the period in which they occur. Past service, cost is recognised immediately to the extent that the benefits are already vested and otherwise is amortised on a straight-line basis over the average period until the benefits become vested.

Compensated absences, which are not expected to occur within twelve months after the end of the period in which the employee renders the related services, are recognised as an actuarially determined liability at the present value of the defined benefit obligation at the balance sheet date, as reduced by the fair value of scheme assets.

H. Provisions and Contingent Liabilities:

Provisions are recognized when the society recognizes that it has a present obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation and the amount can be reasonably estimated.

Provisions are not discounted to their present value and are determined based on best estimate required to settle the obligation at the balance sheet date. These are reviewed at each balance sheet date and adjusted to reflect the current best estimates.

Contingent liabilities are not recognized but disclosed in the notes to financial statement. Contingent assets are neither recognized nor disclosed in the financial statement.



I. Revolving Fund:

Revolving Fund is in the nature of contingency reserve fund. The interest earned on investment made out of the Revolving fund is used to meet the revenue expenditure of the Institute and the fund may be used to meet shortfall, if any, in general fund and replenished back as and when surplus funds are available, in order to keep the revolving fund intact.

J. Recognition of Capital Grants:

Capital Grants received towards cost of fixed assets is credited to Fixed Assets Fund. The society has adopted Accounting Standard -12 issued by ICAI, in the case of Capital Grants. Accordingly, an amount equal to the depreciation on the assets created out of such grants is transferred from Fixed Assets Fund to Income and Expenditure Account.

3) Section 12A Registration:

The Society is registered under Section 12A (a) of the Income Tax Act, 1961, vide No. Accts/718/10A/VOL./A II/N-110, dated February 13, 1990, which has been renewed vide registration No. AAATN2269AE20214 dated 28 May 2021, till 31 March 2026. This entails the society to claim an exemption from Income tax provided certain conditions laid down in the Income Tax Act 1961 are complied with. Provision for tax will be made only in the year in which the Society is unable to establish reasonable certainty of its ability to fulfill these conditions.

4) Land Lease:

The Society had entered into lease agreement with Indian Institute of Science, Bangalore (IISc) dated August 28, 1990 for plot of land of 5 acres for establishment of NIAS by way of license to NIAS, for the organisation and functioning of the NIAS at the Institute. The institute will levy a nominal amount of Rs. 1 (Rupee One only) per annum on the NIAS as license fee for the use of Institute land. The said lease is perpetual in nature till the conditions specified in the agreement are observed. In failure to non-observance of the said conditions, the IISc., will revoke the licence and enter upon the site and buildings.

5) Employee benefits

a). Defined contribution plan

The Institute makes Provident Fund contribution to defined contribution retirement benefit plans for qualifying employees. Under the scheme, the Institute is required to contribute a specified percentage of the payroll costs to fund the benefits and thereafter the Institute does not have any legal or informal obligations to pay additional sums. The contributions payable to these plans by the Institute are at rates specified in the rules of the schemes. The amount recognized as an expense towards contribution to Provident Fund for the year aggregated to Rs.89,04,718/- (March 31, 2024: Rs.97,25,619/-)

b). Defined benefit plans

The Institute offers the following defined benefit schemes to its employees

i). Gratuity

The Institute makes annual contributions to the Employee's Group Gratuity Assurance scheme of the Life Insurance Corporation of India, a funded defined benefit plan for eligible employees. The scheme provides for lump sum payment to vested employees at retirement, death while in employment or on termination of employment of any amount equivalent to 15 days salary for each completed year of service or part thereof in excess of six months. Vesting occurs upon completion of five years of service. The present value of the defined benefit obligation and the related current service cost were measured using the "Projected Unit Credit" method, with actuarial valuations, which has been carried out for the first time, as on balance sheet date.

ii). Compensated Absences

The Institute makes annual contributions to the Employee's Group Leave Encashment Scheme of the Life Insurance Corporation of India, a funded defined benefit plan for eligible employees. The scheme provides for lump sum payment to vested employees at retirement, death while in



employment or on termination of employment of any amount equivalent to 30 days salary for each completed year of service or part thereof, subject to a maximum of 300 days. The present value of the defined benefit obligation and the related current service cost were measured using the "Projected Unit Credit" method, with actuarial valuations, which has been carried out for the first time, as on balance sheet date.

The disclosure as required under AS 15 - employee benefits are as follows:

	For the year ended March 31, 2025 (in Rupees)			
Principal assumptions used	Gratuity (Funded)	Compensated absences (Funded)		
Discount rate	6.60%	6.60%		
Salary escalation	7%	7%		
Attrition rate:	5.00% p.a. for all service groups	5.00% p.a. for all service groups		
Retirement age:	60 years	60 years		
Mortality rate during employment	Indian assured lives mortality 2012-14 (Ultimate)	Indian assured lives mortality 2012-14 (Ultimate)		
Expected rate of return on plan assets (p.a)	7.00%	7.00%		

- 6) Due to the cash flow deficit, the Council of Management resolved via circular resolution dated 10 March 2025 to authorize the management to withdraw an amount of up to Rs.65 lakhs from the revolving fund. During the year, the Institute had drawn an amount of Rs.26 lakhs (Previous year March 31, 2024, of Rs.178 lakhs) to meet the deficit. Since, the revolving fund is to meet temporary funding requirement and needs to be replenished, the amount drawn during the year has been adjusted with accumulated Income and Expenditure balance.
- 7) Previous years' figures have been regrouped/ reclassified wherever necessary.

For and on behalf of National Institute of Advanced Studies

Sd/Place: Bengaluru
Date: September 30, 2025

Sd/
Pr. Shailesh Nayak
Director

Pr. Srinivasa Aithal
Head-Administration





RESEARCH PROGRAMMES AND PROJECTS

Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in Lakhs)			
	School of Conflict and Security Studies							
1.	KAS Sponsored Project Study on Armed Conflicts and Peace Process: A Global Primer (IPRI)	KAS	D Suba Chandran	Apr' 23 – Mar' 25	32.00			
2.	A comprehensive Research Study on the Economic Impact Evaluation of Oil India Limited in the State of Assam	Oil India Limited	Anshuman Behera	Aug' 23 – June' 24	11.39			
3.	Research study titled Understanding Chinese Engagement in South Asia (UCESA)	UoSC	D Suba Chandran	Jan'24 – Dec' 25	51.00			
4.	Hosting of the BRICS YS Forum Secretariat and Implementation of its scientific activities/events etc.	DST	D Suba Chandran	Apr' 24 – Mar' 25	55.76			
5.	NIAS-ICWA Research on PR Insights: Weekly Dispatch on Contemporary Pakistan	ICWA	D Suba Chandran	Apr'24 – Mar' 25	14.00			
6.	NIAS-ICWA Research on Indian Neighbourhood	ICWA	D Suba Chandran	Apr'24 – Mar' 25	3.00			
7.	Democracy, Decentralisation and Governance in India	HSS India	Anshuman Behera	May 24 – Dec' 24	10.85			
8.	Treaties/Policies/Export Control Regimes Impacting the Development of Space Technologies in India	DRDO	PM Soundar Rajan	Jan' 25 – Jan' 26	63.63			
		School of Humani	ties					
10.	Archeometallurgical, Ethnometallurgical and Ethnoarchaeological Investigations on Metal Artefacts and Related Tangible Heritage from Early Tamil Sites	DST	Sharada Srinivasan	Sept'21 – Sept' 25	119.60			
11.	Investigation into the Chaotic Dynamics of Neural Networks	SERB	Nithin Nagaraj	Dec'21 – Dec' 24	10.05			
12.	Orientation of Temples of South India and Their Astronomical Associations	IKS	MB Rajani	Jan' 23 – Dec' 24	14.66			
13.	Material Culture and Experimental Crafts Explorations into Early Tamil and Harappan Metal, Pottery and Bead Finds	TCS	Sharada Srinivasan	Mar' 23- Feb' 26	158.24			
14.	Philosophy of Health and the Healing Self: The Urgency of Humanising Health, and Its Philosophical, Interdisciplinary and Intersocial Imaginations.	ICPR	Sangeetha Menon	Feb' 24 – Jan' 26	5.00			



Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in Lakhs)
15.	Unlocking the Sanskrit Effect: A Carnatic Rhythm and Mantra- based Intervention Approach for Cognitive Training in Dyslexia	AICTE-IKS	Deepti Navaratna	Mar' 24 – Feb' 26	14.65
16.	Cultural Landscape Research Using Geospatial Tools and Techniques	DST/SHRI	MB Rajani	Nov' 24 – Oct' 27	110.03
17.	Towards a National Cultural Landscape Information System: Mapping Heritage Sites for Inclusive Planning	Murty Trust	MB Rajani	Nov' 24 – Oct' 25	100.00
	School of N	atural Sciences ar	nd Engineering		
18.	Urban Ecologies: Governing Nonhuman Life in Global Cities	ERC	Anindya Sinha	Aug' 18 – Jul' 25	184.38
19.	Addressing the Complex Challenges Facing India and Global Society in the area of Environmental Sciences	IGMT	Vinay Kumar Dadhwal	Sept' 20 – Aug' 25	300.00
20.	Epilepsy Research – 1) Use Database and Molecular Modeling Techniques, to Modify the Presently Used AEDs for Better Performance, and 2) Synthesise and Test on Biological Systems the Designed Derivative Drugs	BBST	Madhusoodan Hosur	Apr' 21 – Mar' 25	44.70
21.	Dynamics of Complex Systems: Effect of the Environment on Living Systems	SERB	Janaki Balakrishnan	Aug' 21 – Jul' 24	29.16
22.	INSPIRE Faculty Fellowship Programme	DST	Ramya B Prabhakaran	Aug' 21 – July 26	112.40
23.	Coping with an Invader: Understanding the behavioural adaptations exhibited by the Juveniles of Deccan Mahseer in Response to Alien Invasive Fishes	SERB-DST	VV Binoy	Feb' 22 – Jun' 25	39.89
24.	To Establish the Current Status of Wildlife Crime and Other Facts of Illegal Wildlife Trade in Urban And Rural Parts of Karnataka	HSI	Sindhu Radhakrishna	Feb' 2023 - Feb' 2025	10.08
25.	Study the Interactions between Energy Security, Environment, and Climate Change	OPSA	R Srikanth	Mar' 23 – Mar' 26	98.98
26.	Identifying Emission Hot Spots and Developing High-Resolution Emission Inventory of Major Air Pollutants Using Drone Technology in Bengaluru	EMPRI	Gufran Beig	Apr'23 – Oct' 24	45.40
27.	Support to the EU's Bilateral Relations with Strategic Partners on Climate- Related Policies and Investment (SPIPA II)	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	Tejal Kanitkar	Jun' 23 – Jun' 24	44.27



Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in Lakhs)
28.	An Evidence-based Approach towards Assessing Energy Transition in the Residential Cooking Sector in India	MECS	Rudrodip Majumdar	June 23 – Jun' 24	25.00
29.	Student-Scientist Network Monitoring the Impact of Climate Change and Communicating Risk of Natural Disasters on the Coasts of Kerala and Karnataka	DST	VV Binoy	Sept' 23 – Sept' 25	32.30
30.	Establishing Community-Based Conflict Mitigation Strategies and Socio-Ecological Research to Promote Elephant-Human Coexistence in Northeastern India	Rufford Foundation	Sayan Banerjee & Anindya Sinha	Oct' 23 – Sept' 24	6.00
31.	Investigating the Role and Patterning of Gut Microbiota in Crop Raiding and Non-Raiding Primates in India	DBT	Vani Kulkarni	Jan' 24 – Dec' 26	50.88
32.	Mitigation Actions for India's 1st Biennial Transparency Report (BTR-1), 4th Biennial Update Report (BUR-4), and 4th National Communication (NC-4)	MoEFCC – UNDP	Tejal Kanitkar	Jan' 24 – Dec' 26	98.61
33.	Providing Inputs on GHG Emission Estimates from Aviation, Navigation, and Railways for BTR1, BUR4 and NC4 Communications to UNFCCC	MoEFCC – UNDP	Sumana Bhattacharya	Jan' 24 – Dec' 24	36.80
34.	Emission Estimation of HFCs, PFCs, Unspecified mix of HFC and PFC, SF6 and NF3 from Industrial Processes and Product Use Sector for BTR1, BUR4 and NC4 Communications to UNFCCC	MoEFCC – UNDP	Gufran Beig	Jan' 24 – Dec' 24	36.80
35.	Study to Collect and Analyze Preliminary Information for Selecting Greenfield Sites for Establishing Nuclear Power Plants in India	NPCIL	R Srikanth & AV Krishnan	Jan' 24 – Jan' 26	82.20
36.	Impact of Monkey-proofing on Human- Macaque Conflict: Conservation of the Endangered Lion-Tailed macaque in the Southern Western Ghats, India	Rufford Foundation	Anindya Sinha	Feb' 24 – Jan' 25	10.33
37.	Assist NTPC to develop strategies and action plans for growing the share of nuclear energy in its overall generation mix, thereby contributing to the National goals of reducing the emission intensity of India's GDP and the Long-Term Goal of Achieving Net Zero Emissions by 2070	NTPC	R Srikanth & AV Krishnan	Mar'24 – Feb' 25	38.10
38.	Preliminary Information as per Expected Guidelines of the AERB Code for Selecting these Potential Sites for SMRs in India	JRPPL	R Srikanth & AV Krishnan	Mar' 24 – Feb' 25	36.00



Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in Lakhs)
39.	Nuclear and Radiological Security Engagements in the Republic of India	ORNL	M Sai Baba	May 24 – Sept' 26	80.83
40.	Impact Assessment of Weather and Climate Services of the Indian Meteorological Department (Phase-I: Agrometeorological Advisory Services)	MoES/IITM	Tejal Kanitkar	Jun' 24 – Jun' 27	246.84
41.	Sustainable Pathways for India's Energy Transition to Net Zero by 2070	TCE	R Srikanth	Jun' 24 – Mar' 25	12.00
42.	JC Bose National Fellowship	DST/ANRF	M Jayananda	Jul' 24 – Jun' 27	59.93
43.	Small Modular Reactors to Achieve Net Zero with Energy Security for India	International Sustainable Energy Foundation	Rudrodip Majumdar & R Srikanth	Jul' 24 – Jul' 26	82.57
44.	Examining the Potential of Community – LED Models to Protect Illegal Hunting and Trade in Northeast India	Wild Life Conservation Society	Uttara Mendiratta & Anindya Sinha	Sept' 24 – Sept' 26	46.85
45.	Site Evaluation with Desktop Study for Installation of Bharat Small Reactors (BSRs) at Greenfield Site Mahan Aluminium, Bargawan, Singrauli (MP)	Hindalco Industries Limited	R Srikanth & AV Krishnan	Sept' 24 – Jan' 25	12.00
46.	Site Evaluation with Desktop Study for Installation of Bharat Small Reactors (BSRS) for Aditya Aluminium, Lapanga	Hindalco Industries Limited	R Srikanth & AV Krishnan	Sept' 24 – Jan' 25	12.00
47.	Global South Perspectives on People Positive Climate Action	ISEF	Tejal Kanitkar	Nov' 24 – Jan' 25	5.80
48.	Site Selection Studies for Bharat Small Reactors	Tata Power Company Limited	R Srikanth & AV Krishnan	Nov' 24 – Nov' 26	112.00
49.	Gastrointestinal and Malarial Parasite Prevalence, Diversity and Distribution in Primate Communities in the Lowland Rainforest Fragments of the UBV, Assam, India	Rufford Foundation	Karshita Bharati & Anindya Sinha	Nov' 24 – Oct' 25	7.36
50.	Investigating Climate, Human and Forest-Fire Interrelationships to Build Resilience in the Tropical Forests of Southern India	Australian Government	Ramya B Prabhakaran	Jan' 25 – Dec' 25	6.00
51.	Monkeys of a Feather? Cooperation in Synurbic, Free-Ranging Rhesus Macaques in Guwahati, Assam	Mr Debashish Dutta Gupta	Anindya Sinha	Feb' 25 – Jul' 25	5.47
52.	To Develop Natural Resource Utilization Plan for Biodiversity Hotspots	ISEF	V K Dadhwal	Feb' 25 – Jan' 27	255.98
53.	Site Assessment for Potential Nuclear Power Plants as per AERB Rejection Criteria in Various States	Reliance Industries Limited	R Srikanth & AV Krishnan	Mar' 25 – May 25	81.00



Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in Lakhs)
54.	Study of Site Suitability for Installation of 2*250MWe PHWR Bharat Small Reactor (BSR)	Jayprakash Power Ventures Limited	R Srikanth & AV Krishnan	Mar' 25 – Apr' 25	9.00
55.	Summary Report on Site Suitability for Nuclear Power Plant based on BSRs	Bajaj Energy	R Srikanth & AV Krishnan	Mar' 25 – Apr' 25	9.00
56.	Circularity for Water-Stressed Towns	ISEF	Rudrodip Majumdar & R Srikanth	Mar' 25 – Feb' 26	50.86
57.	BSR Site Evaluation and Summary Report – Adani and HMEL	TCEL	R Srikanth & AV Krishnan	Mar' 25 – Mar' 26	36.00
	Sc	hool of Social Sci	ences		
58.	Interdisciplinary Approaches to Economic Issues	RBI	Narendar Pani	On-going	6.00 (Yearly Int.)
59.	NIAS IKS Centre on Mathematics, Computation and Information Science	IKS	Shailaja Sharma D	Apr' 22- Jun' 24	14.05
60.	NIAS-EGT Program: Identification and Mentoring Gifted and Talented Children in India – NIAS ALCs School Partnership Projects for Age Group 11- 16 Years	RGMFE	Anitha Kurup	Mar' 23 – Mar' 26	200.67
61.	Research on the Linkages between Migration, Urbanization and Food Security in India	AAGS	Chetan Choithani	Jun' 23 – Jun' 24	4.81
62.	3HP Linkages Project: Integrating a Community-Led, Peer-Delivered Model of Prevention, Screening and Treatment Referral Services for Viral Hepatitis (HBV/HCV/HAV) and PrEP within HIV Prevention Interventions for Sexual and Gender Minorities in India	Gilead Sciences, INC	Aleena Sebastian	Feb' 24 – Jan' 26	82.97
63.	Economic Accounting for a Sustainable and Inclusive Blue Economy in India: Case of Sundarbans	MoES	Debosree Banerjee	Jun' 24 – Jun' 26	84.10
64.	Conducting Qualitative PrEP Implementation Research in India and Providing Technical Support to Partner MAs in 3 Regions of IPPF	Family Planning Association of India	Aleena Sebastian	Sept' 24 – Dec' 25	32.94
65.	Economic Impact Analysis of DRDO	DRDO	Anant Kamath	Mar' 25 – Sept' 26	200.25





Director

Shailesh Nayak

Professors Emeritus

K Kasturirangan VS Ramamurthy

Professors

D Suba Chandran, Dean (School of Conflict and Security Studies) Anitha Kurup, Dean (School of Social Sciences) Sangeetha Menon, Dean (School of Humanities) Nithin Nagarai Sindhu Radhakrishna Anindya Sinha R Srikanth, Dean (School of Natural Sciences and Engineering) Sharada Srinivasan

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DST-INSPIRE Faculty Fellow

P Ramya Bala

DBI- BioCARe Project Investigator

Vani Kulkarni

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Prashantha S C

Head (Administration & Finance)

P Srinivasa Aithal

Office Manager

C Arul Anand B Lalu - till April 15, 2024

Assistant Manager (Accounts & Finance)

P Satish Bhat

Assistant Manager (IT)

Ramprasad R



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VB Mariyammal R Vijayalakshmi (*Library*)- *till May 31, 2024*

Executive Assistants

AS Mary Stella R Ravisha – *Accounts* MS Shivakumar – *Accounts & Admin*.

Junior Executive Assistants

Meghana BP – *Library* Nagaraja P Guru Prasanna – *Technical* Rajesh K – *Library* VA Ramesh – *Technical*

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Dr Bindu Thirumalai





BOOKS

Dharmapalan Biju (2024). Manushya parinama padam (Malayalam). Kerala Bhasha Institute, Govt of Kerala.

Gupta D.N. and Sushil (2024). Innovation and institutional development for public policy: Complexity theory, design thinking and system dynamics application. Singapore: Springer.

Kapur Malavika (2025). Multilingualism in children: A marvel or a miracle and yet a mystery. New Delhi: Storywell Books Foundation.

Srivastava D.K., V.S. Ramamurthy, Shailesh Nayak and D. Suba Chandran (2025). Science beyond borders: International collaborations in basic sciences. Singapore: World Scientific Publishing Co.

Srivastava D.K. (2025). Stars, Tsunami and Sauropods: Adventures of Shaurya and Maya. New Delhi: Storywell Books Foundation.

EDITED BOOKS

Gidwani Vinay, Michael Goldman and Carol Upadhya eds. (2024). Chronicles of a global city: Speculative lives and unsettled futures in Bengaluru. Minnesota: University of Minnesota Press.

Sahoo Raghunath, Dinesh Kumar Srivastava, Edward Sarkisyan-Grinbaum and Airton Deppmann eds. (2024). Jean Cleymans a life for Physics. Basel: MDPI Books.

Suba Chandran D. and Anu Maria Joseph eds. (2025). Conflict annual 2025: A review of issues in peace and conflict around the world in 2024. Bengaluru: NIAS.

Suba Chandran D. ed. (2025). Global politics annual 2025: Issues in global politics during 2024. Bengaluru: NIAS.

Suba Chandran D. and Anu Maria Joseph, eds. (2024). The War in Gaza, Vol.1. Bengaluru: NIAS.

Suba Chandran D. and Anu Maria Joseph, eds. (2024). Conflict annual 2024. Bengaluru: NIAS.

Suba Chandran D. and Anu Maria Joseph, eds. (2024). NIAS-IPRI conflict weekly 250th issue. Bengaluru: NIAS.

BOOK CHAPTERS

Biswas-Diener Robert, Louis Tay, Tithi Bhatnagar and Ed Diener (2024). Happiness in India In: *Happiness Across Cultures* edited by Helaine Selin and Gareth Davey. Dordrecht: Springer, pp.1-16.

Choithani Chetan (2025). Circular male migration, rural-urban linkages and household food security in India. In: *Handbook on rural-urban linkages in the global south* edited by Cecilia Tacoli et.al. Edward Elgar Publishing, pp. 192-204.

Hossain Kamrul (2025). How does international human rights law respond to indigenous peoples rights to culture? In: *Digital Indigenous Cultural Heritage* edited by Inker-Anni Linkola-Aikio et.al. Palgrave Macmillan, pp. 249-264.



Hossain Kamrul (2025). Human rights in the Arctic In: *The Routledge Handbook of Arctic Governance* edited by Elena Conde and Corine Wood-Donnelly. London: Routledge, pp. 129-148.

Kripa M.K., K. Saketh and Vinay Kumar Dadhwal (2024). Mapping aboveground biomass and soil organic carbon density in India—A geospatial-analytic framework for integrating multi-year remote sensing, large field surveys, and machine learning In: *Harnessing data science for sustainable agriculture and natural resource management* edited by Mehul S. Raval et.al. Singapore: Springer, pp. 97-120.

Kapur Malavika (2024). Foreword to A Contextual approach to human development edited by A. K. Srivasatava and Giriswar Misra. Routledge.

Kapur Malavika (2024). Foreword to Counselling skills: Theory and practice edited by Meena Hariharan, Usha Chivukala and Meera Padhya. Hyderabad: Routledge.

Kulkarni Parag and Lalith Mohan Patnaik (2024). Looking at exploratory paradigms of explainability in creative computing In: *Explainable, interpretable, and transparent AI systems* edited by B. K. Tripathy and Hari Seetha. CRC Press, pp. 20-31.

Kumar Saransh (2024). Interplay between tidal range and dam-induced flooding in sustaining the islands and livelihoods in Narmada estuarine zone, India In: *Sustainable local development for environmental and social sustainability* edited by Bhanwar Vishvendra Raj Singh and Amit Kumar Batar. Switzerland: Springer, pp.87-103.

Lavanyaa V.P., S.S. Mitra, H. Kamath, R. Srikanth and Rudrodip Majumdar (2024). Impact of land-use pattern on particulate matter pollution in a mega-city in India. In: *Recent Advances in Environmental Science from the Euro-Mediterranean and Surrounding Regions (Proceeding of 3rd Euro-Mediterranean Conference for Environmental Integration*) edited by Mohamed Ksibi et.al. Springer, pp.633-636.

Mackie S.E. and Kamrul Hossain (2024). Governance of plastic in the Arctic In: *Research handbook on plastic regulation: Law, policy and the environment* edited by Elizabeth A. Kirk et.al. Edward Elgar, pp. 229-247.

Menon Sangeetha (2024). Being that knows and consciousness that is mindful In: *Exploring the realm of the mental: Cognition, emotion and volition* edited by Nirmalya Narayan Chakraborty. Kolkata: The Ramakrishna Mission Institute of Culture, pp.81-88.

Neethi P. and Anant Kamath (2024). Turbulent transformations and urban undesirables: Revanchist urban transition and street-based sex work in Bangalore. In: *Mapping legalities: Urbanisation, law and informal work* edited by Thomas Coggin and Roopa Madhav. London and New York: Routledge.

Pani Narendar (2025). Land reform as a source of identity politics. In: *Deconstructing India's democracy: Essays in honour of James Manor* edited by Rob Jenkins and Louise Tillin. Hyderabad: Orient Blackswan.

Ramchand Mythili (2025). Teacher education and inclusion: Post-pandemic potentials and possibilities. In: *The Evolving landscape of higher education in India: Post-pandemic policies and transformations* edited by Sudhanshu Bhushan. Singapore: Springer Nature, pp. 269-287.

Sinha Anindya and Maan Barua (2025). Being macaque: Nonhuman ethnographies of urban India In: *Posthumanism and India: A Critical Cartography* edited by Debashish Banerji, Monirul Islam and Samrat Sengupta. New Delhi: Bloomsbury Academic India, pp.75-91.

Sinha Anindya and Sayan Banerjee (2024). Engendered primatology: of female primates and feminist primatologists In: *Gender and animals in history: Yearbook of women's history* edited by Sandra Swart et.al. Amsterdam: Amsterdam University Press, pp.137-156.



Srinivasan Sharada (2024). Indian metals heritage: Some archaeometallurgical insights (keynote address). In: Souvenir of International Conference on Minerals, Mining and Metallurgy in South Asia. Udaipur: Aryas Publishers, pp.1-19.

Srinivasan Sharada (2024). Scientific validation of skilled Aranmula metal mirror craft techniques In: *Communication and Dissemination if Traditional Knowledge*. New Delhi: CSIR-NiScPR Publication, pp.30-33.

Srinivasan Sharada (2024). Wootz damascus steel and evidence from South Indian antiquity In: *Svastik Stories: Indian Traditional Knowledge Through the Lens of Science*. CSIR-NIScPR Publication. pp. 6-12.

Suba Chandran D. (2024). The War in Gaza: The First Eight Months In: *The War in Gaza, Vol.1*. edited by Suba Chandran D. and Anu Maria Joseph. Bengaluru: NIAS.

Suba Chandran D. (2025). Science diplomacy: Emerging world order, impending tech war and challenges to science diplomacy In: *Science beyond borders: International collaborations in basic sciences* edited by Srivastava D.K et.al. Singapore: World Scientific Publishing Co. pp. 437-449.

Udaya Kumar S. (2024). Preliminary investigation of the methods of making bone tools: an experimental archaeology perspective In: *Rajatarangini recent research in archaeology and history (A Festschrift for Prof. K. Rajan) Vol.* 1 edited by Y. Subbarayalu, R.N. Kumaran and V.P. Yathees Kumar. Thanjavur: Heritage India, pp. 214-217.

BOOK REVIEWS

Banerjee Debosree (2024). Book review of K. B. Saxena Ed., Poverty and Deprivation: Changing Contours. *Social Change*. DOI: https://doi.org/10.1177/00490857241255256

Menon Srikumar M. (2025). Book review of Prehistoric foundations of Bharata. (2 Parts). The Mythic Society - History and Culture of Bharata Series - 1. *Heritage: Journal of Multidisciplinary Studies* in Archaeology 10: 796-801.

Menon Srikumar M. (2025). Deep dive into Buddhas world (Book review of Casting the Buddha, by Shashank Shekhar Sinha, Macmillan Books). *Deccan Herald*, 24 Feb 2025.

Upadhya Carol (2024). Book review of Douglas E. Haynes, The Emergence of brand-name capitalism in late colonial India: Advertising and the making of modern conjugality. *The Indian Economic & Social History Review* 61(4).

JOURNAL ARTICLES

Adimoolam Yeshwanth Kumar, Nithin D. Pillai, Gnanappazham Lakshmanan, Deepak Mishra and Vinay Kumar Dadhwal (2025). Estimation of above ground biomass of mangrove forest plot using terrestrial laser scanner. *The Egyptian Journal of Remote Sensing and Space Sciences* 28(1): 1-11.

Agarwala M., P. Ramya Bala, C. Kulkarni, R. Sukumar, M.F. Quamar, K. Balasubramanian, S. Tripathi and K. Anupama (2024). Learning from the past: Collaborating across times for landscape management for conservation. *Current Science* 127(8): 893-894.

Anand Shaurabh and Sindhu Radhakrishna (2024). Does mining escalate human-wildlife conflict?: Insights from human-rhesus macaque conflict in a coal-mining region in Southern India. Human Ecology 52: 129-141.

Anbazhagan S. and A. Jothibasu (2025). Derivation of surface and groundwater pollution index in the urban-industrial sector along Cauvery River to assess the quality standards. *Journal of Geology, Geography and Geoecology* 34(1): 112-125.



Anel Juan A., Ingrid Cnossen, Juan Carlos Antuna-Marrero, Gufran Beig, Matthew K. Brown, Eelco Doornbos, Scott Osprey, Shaylah Maria Mutschler, Celia Perez Souto, Petr Sacha, Viktoria Sofieva, Laura de la Torre, Shun-Rong Zhang and Martin G. Mlynczak (2025). The Need for better monitoring of climate change in the middle and upper atmosphere. *AGU Advances* 6(2).

Banerjee Sayan, Dibakar Nayak and Anindya Sinha (2024). Adivasi (Tea Tribe) worldviews of living close to wild Asian Elephants in Assam, India. *Conservation Biology* 38(6).

Behera Anshuman (2024). Peaceful resolution of ethnic conflicts: The relevance of Gandhian fraternity and participatory democracy. Gandhi Marg: A Quarterly Research Journal 46(1): 131-152.

Bhagavathiammal Ganesan, Gufran Beig, N. Korhale, Siddhartha Singh and Bandaru Sathya Murthy (2024). Impact of lockdown emission scenario on fine particulate matters (PM1) and its comparison with PM2.5 within Indian megacities. *Natural Hazards* 120: 9093-9105.

Bhat Y., M.K. Kripa and Vinay Kumar Dadhwal (2024). Validation of ESA-CCI forest biomass products over India: Methodological and data challenges and results. *Journal of the Indian Society of Remote Sensing* 52(4): 931-942.

Chakrabarty S. and Kamrul Hossain (2024). Recognizing indigenous traditional knowledge with medicinal value within a legal framework: an overview of the issues and challenges with special focus on India. *Man in India* 104(1-2): 41-60.

Chakrapani Venkatesan, Heather Santos, Madhusudana Battala, Shaman Gupta, Satvik Sharma, Aditya Batavia, Sahil Jamal Siddiqui, Kelly A. Courts and Ayden I. Scheim (2024). Access to transition-related health care among transmasculine people in India: A mixed-methods investigation. *PLOS Global Public Health* 4(10): 1-22.

Chatterjee Juhi and Tejal Kanitkar (2024). A Shift to solar irrigation pump-sets: A case study from Uttar Pradesh, India. *Review of Agrarian Studies* 14(1).

Choithani Chetan and Arslan Wali Khan (2024). Southward ho! demographic change, the North-South divide and internal migration in India. *The India Forum: A Journal-Magazine on Contemporary Issues*.

Choithani Chetan, C.P. Abdul Jaleel and S. Irudaya Rajan (2024). Rural-urban transition and food security in India. *Global Food Security* 42:100780.

Dadhwal Vinay Kumar and et al. (2024). LiDAR-based reference aboveground biomass maps for tropical forests of South Asia and Central Africa. *Scientific Data* 11:334.

Dadhwal Vinay Kumar and Subrata Nandy (2024). Forest biomass assessment using multisource earth observation data: Techniques, data sets and applications. *Journal of the Indian Society of Remote Sensing* 52(4): 703-709.

Dadhwal Vinay Kumar and et al. (2024). Spatiotemporal atmospheric in-situ carbon dioxide data over the Indian sites-data perspective. *Scientific Data* 11(1):385.

Das Prantik and V.V. Binoy (2024). Insights on the distribution, catch and release and public sentiment towards recreational angling of mahseers - A study of YouTube videos from India. *Aquatic Conservation: Marine and Freshwater Ecosystems* 34(5).

Das Sherin S., Rudrodip Majumdar, A.V. Krishnan and R. Srikanth (2024). Exploring urban water-energy nexus: A case study of thermal power plants in Raichur and Ballari districts in Karnataka. *Natural Resources Forum - A United Nations Sustainable Development Journal*. DOI: https://doi.org/10.1111/1477-8947.12507



Deevi S.K., B. Anilkumar, P.G. Pinto, P. Ramani, C.N. Vishnuprasad, S. Shanmugaraju and N. Pandurangan (2024). Facile synthesis of corticiolic acid—a bioactive pharmacophore from natural sources. *RSC Advances* 14: 37539-37545.

Dhanya G., T.S. Pranesha, Sandip Nivdange, Kamsali Nagaraja, B.S. Murthy, D.M. Chate, Gufran Beig and Nitin R. Karmalkar (2024). Temporal variability of ozone and its precursors at tropical megacity, Bengaluru, India: Effect of volatile organic compounds and meteorology. *Journal of Atmospheric and Solar-Terrestrial Physics* 265:106388.

Dhawale Ashni Kumar and Anindya Sinha (2024). Twinning in wild, endangered lion-tailed macaques Macaca silenus in the Anamalai hills of the western ghats, India. *Primates* 65: 229-234.

Gautama Pushya A. and Sangeetha Menon (2024). Self, well-being, and agency in the Caraka Samhita. *The Journal of Hindu Studies* 17(3): 314-337.

Gautama Pushya A., Sukanya Guruvayoorappan and Sangeetha Menon (2024). Placing well-being: The role of ecology in Ayurveda and Mavilan healing traditions. *Indian Journal of History of Science* 59: 274-283.

Ghosh Tanmay, Tejal Kanitkar and R. Srikanth (2025). Enhancing inclusiveness and sustainability: Impact of accessibility and affordability on public transportation in an Indian megacity. *Sustainable Transport and Livability* 2(1): 1-31.

Green Aalayna R., Stotra, Shweta Shivakumar, Courtney Hughes, Sayan Banerjee, Maureen W. Kinyanjui, Moreangels M. Mbizah, Omar Ohrens and Abigail R. Thiemkey (2024). Creating constellations of coexistence through connections between people in human–wildlife conflict areas. *Conservation Biology* 38(6).

Haitao Ma, Yildirim Dilek, Dongyang Lian, Pengjie Cai, Mudlappa Jayananda, K.R. Aadhiseshan and Jingsui Yang (2025). Parental magma and mantle source compositions of chromitites in the Mesoarchean Nuggihalli greenstone belt, India: evidence for Archean subduction zone magmatism. *Journal of Geological Society* 182(2).

Hegde Venkatraman S., H.E. Frimmel, N. Rebeun, A.R. Pratihari and G. Shalini (2025). Provenance of Neoarchaean metagreywackes on the western margin of the Western Dharwar Craton, South India: Implications for Madagascar—Western Dharwar Craton connection. *Journal of Asian Earth Sciences* 280:106474.

Henry Akhila, Nithin Nagaraj and Rajan Sundaravaradhan (2025). Universal orbits: Universiting the connection between chaotic dynamics, normal numbers, and neurochaos learning. *Chaos Theory and Applications* 7(1): 61-69.

Hossain Kamrul (2024). The Future of science diplomacy in Arctic law. *Current Developments in Arctic Law 12*: 14-19

Hossain Kamrul (2025). An indigenous cosmovision for an earth-centric governance: Deconstructing the normative structure of international law?. *International Community Law Review 26*(4): 315-330.

Iorbo Rita, Sanjeev P. Sahni, Tithi Bhatnagar and Dick Taverishima Andzenge (2025). Political participation for social inclusion of internally displaced persons. *Journal of Humanitarian Affairs* 5(3): 3-11.

Iorbo Rita, Sanjeev P. Sahni, Tithi Bhatnagar and Dick Taverishima Andzenge (2024). Social inclusion and justice for the internally displaced by the Herdsmen-Farmers conflict in Benue state, Nigeria. *Journal on Migration and Human Security* 12(2): 96-109.

Janaki Chintalapati, Arvind Kumar, M.V. Hosur and Supriya N. Pal (2024). TREADS: Target research for anti-epileptic drugs using data science. *Neurology India* 72(3): 620-625.



John Biju, Yogendra Singh and C.P. Rajendran (2024). Sedimentary records of liquefaction from central Kerala (Southwestern India), as earthquake indicators in a cratonic area. *Journal of Asian Earth Sciences* 277:106373.

Kaempf Jonas, Chris Clark, Tim E. Johnson, Mudlappa Jayananda, Julian Alfing, Justin Payne, Krishnan Sajeev and Martin Hand (2024). Archean polymetamorphism in the central Dharwar craton, Southern India. *Journal of Metamorphic Geology* 43(1): 71-95.

Kamath Anant (2024). Frugal technological praxis as empowerment. *Economic and Political Weekly* 59(43): 25-29.

Kanitkar Tejal, Akhil Mythri and T. Jayaraman (2024). Equity assessment of global mitigation pathways in the IPCC Sixth Assessment Report. *Climate Policy* 24(8): 1129-1148.

Karapurkar D., R. Ramakrishnan and Venkatraman S. Hegde (2025). Tidally modulated sediment dispersion in engineered tropical estuary: implications for estuarine morphological evolution. *Journal of Sedimentary Environments* 10: 281-301.

Khanna Monty (2025). Living in transparent oceans-looking beyond technological solutions. *Indian Naval Despatch* 5: 01-05.

Khanna Monty (2025). What the Red Sea and Ukraine suggest about distributed lethality. *Indian Naval Despatch* 5: 108-113.

Khona Preeth (2025). Nottusvara: A pedagogical tool. South Asian Studies 41(1): 59-72.

Laine Nicolas, Romain Simenel, Morgane Labadie, Nishant M. Srinivasaiah and Anindya Sinha (2024). Humananimal interactions: Camera traps as research agents. *Anthropology Today* 40(4): 22-26.

Madhusudan M.D. and Anindya Sinha (2025). Saving wildlife in a changing India. *Economic and Political Weekly* 60(2): 33-39.

Mal Arindam, Sarbani Palit, Christopher C. Fulton and Sisir Roy (2024). Quantized redshift and its significance for recent observation. *Research in Astronomy and Astrophysics* 24(9).

Mammadova A., U. Payyappallimana, C.N. Vishnuprasad and S. Badiger (2024). Collaborative educational study on traditional medicine and biodiversity conservation within UNESCO biosphere reserve. *European Journal of Sustainable Development* 13(4): 458-466.

Mandal Moumita (2024). Permanent court of arbitration (PCA). *Yearbook of International Environmental Law* 34(1).

Mandal Moumita (2024). South Asia: India. Yearbook of International Environmental Law 34(1).

Mangaraj Poonam, Saroj Kumar Sahu and Gufran Beig (2024). Development of emission inventory for air quality assessment and mitigation strategies over most populous Indian megacity, Mumbai. *Urban Climate* 55:101928.

Manohar Kumar C.V.S.S., Sudhanshu Shekhar Jha, Rama Rao Nidamanuri and Vinay Kumar Dadhwal (2024). Precision crop mapping: within plant canopy discrimination of crop and soil using multi-sensor hyperspectral imagery. *Scientific Reports* 14(1).

Mohan Varun (2025). In search of consensus: Examining global south perspectives on climate security in UNSC debates. *Earth System Governance* 23:100231.



Mukherjee Diya (2025). An insight into an ancient technology (Lost Wax casting technique) through an ethnographic approach: Case study of Mannar, Kerala. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 10: 403-413.

Mukhopadhyay Dyutiman, Sohhom Bandyopadhyay, Eshwar Venkatesh and Sangeetha Menon (2024). Exploring complexity-entropy, eye-tracking, experience, creativity, familiarity, and emotional responses to 40 paintings of Raja Ravi Varma - father of Indian modern art. *International Journal of Arts and Technology* 15(2): 170-207.

Nayak Shailesh (2025). From excellence to eminence: The Indian tsunami early warning centre (guest editorial). *Current Science* 128(2): 123-124.

Nayak Shailesh (2025). Towards developing the national earth observation system. *Journal of the Indian Society of Remote Sensing* 53: 1-3.

Pal Sucharita, Mudlappa Jayananda, Tiwari M. Devleena, J.P. Shrivastava, M. Satyanarayanan, A.S. Maurya, and J.P. Gautam (2024). Paleoenvironmental shifts across Cretaceous–Paleogene boundary: insights from multi-proxy chemo stratigraphy of the Mahadeo–Cherrapunji section, Meghalaya, India. *Journal of Sedimentary Environments* 9: 271-296.

Panicker A.S., S. Athulya, K. Ramakrishna, Gufran Beig and S. Das (2024). Particulate matter (PM2.5) radiative forcing over three different cities in India. *International Journal of Engineering Applied Sciences and Technology* 9(1): 104-109.

Panneerselvam Prakash and K.G. Ramkumar (2024). The Role of MSMEs in shipbuilding and future naval technologies: Strategy to transition from atmanirbharta to atmanirbhar by 2047. Journal of Defence Studies 18(4): 45-63.

Parthasarathy G. and R. Srinivasan (2024). Padma Shri award to Dr. Shailesh Nayak. *Journal of the Geological Society of India* 100(4): 601-602.

Pasha S.V. and Vinay Kumar Dadhwal (2024). National analysis on variations in estimates of forest cover dynamics over India (2001–2020) using multiple techniques and data sources. *Spatial Information Research* 32: 451-461.

Pasha S.V., Vinay Kumar Dadhwal, Komal Kumari and Nashit Ali (2024). Historical expansion of tea plantations over 150 years (1876–2023) in North Bengal, India. *Environmental Monitoring and Assessment* 196(11): 1-18.

Pradeep Arya S. and M.B. Rajani (2024). Ancient Valabhi: A remote sensing perspective. *Journal of the Indian Society of Remote Sensing* 53: 1765-1783.

Rajani M.B. (2024). Archaeological landscape of Thotlakonda and Bavikonda near Visakhapatnam, Andhra Pradesh: Insights from remote sensing and GIS analysis. *Current Science* 127(10): 1180-1193.

Pujari Ankush Shankar, Rudrodip Majumdar, Chandramouli Subramaniam and Sandip K. Saha (2025). Techno-Economic analysis of solar thermal seasonal thermochemical storage for Indian Himalayan cities. *Applied Thermal Engineering* 269.

Ranjan Ankita and Tejal Kanitkar (2025). Energy requirements for sustainable human development. *Energy for Sustainable Development* 85:101648.

Ranjan Ankita, Tejal Kanitkar and T. Jayaraman (2024). A New scenario framework for equitable and climate-compatible futures. *Climate and Development*. 1-13. DOI: https://doi.org/10.1080/17565529.2024.2365939



Rathod Aditi, Abhilash S. Panicker, Gufran Beig and Kaushar Ali (2024). Radiative impacts of organic and elemental carbon aerosols over two urban locations in India. *International Journal of Engineering Applied Sciences and Technology (IJEAST)* 8(10): 45-52.

Remya Ajai A.S. and Nithin Nagaraj (2025). Random heterogeneous neurochaos learning architecture for data classification. *Chaos Theory and Applications* 7(1): 10-30.

Rodda Suraj Reddy, Rama Rao Nidamanuri, T. Mayamanikandan, Gopalakrishnan Rajashekar, Chandra Shekar Jha and Vinay Kumar Dadhwal (2024). Non-destructive allometric modeling for tree volume estimation in tropical dry deciduous forests of India using terrestrial laser scanner. *Journal of the Indian Society of Remote Sensing* 52(4): 825-839.

Sahu Saroj Kumar, Madhusmita Mishra, Ashirbad Mishra, Poonam Mangaraj and Gufran Beig (2024). Quantification and assessment of hazardous mercury emission from industrial process and other unattended sectors in India: A step towards mitigation. *Journal of Hazardous Materials* 470:134103

Sahu Saroj Kumar, Poonam Mangaraj, Pallavi Sahoo, Ashirbad Mishra and Gufran Beig (2024). Quantification and spatial analysis of gridded $(0.1^{\circ} \times 0.1^{\circ})$ emission of indirect GHGs/Air pollutants from anthropogenic sources in India. *Environmental Pollution* 363:125231.

Salam Jeebanlata (2025). Occlusive narratives: School textbooks and national identities. *Sociological Bulletin* 74(1): 42-59.

Salam Jeebanlata (2025). Sustainable development goals and vocational skill policy: India vis-a-vis global scenario. *Journal of Educational Planning and Administration* 39(1): 23-42.

Sarkar Debarun and Anitha Kurup (2024). Scale of outcome-based education: Beyond the knowledge-skill dichotomy. *Higher Education for the Future* 11(2): 204-219.

Sharma Niharika, Rajaraman Shankar and Sangeetha Menon (2024). The Metaphysical integration of Upaya in the Trika philosophy and Bhoja's model based on Triguṇa-Purusartha to understand the concepts of Sivatva, self-realisation and consciousness. *Journal of Indian Council of Philosophical Research* 41: 369-380.

Simenel Romain (2024). Is Mnemonics an end in itself? sensory mnemonic learning of the Quran in Southwestern Morocco. *Current Anthropology* 65(4): 607-628.

Sinha Anindya, Mayukh Chatterjee, Ashni Kumar Dhawale and et al. (2025). MacaqueNet: Advancing comparative behavioural research through large-scale collaboration. *Journal of Animal Ecology* 94(4): 519-534.

Sujay K. and Venkatraman S. Hegde (2024). Assessment of sub-watershed for soil erosion threat in a semi-arid region watershed (Bennihalla) of North Karnataka using morphometric analysis and geo-computational approach. *Journal of Jilin University (Engineering and Technology Edition)* 43(10): 83-104.

Surendrababu Hema Karnam and Nithin Nagaraj (2024). A Novel backdoor detection approach using entropy-based measures. IEEE Access 12: 114057-114072.

Surendran H., R. Battu, R. Gopurappilly, C.N. Vishnuprasad and R. Pal (2025). Generation of a human induced pluripotent stem cell (iPSC) line ERPLi004-A from an Alpha-1 antitrypsin deficiency (AATD) patient with SERPINA1 mutation. *Stem Cell Research* 83:103664.

Swarada B., S.V. Pasha, T.N. Manohara, H.S. Suresh and Vinay Kumar Dadhwal (2024). Assessing landslide-driven deforestation and its ecological impact in the western ghats: A multi-source data approach. *Journal of the Indian Society of Remote Sensing* 52(7): 517-1531.



Swarada B., S.V. Pasha and Vinay Kumar Dadhwal (2024). How natural are the forests in Rajiv Gandhi (Nagarhole) Tiger reserve?: A multi-source data approach. *Environmental Monitoring and Assessment* 196 (5): 444.

Tandon Latika, Tithi Bhatnagar and Tanushree Sharma (2024). Leadership agility in the context of organisational agility: a systematic literature review. *Management Review Quarterly*. DOI: https://doi.org/10.1007/s11301-024-00422-3

Thomas Joseph Ivin (2024) A Hyperbola framework for scalar diffraction theory with applications. Frontiers in Optics + Laser Science 2024 (FiO, LS).

Udayakumar S. (2024). An experimental study of iron-smelting techniques used in the Nathara-Ki-Pal and Iswal, India: Results for the reconstruction of ancient metallurgical processes. *South Asian History, Culture and Archaeology* 4(2): 221-240.

Udayakumar S. (2024). Ethno-technological perspective of current wisdom of metal craft and craftsmanship, Tamil Nadu and Karnataka. SAARC Culture 10.

Udayakumar S. (2025). A Current wisdom and heritage of making terracotta horses in Konthagai Village, Sivagangai district, Tamil Nadu. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 10: 129-147.

Upadhya Carol and Supriya RoyChowdhury (2024). Crafting new service workers: Skill training, migration and employment in Bengaluru, India. *Third World Quarterly* 45(4): 753–770.

REPOSITORY PAPERS

Bharati Anjali and V.V. Binoy (2025). Sharing the joy of observing nature: A study of nature walks in India. SocArXiv. URL: https://osf.io/preprints/socarxiv/73yv5_v1

Harikrishnan N. B., Anuja Vats, Nithin Nagaraj and Marius Pedersen (2025). Chaotic map based compression approach to classification. arXiv:2502.12302 [cs.LG].

Narendra Nanjangud C. and Nithin Nagaraj (2025). Integrating causality with neurochaos learning: Proposed approach and research agenda. arXiv:2501.13763 [cs.LG].

Vijayakrishnan Sreedhar, Ganesh Raghunathan, Mavatur Ananda Kumar and Anindya Sinha (2024). Elephants in a teacup: Ranging and habitat-use of Asian elephants Elephas maximus in a plantation dominated landscape in southern western ghats, India. *BioRxiv*. DOI: https://doi.org/10.1101/2024.01.08.574633

CONFERENCE PAPERS / POSTERS / PRESENTATIONS

Ahmed Anas A.E., Rudrodip Majumdar and Sandip K. Saha (2024). Comparison of stratification performance in oil-based thermal storage tank for different immersed discharging coil configurations In: *Proceedings of the 5th international conference on advances in energy research and applications (ICAERA 2024)*, Lisbon, Portugal. 21-23 November 2024.

Banerjee S. and Anindya Sinha (2024). Elephant counter-maps in an urbanising rural frontier in northeast India. Panel on More-than-Human Cartographie. *RGS–IBG Annual International Conference 2024*, London, UK, 27–30 August 2024.

Banerjee S. and Anindya Sinha (2024). Sensory and sensible geographies of elephant-human cohabitation in Assam, India. Panel on Uncertain Methods, Elusive Lives: Exploring the Methodological and Relational Horizons of Doing Research with More-than-Humans, EASA2024. *18th EASA Biennial Conference on Doing and Undoing with Anthropology*, University of Barcelona, Spain, 23–26 July 2024.



Banerjee S. and Anindya Sinha (2024). Sensory and sensible geographies of elephant-human cohabitation in Assam, Northeastern India. Panel P253 on Symbiotic Methods: More-than-Human Companions for Knowing, EASST-4S 2024 Amsterdam. *International Conference on Making and Doing Transformations*, Amsterdam, The Netherlands, 16–19 July 2024.

Bharati A. and V.V. Binoy (2024). Sharing the joy of observing nature in a city: A study of the guided nature walks in India (online). *Conservation Social Science Conference organized by the Society for Conservation Biology*, USA. 23 November 2024.

Bharati A. and V.V. Binoy (2024). Unveiling the power of citizen science for conservation insights from projects coordinators in India. 15th Student Conference on Conservation Science (SCCS), Bangalore, 21-24 October 2024.

Chakrapani V., Aleena Sebastian, R. Nelson, M. Shanmugam, J. Kaur, A.C. Tsai, A. Scheim, P.A. Newman, S. Rawat and A. Jaya (2024). Synergy among multiple stigmas in predicting psychosocial conditions and condomless anal sex among transgender women in India: Findings from a longitudinal S3 (stigma, syndemics and sex) cohort study. *The 25th International AIDS Conference*, International AIDS Society (IAS), 22-26 July 2024.

Chakrapani V., Aleena Sebastian, R. Nelson, M. Shanmugam, J. Kaur and P.A. Newman (2024). The Relationship between recent condomless anal sex and willingness to use injectable PrEP among transgender women and MSM in India: Testing the mediating role of risk perception. *The 25th International AIDS Conference*, International AIDS Society (IAS), 22-26 July 2024.

Chakravorty Tirthankar (2024). Meri atmakatha (my autobiography): Exploring autobiographical narratives of adolescents through social science pedagogy in a school-based ethnography. *The 49th All-India Sociological Conference*, December 2024.

Chakravorty Tirthankar (2024). Ummeed - a ray of hope: Filmmaking as autoethnography and tracing censorship in narratives during pedagogical experiments with adolescents in a school setting. *The 49th All-India Sociological Conference,* December 2024.

Das Sherin S., Rudrodip Majumdar, A.V. Krishnan and R. Srikanth (2024). A Methodological framework for strategic electricity generation planning in India: Assessing resource adequacy through probability risk metrics In: *3rd International Conference on Renewable Power (ICRP)*, Delhi: MAIT, 28-29 March 2024.

Henry Akhila, Nithin Nagaraj (2024). Neurochaos learning for classification using composition of chaotic maps. 5th Edition of the Meeting for the Dissemination and Research in the Study of Complex Systems and their Applications (EDIESCA 2024), Mexican Association of Dynamic Systems and Complexity (AMESDYC), Universidad Panamericana Campus Aguascalientes (Mexico), virtual mode, 28 October 2024.

Joshi Y.C. and Anindya Sinha (2024). The Crocodile conundrum of Charotar: Studies on positive and negative human-crocodile interactions in central Gujarat, India. *WCH10: 10th World Congress of Herpetology, Kuching*, Sarawak, Malaysia, 5–9 August 2024.

Joshi Y.C. and Anindya Sinha (2024. Studies on deep socioecological connections and coexistence between human and marsh crocodile communities in Gujarat, India. *Pathways Europe 2024: Revisiting What is Wild for Coexisting, Cordoba*, Spain, 13–16 October 2024.

Joshi Y.C., Anindya Sinha, K. Karanth, A.Vasava and V. Mistry (2024). Charter: Human-otter interactions in urban spaces of Gujarat, India. *Pathways Europe 2024: Revisiting What is Wild for Coexisting, Cordoba*, Spain, 13–16 October 2024.

Kiran J. and Tejal Kanitkar (2024). Evaluating 'just' energy transition pathways: A review of equity and justice considerations in integrated assessment models. 17th IAMC Annual Meeting 2024, Seoul, South Korea. November 2024



Kiran J. and Tejal Kanitkar (2024). Examining employment opportunities and development challenges in India's solar energy sector: A case study of three solar power park. *American Geophysical Union Annual Meeting 2024*, Washington D. C., USA. December 2024.

Kiran J. and Tejal Kanitkar (2024). Estimating the labour impacts of low-carbon growth pathways in India. understanding low-carbon transitions in the global south: Policy, politics, and decolonization. STS Conference Graz 2024, Graz, Austria. May 2024.

Krishnan A., D. Philipose, A. Gopinath and V.V. Binoy (2024). Meeting with an invader understanding behavioral responses of the juvenile deccan mahseers (Tor khudree) towards the alien invasive fish common carp. 15th Student Conference on Conservation Science (SCCS), Bangalore, 21-24 October 2024.

Kumar Rajeev and Rudrodip Majumdar (2024). Evaluation of energy transition readiness in the residential cooking sector among the low and medium-income households In: *3rd International Conference on Renewable Power (ICRP)*, Delhi: MAIT, 28-29 March 2024.

Loganathan V., R. Nelson, V. S. Sayyed, R. Chhetri, M. Shunmugam, V. Chakrapani, S. Rawat, A.K. Srikrishnan, P. Saha, S. Panda, J. Mukherjee, S. ul Hadi, K. Ondenge, Y.W. Machira and Aleena Sebastian (2024). Emerging virtual sexual networks and implications for implementation of online HIV prevention interventions: A qualitative study among transgender women in India. *The 25th International AIDS Conference*, International AIDS Society (IAS), 22-26 July 2024.

Majumdar Rudrodip (2024). Knowledge sharing session - "An evidence-based approach to access energy transition in clean cooking" In: *Modern energy cooking forum (MECF)-2024 [Theme: "Accelerating Progress in Transition to eCooking".]*, New Delhi, India Habitat Centre, 27 September 2024.

Nagaraj Nithin (2025). Chaos theory meets number theory and machine learning. *Conference on Nonlinear Systems and Dynamics (CNSD 2025)*, Tiruchirappalli: Bharathidasan University 11 March 2025.

Nelson R., Aleena Sebastian, J. Kaur, M. Shunmugam, J.G. Annamalai, S. Kuppan, S. Prasath and V. Chakrapani (2024). Associations between sexual stigma, COVID-19 economic stressors, psychosocial syndemic conditions, and condom use among men who have sex with men in India. *The 25th International AIDS Conference*, International AIDS Society (IAS), 22-26 July 2024.

Nelson R., Aleena Sebastian, J. Kaur, M. Shunmugam, T. Mani, K. Kasinathan and V. Chakrapani (2024). Influence of gender identity stigma and COVID-19 economic stressors on mental health and HIV risk of transgender women in South India: Findings from mediation analyses. *The 25th International AIDS Conference*, International AIDS Society (IAS), 22-26 July 2024.

Parthasarathy G. (2025). Critical minerals for the Viksit Bharat@2047, Proceedings of the International Conference on Earth and Environment in the Anthropocene (ICEEA 2025), Central University of Karnataka, March 5-7, 2025

Pasha S.V., Vinay Kumar Dadhwal, B. Swarada and G.M. Pavithra (2024). Harnessing geospatial technology for Human Elephant conflict hotspots: Insights from e-parihara data from Karnataka forest department. In: *International conference on Human Elephant conflict management*. Bengaluru: Karnataka Forest Department, Govt. of Karnataka, 12 Aug 2024. pp. 147-164

Philipose D., A. Gopinath, P. Das, V. Varma and V.V. Binoy (2024). Personality traits and behavioural syndromes in the juvenile deccan mahseers (Tor khudree). *15th Student Conference on Conservation Science (SCCS)*, Bangalore, 21-24 October 2024.

Ranjan A., Tejal Kanitkar and T. Jayaraman (2024). Bridging equity gaps in integrated assessment models: Towards comprehensive and just energy benchmarks. *17th Integrated Assessment Modeling Consortium*, Yonsei University, Seoul, South Korea. 4-6 November 2024.



Sakia Binod K. and G. Parthasarathy (2024). Preserving history: Chemical and mineralogical insights into monument deteriorations In: *Proceedings of History of Science; Materials from Ancient and Medieval Periods*. Indian National Science Academy and Tezpur University Vol.1, pp.6

Sharma A and Anindya Sinha (2024). Impact of urbanisation on taxonomic and functional diversity of spiders in Guwahati, Assam, India (Conference Poster). *Indian Wildlife Ecology Conference 2024*, Bengaluru: National Centre for Biological Sciences, 4–16 June 2024.

Sharma A., Anindya Sinha, B. Deka, N. Sharma and S. Chakraborty (2024). Impact of urbanisation on taxonomic and functional diversity of spider assemblages in South Guwahati, Assam, India. *ATBC 2024: 60th Annual Meeting of The Association for Tropical Biology and Conservation*, Kigali, Rwanda, 14–18 July 2024.

Srinivasan Sharada (2024). Early finds of forged bronze and high-tin bronze from Tamil Nadu and India In: *Proceedings of the 2nd International Seminar on Recent Advances in Archaeological Investigations of South India*. Chennai: Roja Muthiah Library & Government of Tamil Nadu, pp.78-89.

Thejesh N., Tejal Kanitkar (2024). Optimal power dispatch with renewable energy integration using a high-resolution MILP model: A case study of Western India. 16th International Conference on Applied Energy (ICAE2024).

Zakhiya P.C., M. Chatterjee, K. Mukhopadhyay and Anindya Sinha (2024). Are species-typical traits a myth? Heterogeneity within and across allogrooming networks of adult female bonnet macaques in the wild. *European Conference in Behavioural Biology*, Zurich, Switzerland, 16–19 July 2024.

Zakhiya P.C., M. Chatterjee, K. Mukhopadhyay and Anindya Sinha (2024). Are species-typical traits a myth? Heterogeneity within and across allogrooming networks of adult female bonnet macaques Macaca radiata. Satellite on CRAB – Complexity Research in Animal Behaviour, CCS'24 Exeter: Conference on Complex Systems 2024, Exeter, UK, 2–6 September 2024.

NIAS PUBLICATIONS

Banerjee Debosree, Narendar Pani, Ishita Patil and Paul Thomas (2024). Inequality and intervention: Instrumentality of aggregation Vol.2 (NIAS/SSc/IHD/U/RR/06/2024). Report. NIAS, Bengaluru.

Beig Gufran, Jithin Jose and Shailesh Nayak (2025). Impact of EV-transition on air quality and public health (NIAS/NSE/EECP/R/PB/02/2025). Policy Brief. NIAS, Bengaluru.

Choithani Chetan (2025). Migration, urbanization and food security in the global south: evidence from urban India (NIAS/SSc/IHD/U/RR/02/2025). Report. NIAS, Bengaluru.

Choithani Chetan, Paul Thomas and Narendar Pani (2024). Inequality and intervention: The left behind in migration Vol.4 (NIAS/SSc/IHD/U/RR/08/2024). Report. NIAS, Bengaluru.

Jain Kshipra, Debosree Banerjee, Malavika Belavangala and Narendar Pani (2024). Inequality and intervention: Community, family and missing women Vol.5 (NIAS/SSc/IHD/U/RR/09/2024). Report. NIAS, Bengaluru.

Kamath Anant, Ajit Kumar Babu and Narendar Pani (2024). Inequality and intervention: Experience of technology Vol.3 (NIAS/SSc/IHD/U/RR/07/2024). Report. NIAS, Bengaluru.

Kannangara Nisar and Ka. Sa. Kalaiarasi (2024). Inequality and intervention: Autonomous adaptation to climate change Vol.6 (NIAS/SSc/IHD/U/RR/10/2024). Report. NIAS, Bengaluru.



Majumdar Rudrodip, Raja Ram Singh Yadav, A.V. Krishnan and R. Srikanth (2025). Technological assessment of select light water reactors to accelerate nuclear power expansion in India (NIAS/NSE/EECP/R/RR/01/2025). Report. NIAS, Bengaluru.

Majumdar Rudrodip, Raja Ram Singh Yadav, A.V. Krishnan and R. Srikanth (2024). Research report on technology assessment of select small and modular reactors (SMRs) to achieve net zero with energy security in India (NIAS/NSE/EECP/R/RR/14/2024). Report. NIAS, Bengaluru.

Nannewar Rakesh Gomaji, Tejal Kanitkar, R. Srikanth and Shailesh Nayak (2024). Beyond forecasts: Providing agrometeorological advisory services in India (NIAS/NSE/EECP/R/PB/01/2024). Policy Brief. NIAS, Bengaluru.

Pani Narendar (2024). Inequality and intervention: Executive summary (NIAS/SSc/IHD/U/RR/11/2024). Report. NIAS, Bengaluru.

Pani Narendar (2024). Inequality and intervention: The conceptual framework.Vol.1 (NIAS/SSc/IHD/U/RR/05/2024). Report. NIAS, Bengaluru.

Pani Narendar (2025). Fallows at a time of urbanisation (NIAS/SSc/IHD/R/PB/01/2025). Policy Brief. NIAS, Bengaluru.

RoyChowdhury Supriya (2025). Women workers in Karnataka's apparels export industry (NIAS/SSc/UMP/R/PB/03/2025). Policy Brief. NIAS, Bengaluru.

Srikanth R. (2024). Compendium of journal publications documenting the research conducted under a ministry of earth sciences research grant (NIAS/NSE/EECP/U/RR/12/2024). Report. NIAS, Bengaluru.

Srikanth R. (2024). Compendium of synopses of the PH.D dissertations completed at NIAS under a ministry of earth sciences research grant (NIAS/NSE/EECP/U/RR/13/2024). Report. NIAS, Bengaluru.

Srikanth R. (2024). Enhancing domestic coking coal availability to reduce the import of coking coal (NIAS/NSE/EECP/U/RR/01/2024). Report. NIAS, Bengaluru.

Srikanth R., A.V. Krishnan and Dizna James (2024). Economic, environmental, and climate impacts of FGDs in thermal power plants in India (NIAS/NSE/EECP/U/RR/15/2024). Report. NIAS, Bengaluru.

REPORTS

Beig Gufran, Jitin Jose, K. M. Harshitha, I. Behera, P. Mangaraj, U. Hussain, D. James, and R. Srikanth. (2024). Identifying emission hot spots and high-resolution emission inventory (200m) of particulate pollutants using drone technology in Bengaluru urban district (BUD), NIAS, Bangalore, EMPRI, Govt. of Karnataka, 2024.

Choithani Chetan (2024). Male circular migration, rural-urban and gender dynamics, and food security in India (MiFOOD Paper No.28). Report. Hungry Cities Partnership at the Balsillie School of International Affairs, Waterloo, Ontario, Canada.

Kanitkar Tejal and T. Jayaraman (2025). Climate justice and equitable futures. Policy Brief for the Heinrich Boll Stiftung and Third World Network, February 2025. https://www.boell.de/en/2025/02/06/climate-justice-and-equitable-futures

Majumdar Rudrodip and Rajeev Kumar (2024). NIAS-MECS Project on "An evidence-based approach to access the energy transition in clean cooking". Report. NIAS, Bengaluru.

Srinivasan Sharada (2024). Report on scientific analysis of metal objects, excavations at Pattaraiperumbudur, Government of Tamil Nadu, Department of Archaeology.



OUTREACH ARTICLES

Achar Raghu Ram and Biju Dharmapalan. Research scholars conference in health sciences and life sciences 2025: A catalyst for future researchers. *Science Reporter*, 62(4): 50-51, 2025.

Anandhan Padmashree and Anu Maria Joseph. Is France's influence in West Africa over?. The Hindu, 24 Jan 2025.

Behera Anshuman. Cracks in Nepal's democracy. ETV Bharat, 14 Mar 2025.

Behera Anshuman. The Endgame for the Maoists under the Narendra Modi government?. *ETV Bharat*, 18 Dec 2024.

Behera Anshuman. Ethnic violence in Manipur: The failure of state and society. ETV Bharat, 21 Sep 2024.

Behera Anshuman. Reasoning the political crisis in Bangladesh. ETV Bharat, 14 Aug 2024.

Beig Gufran. Delhi's air pollution crisis | lasting solutions for health and greenery. The Pioneer, 28 Oct 2024.

Beig Gufran. Why Delhi needs to shift to EVs. Indian Express, 04 Jan 2025.

Beig Gufran. Delhi can't qet clean air without crossing borders. Indian Express, 13 Mar 2025.

Beig Gufran. The La Nina and North India's pollution. Indian Express, 1 Oct 2024.

Beig Gufran. Is Delhi's AQI 500 or 1,500? The confusion is part of the problem. Indian Express, 20 Nov 2024.

Desiraju Gautam R. and M.K. Surappa. The Issue is about the 'quality' of India's publications. *The Hindu*, 27 March 2025.

Dharmapalan Biju and M. Hemalatha. The importance of passion preneurship in higher education. *The Hindu*, 14 Dec 2024.

Dharmapalan Biju and Auqib Hussain Parray. Kashmir morels: Rare heirloom crop that needs conservation. *Science Reporter*, 62(3): 56-57, 2024.

Dharmapalan Biju. Addressing misinformation about health supplements. The Pioneer, 15 Jun 2024.

Dharmapalan Biju. Artificial womb a revolutionary reproductive technology for next-gen humans. *Science Reporter,* 61(5):24-28. 01 May 2024.

Dharmapalan Biju. Balancing motivation and misuse in India's research landscape. The Pioneer, 05 Jul 2024.

Dharmapalan Biju. Basic science needs priority status within the ANRF. Daily Excelsior, 03 Aug 2024.

Dharmapalan Biju. Bioceramics technology translation: An Indian perspective. Science India, July 2024.

Dharmapalan Biju. Books vs e-Books a battle for focus in the digital age. Daily Excelsior, 28 Apr 2024.

Dharmapalan Biju. Breaking barriers: Building a future for women in science. The Pioneer, 13 Feb 2025.

Dharmapalan Biju. Budget priorities applied research but neglects basic science. The Pioneer, 1 Aug 2024.

Dharmapalan Biju. Citation manipulation is undermining research integrity. The Pioneer, 04 Sep 2024.



Dharmapalan Biju. Computational protein design and alpha fold's leap into the future. *Science Reporter* 61(12): 22-24, 2024.

Dharmapalan Biju. Crafting a responsive email: A game-changer in unlocking opportunities. *Daily Excelsior*, 16 Mar 2025.

Dharmapalan Biju. Crafting a standout statement of purpose for Doctoral Studies. Daily Excelsior, 10 Nov 2024

Dharmapalan Biju. Crafting a standout statement of purpose for doctoral studies. Sikkim Express, 13 Nov 2024.

Dharmapalan Biju. Crowdfunding can transform science research funding. The Pioneer, 03 Jan 2025.

Dharmapalan Biju. Declining PhD enrolments threaten the research in the country. The Pioneer, 28 Feb 2025.

Dharmapalan Biju. Declining trend in PhD enrolment hampering research ecosystem. The Statesman, 4 Mar 2025.

Dharmapalan Biju. Deconstructing the science behind the health benefits of dark chocolate. *The Hindu*, 29 Nov 2024.

Dharmapalan Biju. Deep ocean missions exploring the unexploited potential of oceans. *Daily Excelsior*, 04 Jul 2024.

Dharmapalan Biju. Diabetes care: Bridging modern medicine and holistic traditions. The Pioneer, 21 Nov 2024.

Dharmapalan Biju. Digital shield: Safeguarding children from the digital trap. The Pioneer, 08 Jan 2025.

Dharmapalan Biju. Diverse, climate-responsive design is key to net-zero goals. The Pioneer, 14 Nov 2024.

Dharmapalan Biju. Dr E. P. Madhava Bhattathiri (1928-2025), a scientist of simplicity and Nobel jury member. *Science India*, 19(106): 30-31, Mar 2025.

Dharmapalan Biju. Dr. Charusita Chakravarty (1964–2016): A scientific luminary and tireless supporter of women in STEM. *Science India*, 19(108): 34-36, 2025.

Dharmapalan Biju. Dr. M. S. Valiathan (1934-2024): A visionary who reformed the medical education and research. *Invention Intelligence*, 59(4): 60-64, 2024.

Dharmapalan Biju. DST-SCTIMST researchers develop cost-effective tuberculosis diagnostic kit. *The Statesman*, 22 May 2024.

Dharmapalan Biju. Elevate higher education with philosophy's power. The Pioneer, 12 Apr 2024.

Dharmapalan Biju. Empowering political parties to champion earth's preservation. Daily Excelsior, 09 May 2024.

Dharmapalan Biju. Empowering women, transforming science – A new culture in the offing. Sikkim Express, 15 Feb 2025.

Dharmapalan Biju. Empowering women, transforming science. Daily Excelsior, 25 Feb 2025.

Dharmapalan Biju. Enigma of copyright in the digital world. The Pioneer, 10 May 2024.

Dharmapalan Biju. Evidence emphasises irrevocable relationship between the gut and immunity. *The Hindu*. 15 Nov 2024.



Dharmapalan Biju. Exploring the abyss: Unraveling the mysteries and power of the deep ocean. *Science India*, 19(103)103: 42-45, 2024.

Dharmapalan Biju. Fostering innovation from schools to startups. The Pioneer, 15 May 2024.

Dharmapalan Biju. Fusion energy: The guest for unlimited power. EdPublica, 11 Jun 2024.

Dharmapalan Biju. Gandhi's philosophy in the age of AI. The Pioneer, 14 Oct 2024.

Dharmapalan Biju. High seas treaty: A crucial step for marine biodiversity protection. The Pioneer, 16 Jul 2024.

Dharmapalan Biju. Higher secondary science education needs urgent transformation in India. Sikkim Express, 31 Jan 2025.

Dharmapalan Biju. India's digital data protection act protects children. Daily Excelsior, 20 Jan 2025.

Dharmapalan Biju. India's expectations in science and technology for 2025. Daily Excelsior, 05 Jan 2025.

Dharmapalan Biju. Innovative and affordable indigenous tuberculosis diagnostic kit. *Science India* 19(98): 6-7, 2024.

Dharmapalan Biju. Is Delhi's AQI 500 or 1,500? The confusion is part of the problem. *The Indian Express*, 20 Nov 2024.

Dharmapalan Biju. Is it possible to restore the lost vigour of our planet?. The Pioneer, 04 June 2024.

Dharmapalan Biju. Is Teaching science in higher education in regional languages effective?. Sikkim Express, 30 Sep 2024.

Dharmapalan Biju. Is the internet rewriting our minds? technology reshaping the way we remember. *The Statesman*, 26 Feb 2025.

Dharmapalan Biju. Language chauvinism in S&T education. Daily Excelsior, 7 Oct 2024.

Dharmapalan Biju. Museums are pillars of culture and education. The Pioneer, 21 May 2024.

Dharmapalan Biju. Navigating digital challenges: Safeguarding children's social-emotional well-being in the digital age. *Science Reporter*, 61(11): 32-33, 2024.

Dharmapalan Biju. Neanderthals and modern humans: An ancient love story. The Statesman, 22 Jan 2025.

Dharmapalan Biju. Need to infuse entrepreneurship into school curricula. Daily Excelsior, 4 Jun 2024.

Dharmapalan Biju. NIRF Rankings: A catalyst for India's higher education transformation?". *The Statesman*, 17 Dec 2024

Dharmapalan Biju. Nobel Prize snub of Rosalind Lee sparks debate on fairness of the system. *The Pioneer,* 24 Oct 2024.

Dharmapalan Biju. One nation one subscription: A step towards bridging educational inequality. *Sikkim Express*, 28 Nov 2024.

Dharmapalan Biju. Ozone: A double-edged sword that needs attention for human survival. Sikkim Express, 22 Sep 2024.



Dharmapalan Biju. Ozone: The earth's protective shield but also a threat. The Pioneer, 19 Sep 2024.

Dharmapalan Biju. Protecting health through food safety. The Pioneer, 10 Jun 2024.

Dharmapalan Biju. Redefining teacher's role in today's generation. GCU World, Nov 2024.

Dharmapalan Biju. Revamping journalism education for the new age media. Sikkim Express, 11 Sep 2024.

Dharmapalan Biju. Revamping the English literature curriculum. The Pioneer, 13 Aug 2024.

Dharmapalan Biju. Reviving indigenous technologies for sustainable living. Science India, 19(97): 32-35, 2024.

Dharmapalan Biju. Science archives preserve our scientific legacy. The Pioneer, 28 May 2024.

Dharmapalan Biju. Shackled science. The Telegraph, 08 May 2024.

Dharmapalan Biju. Space foods-a triumph of human innovation. Science India, 19(99): 37-39, 2024.

Dharmapalan Biju. Starliner mission redefines space exploration. The Pioneer, 22 Mar 2025.

Dharmapalan Biju. Suppressing scientific studies is injurious to nation's health. The Pioneer, 7 Aug 2024.

Dharmapalan Biju. Teachers must meet the demands of future generation. Daily Excelsior, 05 Sep 2024.

Dharmapalan Biju. The erosion of local cultures and the rise of digital colonisation. The Pioneer, 13 Sep 2024.

Dharmapalan Biju. The Fallout of cancellation of competitive examinations. Daily Excelsior, 16 Jul 2024.

Dharmapalan Biju. The new age of quantum technology. The Pioneer, 18 Apr 2024.

Dharmapalan Biju. The perils of imparting higher education in local languages. The Pioneer, 25 Sep 2024.

Dharmapalan Biju. The promise of one nation one subscription. Daily Excelsior, 29 Nov 2024.

Dharmapalan Biju. The relevance of Gandhian thoughts in the digital world. Sikkim Express, 7 Nov 2024.

Dharmapalan Biju. The risk of monetising public education. The Pioneer, 28 Aug 2024.

Dharmapalan Biju. The Role of men in women's empowerment. Sikkim Express, 8 Mar 2025.

Dharmapalan Biju. The Unmatched multitasking skills of women. The Pioneer, 11 Mar 2025.

Dharmapalan Biju. The Visionary who propelled Indian science and technology. Science India, 16 Dec 2024.

Dharmapalan Biju. Transformative power of one nation one subscription. *Science India*, 19(106): 36-39, Mar 2025.

Dharmapalan Biju. Union budget 2024: A major thrust on agriculture. The Pioneer, 26 Jul 2024.

Dharmapalan Biju. Vigyan Ratna award for G Padmanaban A recognition of great scientific legacy. *Daily Excelsior*, 25 Aug 2024.

Dharmapalan Biju. Will AI make Lamarckian theory a reality?. The Pioneer, 18 Mar 2025.



Dharmapalan Biju. Zooming the biomolecular structure. Science Reporter, 61(8): 30-33, 2024.

Dharmapalan Biju. Harnessing human literacy in age of AI. Daily Excelsior, 29 Dec 2024.

Dharmapalan Biju. ISRO's space docking: A new era for India's space exploration. The Pioneer, 22 Jan 2025.

Dharmapalan Biju. The human touch in AI: Why we anthropomorphise machines. The Pioneer, 4 Feb 2025.

Dharmapalan Biju. Folklores as a medium of societal reform. Daily Excelsior, 14 Dec 2024.

Dharmapalan Biju. Tourism as an agent of peace and brotherhood. Sikkim Express, 7 Oct 2024.

Goswami Aranyak and Biju Dharmapalan. Ethical concerns. The Telegraph, 26 Mar 2025.

Gupta Navneeth Kumar and Biju Dharmapalan. Architect of India's nuclear programme and a visionary scientist. *Science India*, 10 Feb 2025.

Hemalatha M. and Biju Dharmapalan. Fuel their passions. The Hindu, 16 Dec 2024.

Hossain Kamrul. Linking the Arctic with the Third Pole. Shared Voices: The University of the Arctic Magazine 2024, 13-15.

Hossain Kamrul. The Revival of "America First"? Where does the Arctic stand in Trump's second term?. *Barents Observer*, 25 Nov 2024.

Jobel Akhil and Biju Dharmapalan. Need for forensic victim profiling and national database to combat human trafficking. *Sikkim Express*, 17 Mar 2025.

Jyothish M. S. and Biju Dharmapalan. Thity meter telescope-A step closer to solving the mystery of the universe. *Science India*, 19(107): 24-27, 2025.

Kamath Anant and Neethi P. Workers, not tech, should be the state's priority. The Hindu, 1 Apr 2024

Kanitkar Tejal and T. Jayaraman. Broken promises in a warming world. The Hindu, 30 Jan 2025.

Khanna Monty. China is well on the path towards a nuclear-powered aircraft carrier. *National Maritime Foundation*, 15 Jan 2025.

Khanna Monty. China's heavy lift ship fleet and their potential for use in combat. *National Maritime Foundation*, 30 Jan 2025.

Khanna Monty. China's Zubr class hovercrafts- An assessment. National Maritime Foundation, 22 Jan 2025.

Khanna Monty. GSI delivers China's fifth icebreaker in record time. National Maritime Foundation, 08 Jan 2025.

Khanna Monty. HDZH sets a new record for time taken to construct frigates. *National Maritime Foundation*, 01 Jan 2025.

Kharel A. and Kamrul Hossain. The Arctic intersection: climate change, indigenous rights, and environmental law. *New Spotlight*, 8 Sep 2024.

Kusala Rajendran and Rajendran C.P. How the 2004 Indian ocean quake transformed tsunami science. *The Hindu,* 26 Dec 2024.



Meghana Jyothinagaram and Biju Dharmapalan. From plough to platform: The digital evolution of farming. *Science Reporter*, 62(5): 24-28, 2025.

Mehajan Rajeev Kumar and Biju Dharmapalan. Bridging gaps for inclusive and global excellence in higher education. Sikkim Express, 18 Dec 2024.

Mehajan Rajeev Kumar and Biju Dharmapalan. Rebooting NIRF: Time for a rankings revolution?. *Daily Excelsior,* 19 Dec 2024.

Menon Sangeetha. How beauty in Hinduism is also identified with self and consciousness, in the special issue of Jusur: An international intercultural magazine, Special Issue on "Beauty between Science and Religion", Ed. Wael Farouq, Issue 3 September 2024, 51-53, Milan, Italy.

Menon Srikumar M. Monkey business at Aihole. Deccan Herald, 16 May 2024.

Menon Srikumar M. The Moriyas behind the megaliths. Deccan Hearld, 26 Dec 2024

Menon Srikumar M. How I discovered celestial geometry. Deccan Hearld, 9 Nov 2024

Mohan Varun. A Test of governance: India's struggle against environmental upheaval. South Asian Voices, 14 Feb 2025.

Pani Narendar. Banking on parivar to win in Karnataka. Hindustan Times, 10 Apr 2024.

Pani Narendar. Declining populations: falling representation. Hindustan Times, 31 Oct 2024.

Pani Narendar. Decoding the battle for Bengaluru seats. Hindustan Times, 25 Apr 2024.

Pani Narendar. Good democratic politics: Create jobs. The Times of India, 05 Jun 2024.

Pani Narendar. How Netas move land. The Times of India, 4 Nov 2024.

Pani Narendar. Is there such a thing as too much Hindutva? . Hindustan Times, 22 Apr 2024.

Pani Narendar. Karnataka budget: Is it a sustainable path?. The Hindu, 7 Mar 2025.

Pani Narendar. Note for FM: Save for India. The Times of India, 17 Jun 2024.

Pani Narendar. Policy making gains from coalition politics. Hindustan Times, 10 Jun 2024.

Pani Narendar. Political promises in an aspirational ethos. Hindustan Times, 27 May 2024.

Pani Narendar. Road to good jobs. The Times of India, 26 Dec 2024.

Pani Narendar. The political bleeding of Karnataka's economic strategy. Deccan Herald, 26 Sep 2024.

Pani Narendar. The working formula doesn't quite work. The Times of India, 24 Jul 2024.

Pani Narendar. Two Dalit narratives in Kharge heartland. Hindustan Times, 6 May 2024.

Pani Narendar. Where goes the Lingayat vote. The Times of India, 3 May 2024.

Panneerselvam Prakash. Enhancing Vietnam's maritime security and the role of unmanned maritime systems. *Pacific Forum*, 13 Dec 2024.



Panneerselvam Prakash. The QUAD should help Indonesia achieve underwater domain awareness. *ASPI Strategist*, 14 Jan 2025.

Panneerselvam Prakash. The Quad's coast guard cooperation: New dynamics in power politics. *The Diplomat,* 17 Oct 2024.

Patairiya Manoj Kumar. Indian R&D ecosystem: Fostering excellence and transforming nation. *Science India*, 10 Feb 2025.

Rajendran C.P and Mallika Bhanot. Ganga asks to be left alone. Frontline Magazine, 13 Jan 2025.

Rajendran C.P. Dam-building spree is a zero-sum game. The New Indian Express, 15 Jan 2025.

Rajendran C.P. Hydrogen as a fuel of the future- risks and possibilities. ETV Bharat, 08 May 2024.

Rajendran C.P. Indian environment Policy needs a fix, but the BJP's election manifesto does nothing. *The Wire*, 30 Apr 2024.

Rajendran C.P. Review of Arup K. Chatterjee's Adam's Bridge – Sacrality, Performance, and Heritage of an Ocean Marvel. *The Hindu (Sunday Edition)*, 14 June 2024.

Rajendran C.P. River interlinking, the fount of environmental disaster. The Hindu, 09 Jan 2025.

Rajendran C.P. The warming of the Indian Ocean – Are we closing on a tipping point?. ETV Bharat, 30 May 2024.

Rajendran C.P. A lesson from Taiwan in quake resilience. The Hindu, 23 Apr 2024.

Rajendran C.P. A Perilous highway to salvation in the Himalayas. The Hindu, 19 Oct 2024.

Rajendran C.P. Adopting Gadgil panel proposals will help in long term. The News Minute, 03 Aug 2024.

Rajendran C.P. and Bahata Ansumali Mukhopadhyay. Decoding the Indus script: Politics, progress, and puzzles. Frontline, 42(3). 4 Mar 2025.

Rajendran C.P. Blue carbon, carbon credit and trading: The bumpy road to net zero. ETV Bharat, 18 Feb 2025.

Rajendran C.P. Bridge the gap between rhetoric and action. Deccan Herald, 08 May 2024.

Rajendran C.P. Budget 2024-25: Bid to Operationalise ANRF could end up being a wasted effort. *Down to Earth*, 23 Jul 2024.

Rajendran C.P. Climate lessons from the societies past. *Mongabay*, 11 Feb 2025.

Rajendran C.P. Commentary on the trail of the Wayanad landslide. Mongabay, 09 Aug 2024.

Rajendran C.P. From waste to energy to pollution. The Hindu, 23 Dec 2024.

Rajendran C.P. Hints of the corporatization of science research in India. The Hindu, 14 Aug 2024.

Rajendran C.P. India's mounting garbage problem requires inventive solutions. ETV Bharat, 22 Jan 2025.

Rajendran C.P. Lessons to be learned from the Wayanad Landslide. Mathrubhumi, 08 Aug 2024.

Rajendran C.P. Moving towards an environment-friendly sustainable agriculture. ETV Bharat, 28 Jun 2024.



Rajendran C.P. Moving towards post-growth economics. Mongabay, 30 July 2024.

Rajendran C.P. Read the rocks to improve India's geological literacy. The Hindu, 27 Jun 2024.

Rajendran C.P. Space colonisation Vs Earth's liveability, what should be our priority?. The Wire, 05 Apr 2024.

Rajendran C.P. The American liberalism at a turning point. Mathrubhumi Daily, 22 Jul 2024.

Rajendran C.P. The Current global warming is geologically unprecedented. Mongabay, 25 Oct 2024.

Rajendran C.P. The Ganga pollution needs a reality check, drawing a line between faith and science. *ETV Bharat*, 1 Mar 2025.

Rajendran C.P. The Glacial lake outbursts: An emerging risk in the Himalayas. ETV Bharat, 04 Sep 2024.

Rajendran C.P. The Importance of geo-conservation and the need for legislation. ETV Bharat, 05 Oct 2024.

Rajendran C.P. The Ongoing climate summit in Baku - will it overcome the dampening political headwinds?. *ETV Bharat*, 13 Nov 2024.

Rajendran C.P. The Rise of artificial intelligence: Prospects and challenges. ETV Bharat, 20 Jul 2024.

Rajendran C.P. The Risk of a potential circulation change in the Atlantic adds to climate worries. *Mongabay*, 21 Nov 2024.

Rajendran C.P. The Yamuna in Delhi - The urgent need to restore a dying river. ETV Bharat, 23 Oct 2024.

Rajendran C.P. Unravelling the Hindutva playbook of social engineering. The Wire, 20 Aug 2024.

Rajendran C.P. Urgency, implications and India: A conversation with J. Srinivasan on climate change. *The Wire*, 15 Mar 2025.

Rajendran C.P. Waste-to-energy plants in Delhi: Red alert on a 'Green Solution". ETV Bharat Blog, 03 Dec 2024.

Rajendran C.P. Why is deep-sea mining not to be rushed through?. ETV Bharat, 07 Apr 2024.

RoyChowdhury Supriya. The Fate of the aspirational class. *Deccan Herald*, 24 May 2024. Srinivasan Sharada. Tamil Nadu's discoveries rewrite the iron age timeline and South India's past. *Frontline* 42(4): 10-20, 2025.

Vipula P. C. and Biju Dharmapalan. Revamping journalism education for the new age media. *Daily Excelsior*, 21 Sep 2024.





Name of the Committee	Chairperson	Members	
Faculty Committee	Director, NIAS	Prof D Suba Chandran Prof Sindhu Radhakrishna Prof Anindya Sinha Prof Sharada Srinivasan Prof R Srikanth Prof PM Soundar Rajan Prof Sangeetha Menon Prof Anitha Kurup Prof Nithin Nagaraj (<i>Convener</i>)	
Appointments Committee	Director, NIAS Prof Anindya Sinh Prof Sangeetha M Prof R Srikanth Prof Anitha Kurup Respective Progra Two Subject Exper		
Faculty Renewal/Promotion Committee	Director, NIAS	Prof Anitha Kurup Prof Anindya Sinha Prof Sangeetha Menon Prof R Srikanth Prof D Suba Chandran Two Subject Experts	
Committee to Oversee PhD Programme	Dr Anshuman Behera (Academic Head)	Dr VV Binoy Dr MB Rajani Dr Rudrodip Majumdar Dr Aleena Sebastian Ms AS Mary Stella (<i>Secretary</i>)	
Research Ethics Committee	Prof Sangeetha Menon	Dr Tejal Kanitkar Dr Prakash Panneerselvam Dr Chetan Choithani	
Institutional Academic Integrity Panel	Prof Anitha Kurup	Dr Chetan Choithani Asst. Library and Information Officer, NIAS Prof TA Abinandanan (External Member)	
Library and Publications Committee	y and Publications Prof Nithin Nagaraj Dr Jeebanlata		



Name of the Committee	Chairperson	Members
Grievance Redressal Committee	Prof Anindya Sinha	Dr Anant Kamath Dr Debosree Banerjee Dr Rudrodip Majumdar Head-Administration, NIAS (<i>Member Secretary</i>)
Internal Committee for Redressal of Complaints of Sexual Harassment of Women at NIAS (IC, NIAS)	Prof Sharada Srinivasan	Dr Anant Kamath Dr Aleena Sebastian Ms JN Sandhya One External Member
Committee to Oversee Website, Outreach and e-Newsletters	Prof D Suba Chandran	Prof N Ramani Dr Tejal Kanitkar Dr S Udayakumar Asst. Library and Information Officer (Convener)
Board of Studies	Director, NIAS	Academic Head, NIAS PhD Programme Prof Anitha Kurup Prof Nithin Nagraj Dr Tejal Kanitkar Dr MB Rajani





DETAILS OF MEMORANDUM OF UNDERSTANDING (MOU)

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Sl No.	MoU With	Areas of Co-operation	
1.	Sahapedia, New Delhi	Collaboration through various programmes in arts and humanities disciplines.	
2.	The Institute of Trans- Disciplinary Health Sciences and Technology	PhD Programme.	
3.	Kyoto University, Inuyama, Japan	To exchange scientific information in the fields of primatology, wildlife biology, and conservation. Both Institutes will promote the development of joint research projects in the fields of primatology, wildlife biology, and conservation.	
4.	National Institute of Science Technology and Development Studies (NISTADS)	To create value-added policy analysis and policy advocacy for applications of science and technology for sustainable and holistic development at national and global scale.	
5.	Southern Regional Load Despatch Centre, POSOCO	For knowledge sharing and capacity building in areas of mutual interest.	
6.	Manipal University	NIAS PhD Programme and collaborative research to address national challenges and priorities in areas including, but not limited to energy, healthcare, ecology, conservation of natural resources and education.	
7.	University of Liverpool	Undertake collaborative, interdisciplinary research activities – Heritage, Conflict resolution and other fields of mutual interest.	
8.	Defence Research and Development Organization	To support and strengthen collaboration and cooperation in identified topics pertaining to national security.	
9.	DIAT, Pune	Collaborative Research Programmes, Joint Events and Activities, Collaborative PhD Programme, Exchange of Research and Faculty and Collaborative Projects.	
10.	Geospatial Media and Communications	Collaborate in Conducting Research; Research Publications; Joint Proposals for Research Funding; Co-hosting of Conferences etc.	
11.	Karnataka Science and Technology Academy	Collaborate and Partner to Promote Science, Technology and Innovation for Societal Welfare.	
12.	Indian Council of World Affairs	To organize studies and webinars on agreed topics, mainly on the Indian neighborhood.	
13.	Indian Institute of Remote Sensing	To encourage academic collaboration between the faculty, researchers, and students.	
14.	Agastya International Foundation	To work together on programmes aimed at identifying and nurturing Highly Able/Gifted Children in India, optimally utilizing the experience, strengths and capabilities of both organizations for that goal.	



Sl No.	MoU With	Areas of Co-operation	
15.	Sanskriti Foundation	 Joint research activities such as explorations into Indic Mathematical Heritage, Indic Philosophical, Computational and Astronomical Knowledge Systems. Visits by and exchange of doctoral students and faculty members for research. Exchange of information including, but not limited to, research publications of faculty members. The Kannada work Siribhoovalaya shall be initially taken up for exploration of mathematical and informatics content. 	
16.	Kristu Jayanti College	To develop a collaborative academic partnership and to collaborate in th areas of Research Projects, Internship Programme, Exchange of Faculty/Senior Scholars, Joint Events and Workshops, and Academic Network on International Relations.	
17.	SRM Institute of Science and Technology, TN	Collaborative cooperation through: Research Programmes. Student Training Programme. Faculty Exchange Programme. Sharing of Instrumentation/Library Facility/Other Facilities. Organization of joint meetings and any other areas of mutual interests.	
18.	Pondicherry University	Collaboration on academic and research activities.	
19.	Maritime Research Centre, Pune	Collaborate in maritime research and studies, academic exchange and interaction to further scholarship, knowledge, and information in the field of underwater domain awareness.	
20.	Ghent University, Belgium	To promote international academic, cultural and scientific exchange.	
21.	Greater Bengaluru Parisara Foundation (GBPF)	To provide collaborative cooperation through: Collaborative Research Programmes and Training Programmes	
22.	National Atmospheric Research Laboratory (NARL)	Academic collaboration between the faculty, researchers, and students. To carryout collaborative research activities in the area of Atmosphere, weather and climate science and their applications in meteorology, air quality and numerical weather prediction.	
23.	NIAS and SATCOM Industry Association	To collaborate in specific research studies, policy analysis, training and capacity building and related activities, through mutual acceptance.	
24.	Tata Consultancy Limited	To promote cooperation in areas of mutual interest for the benefit of both parties	
25.	Alva's Institute of Engineering and Technology	To promote education and scholarly exchange; collaboration and technical interchange between the parties involved as educational partners	
26.	Environmental Management and Policy Research Institute, Bengaluru (EMPRI)	Sharing knowledge between the Institutes and establish a vibrant research collaboration, by undertaking joint activities in the broad areas of ecology, environmental management, climate change and sustainable development, including associated capacity building.	
27.	The Indian Maritime University	Cooperation through academic exchange, collaborative research projects, co-hosting of conference and other mutually beneficial activities in the areas of Policy Related Matters in Maritime and Allied Fields.	



Sl No.	MoU With	Areas of Co-operation	
28.	Institute of Wood Science and Technology, Bengaluru	To undertake joint research in the area of forest and climate change.	
29.	EXC 2176 "Understanding Written Artefacts" University of Hamburg, Germany	To provide additional opportunities to exchange ideas, information, skills and researchers, and to support cooperative activities in the field of research between the two countries.	
30.	Gujarat National Law University	To develop, promote and organize various academic, research, extension and training programmes for the stakeholders.	
31.	Loyola College (Autonomous), Chennai	Collaborative academic partnership between Department of History, Loyola College and STIR Programme, School of Conflict and Security Studies, NIAS.	
32.	Transcending Horizons Private Limited (Finovista)	Collaborative Research and Academic Exchange.	
33.	Pixel Softek Private Limited	For Collaborative Research and Development.	
34.	Hartwick College	To facilitate the development of technical and educational cooperation, to foster advancement in 40teaching and research and to enhance educational and cultural understanding between the parties.	
35.	Oriental Institute-Czech Academy of Sciences	Academic and research collaboration.	
36.	Pathfinder Foundation, Sri Lanka	To promote regional harmony and co-operation and to promote the study and discussion of global and regional problems in the economic, political educational, cultural and social fields and the dissemination o knowledge on international affairs.	
37.	National Centre for Polar and Ocean Research	Collaborate in specific research studies, policy analysis, training and capacity building and related activities, through mutual acceptance in the field of Polar and Ocean Research.	
38.	UL Research Centre, Kozhikode, Kerala	Collaborate in research and studies, academic exchange and interaction to further scholarship, knowledge and information in the field of martial arts and wellbeing.	
39.	NTPC Limited (Funding MoU)	Assist NTPC to develop strategies and action plans for growing the share of Nuclear Energy in its overall generation mix, thereby contributing to the National goals of reducing the emission intensity of India's GDP and the Long-Term Goal of achieving Net Zero Emissions by 2070.	
40.	Springer Nature	Institutional Partnership for Publishing NIAS Policy Briefs.	
41.	Capacity Building Commission, Government of India – Statement of Intent	Knowledge Partnership.	
42.	Shakti Sustainable Energy Foundation	Shakti and NIAS agree to cooperate in the fields of climate and clean energy, or any other inter-sectional area as may be mutually agreed, including research and studies, academic exchange, and interaction to build data and evidence, knowledge and information, communication and practice.	
43.	Nuclear Power Corporation of India Limited	Study to collect and analyze Preliminary Information for Selecting Greenfield Sites for Establishing Nuclear Power Plants in India.	



Sl No.	MoU With	Areas of Co-operation	
44.	Indian Institute of Technology Madras	Collaborate in research and studies, academic exchange and interaction to further scholarship, knowledge and information in the field of underwater domain awareness.	
45.	Open-Source Pharma Foundation	Joint collaboration focusing on areas such as medicinal discovery in areas of health of interest to India. Collaborative research in the area of (i) Modern methods for traditional medicines (ii) Drug and vaccine work related to neglected disease, pandemics, and other diseases of importance to India and the world (iii) Education, training, policy work, lectures, and public dissemination and engagement (iv) Other activities in the health sphere.	
46.	Centre for National Security Studies, MSR University of Applied Sciences	Collaborative research, exchange of faculty, internship programme, joint courses/workshops, etc.	
47.	Ritambhara Ashram – Kotagiri	Collaborate in creating, and establishing The Centre for Citta Vidya and Indian Psychology.	
48.	The Advanced Research Center for Humanities and Social Sciences (ARCHS), National Chung Hsing University, Taiwan	To collaborate and jointly carry out the project which focus on Studies of Geopolitics and Strategic Forecasts.	
49.	Smart Village Movement, Mumbai	To create a mutually beneficial partnership that will drive opportunities for knowledge exchange, research and collaboration on solutions and case studies to empower smart villages and sustainable and holistic rural development.	
50.	Kristu Jayanti College	To develop a collaborative academic partnership and to collaborate in the areas of Research Projects, Internship Programme, Exchange of Faculty/Senior Scholars, Joint Events and Workshops and Academic network on International Relations.	
51.	Centre for Air Power Studies (CAPS), New Delhi	To establish a constructive and collaborative relationship between Centre of Air Power Studies and National Institute of Advanced Studies, in areas of mutual interest.	
52.	Ashoka University	To record the mutual interest of the National Institute of Advanced Studies and Ashoka University in promoting and furthering academic links between the two institutions.	
53.	IIT Gandhinagar	To record the mutual interest of the National Institute of Advanced Studies and Indian Institute of Technology Gandhinagar in promoting and furthering academic links between the two institutions.	





REPORT ON COUNCIL OF MANAGEMENT AND SOCIETY

The 57th Meeting of the Council of Management of the National Institute of Advanced Studies (NIAS) was held at the NIAS Council Room in hybrid mode with online and in-person attendance on June 26, 2024.

The members of the Council, who attended the meeting, included Dr S Ramadorai, Nominee of Tata Trusts and Chairman of the Council; Dr Shailesh Nayak, Director, NIAS; Prof Govindan Rangarajan, Director, IISC; Prof Padma M Sarangapani, Nominee of Tata Trusts; Dr Nila Mohanan, Representative, Department of Personnel and Training, Government of India; Dr M Mohanty, Representative, Department of Science and Technology, Government of India; Prof N Balakrishnan, Dr AS Kiran Kumar, Ms Swati Ramanathan, all Nominees of the Council. Prof Sangeetha Menon attended the meeting as Secretary, NIAS Council of Management, and NIAS Society. Mr P Srinivasa Aithal, Head–Administration, NIAS, was present at the meeting as Invitee.

The agenda points discussed in the meeting were: i. status of achievements, finances, the budget proposal for 2024-25, and planned actions; ii. the attempts made, roadblocks and unwillingness of the Tata Trusts to support; iii. The sectors/initiatives where money is being spent, and NIAS expertise. Mr Raghu Ananthanarayanan of Ritambhara Ashram was invited to make a presentation on a Centre for Citta Vidyā and Indian Psychology.

The joint 58th Meeting of the Council of Management of the National Institute of Advanced Studies and the 34th Annual General Body Meeting of the NIAS Society were at the NIAS Council Room in hybrid mode with online and in-person attendance on December 11, 2024.

The members of the Council, who attended these meetings, comprised, Dr S Ramadorai, Nominee of Tata Trusts and Chairman of the Council and NIAS Society; Dr Shailesh Nayak, Director, NIAS; Mr Srikar MS, Higher Education Department, Government of Karnataka; Mr KM Chandrasekhar, Dr AS Kiran Kumar, Amb Nirupama Rao, Ms Swati Ramanathan, all Nominees of the Council. Prof Sangeetha Menon attended the meeting as Secretary, NIAS Council of Management, and NIAS Society. Mr P Srinivasa Aithal, Head–Administration, NIAS, was present at the meeting as Invitee.

Ratification of audited financial statements and presentation on the financial statements prepared by M/s Deloitte were presented at these meetings. The auditors were appointed. Status of finance, 2024-2025 and plan for sustaining NIAS was discussed.

The meetings concluded after extensive and in-depth deliberations on both, the progress that the Institute has made in the recent past and the paths that could be followed.

Prof Sangeetha MenonSecretary, NIAS Council of Management and NIAS Society





The 7th meeting of the NIAS Academic Council was held in NIAS on April 29, 2025. The members of the Academic Council who attended this meeting were: Amb DB Venkatesh Varma, Prof R Sukumar, Mr Harish Bhat, Prof N Jayaram, Prof Upinder Singh, Prof Anitha Kurup, Prof Sangeetha Menon, Prof PM Soundar Rajan, Prof Sindhu Radhakrishna, Prof Carol Upadhya, Prof Sharada Srinivasan, Prof D Suba Chandran, Prof R Srikanth and Prof Nithin Nagaraj. The meeting was chaired by Dr Shailesh Nayak, Director, NIAS.

NIAS faculty, Dr Anshuman Behera, Dr Srikumar Menon, Dr VV Binoy, Dr Prakash Panneerselvam, Dr Anant Kamath, and Dr Aleena Sebastian attended the meeting as Special Invitees. The Director briefed the Academic Council on the research activities of NIAS and ten NIAS faculty made presentations on their research. Each presentation was followed by a vigorous exchange of ideas on the larger goal of the research, and how it addresses the mission statement of NIAS. The meeting concluded with external members expressing their satisfaction at the different streams of research being carried out in the institute.

Prof Nithin NagarajConvener, Academic Council of NIAS



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