# NIAS NEWS





•	Research	Programmes	
---	----------	------------	--

- Publications
- Distinctions for NIAS Faculty
- Important Events
- Associates' Programmes
- Wednesday Discussion Meetings 29
- Upcoming Events
- The NIAS Faculty



5 7

12

12

27

54

57

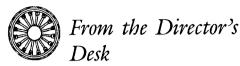


Editors' Note

As we move deeper into the eleventh year of publication of NIAS NEWS, we would like to reiterate our earnest attempts at providing you glimpses of the activities being carried out at the National Institute of Advanced Studies. We do hope that you enjoy reading it as much as we enjoy producing the newsletter. We would definitely like to make this attempt more interactive and so, please do write in to let us know if you have any suggestions and comments regarding its contents or format.

We would like to apologise for having inadvertently omitted the contributions of Prof Dilip Ahuja from our last issue. We also regret mis-spelling the name of the author of the play *Copenhagen* - Michael Frayn - that was performed at the Institute on 21 December 2001.

Anindya Sinha, Hamsa Kalyani and A Devaraju, Editors, April 2002



## **M**

Readers of NIAS News will know that the **In**stitute has been involved for more than three years now in a series of security dialogues with the Committee on International Security and Arms Control of the US National Academy of Sciences. This series is now supplemented by another dialogue, with a team organized through Asia Society, New York. The first dialogue in the new series took place during 4-6 March 2002 and was most useful in identifying specific questions and problems that need to be tackled from both sides.

On 8 March we started a new series of monthly seminars on the History of Ideas. I am gratified by the growing interest on historical issues not only at this Institute but also elsewhere in Bangalore in general. Apart from the history of nations, societies and civilizations, the history of ideas is in itself a fascinating subject. The ideas that inform and guide our thinking at any time have developed over the ages and have been subject to a continuing process of criticism and evolution. The subject of the new seminars will include ideas that are not only concerned with science and technology but all other areas of human knowledge and experience.

With the objective of bringing together people interested in such issues, NIAS and the Raman Research Institute have agreed to sponsor jointly a series of seminars that are held usually on the second Friday of every month. The first seminar in the series was given by Prof N Kumar, Director of the Raman Research Institute, on the theme of *Ideas of the atom.* The Seminar has evoked very wide interest and the inaugural session was very enthusiastically received. We may look forward to a series of seminars in the coming months on issues that will take us through the development of the many powerful ideas that have affected human thought and deed over the centuries.

#### R Narasimha

#### MEETING OF THE ACADEMIC COUNCIL OF NIAS

A meeting of the Academic Council of NIAS was held on March 22. It was attended by Prof Roddam Narasimha, Chairman, Mr A Madhavan, Prof O Siddiqi, Prof B V Sreekantan, Prof Dilip Ahuja, Prof S Rajagopal and Maj Gen M K Paul (Retd), Secretary. Members of the faculty who were specially invited to attend this meeting included Prof R L Kapur, Prof Prabhakar Vaidya, Dr N Shantha Mohan, Dr A R Vasavi, Dr H K Anasuya Devi, Dr P K Shetty and Dr Anindya Sinha.

## MEETING OF THE COUNCIL OF MANAGEMENT OF NIAS

The twenty-fourth meeting of the Council of Management and the twelfth Annual General Meeting (AGM) of the Society of NIAS were held on March 29 at the Institute.

The meeting was attended by Prof M S Swaminathan, Chairman, Prof Roddam Narasimha, Mr Ratan N Tata, Mr R M Lala, Mr Xerxes Desai, Maj Gen M K Paul (Retd) and Prof B V Sreekantan (AGM).

4



The principal areas of research that faculty members of the Institute are currently involved in include consciousness studies, conservation biology, energy policy and renewable energy, environmental toxicology, epigraphy, fluid dynamics and atmospheric sciences, gender studies, history and philosophy of science, international and strategic studies, mathematical modelling in non-traditional areas, primate behaviour, communication and cognition, science and society, science and technology policy, sociology and social anthropology, and theory of numbers.

More specifically, the **Epigraphy Unit** has just initiated a project entitled Knowledgebased Processing of Epigraphy Texts (Phase II) that will be funded under the ISRO-RESPOND project by ISRO, Bangalore, for a period of three years. During the first year of the project, the Unit will be engaged in extending the Phase I programme for recognition of characters at the word level using soft computing techniques. Image to text conversion would help in removing ambiguities during the generation of correct characters within words.

The **Gender Studies Unit** has completed the UNIFEM Project on developing a Resource Directory on Violence Against Women and an English as well as a Kannada directory titled "A Resource Directory to Counter Violence Against Women in Karnataka" has been published. This was a six-month project that covered 13 districts of Karnataka, selected on the basis of certain criteria including the Human Development Indicator, the Gender Development Indicator, and the geographical location, chosen to provide a representative picture of the state of Karnataka.

The directory includes information on nongovernment organisations that provide supportive services to violence victims including legal counseling, legal aid. shelter, as well as training to rehabilitate the women to get on with their lives. The directory also carries information about the location of police stations so that women in distress could access assistance. This information, it was felt, would serve to involve the enforcement agencies themselves as partners in efforts to check crimes against women. As protectors of the law who would ensure that those offended receive redress, the role of such agencies in creating and building a safe environment for women is crucial. There is also a section on common laws relating to women, which is useful for those who are working with women as well as for the women themselves to be equipped with some basic legal information. The directory also includes some examples of 'Best Practices', experiences that could provide hope to people regarding solutions and remedies both with the help of the police and through community initiatives.

The directory has received good media coverage and there have been several requests for copies from various individuals and organisations involved in the welfare of women.

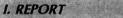
The **Philosophy of Science Unit** has recently initiated a research programme that will investigate the behavioural ecology of four macaque species in north-eastern India that have not been studied earlier, to devise conservation strategies for their endangered populations. It is also envisaged that local people – students, teachers, researchers and conservationists – in the habitat states of these primates will be trained in some basic methodologies to enable them to monitor specific populations, identified as threatened, and implement appropriate management strategies for their conservation.



A preliminary survey of Assamese macaque populations, one of the target species, was conducted in the Goalpara district of Assam in December 2001; several links were established with concerned individuals and organisations in Guwahati during this field trip. A more extensive survey for all the four species of macaques in upper Assam will be conducted during April-May 2002.



#### NIAS PUBLICATIONS



R1-2002 From shelves to digital media: On digital archiving and publication Sangeetha Menon Philosophy of Science Unit

#### II. SPECIAL PUBLICATIONS

- 1-2002 Bhedbhav aur abhaav: Garibo mein buniyadi shiksha (Hindi version of the Report: Discrimination and Deprivation:Education among the Poor in Jaipur) Local Education Report – Jaipur, Rajasthan
- 2-2002 Urban poverty and basic education deprivation Local Education Report – Bangalore, Karnataka

3-2002	Support services to counter
	'violence against women'in
	Karnataka: A resource
	directory
	Gender Studies Unit

- 4-2002 Karnatakadhalli mahilayara melina daurjanya, himsachara edurisalu labhyaviruva neravu sevagalu: Sampanmula margasuchi (Kannada version of the Resource Directory) *Gender Studies Unit*
- 5-2002 Marginalised communities and dysfunctional schools Local Education Report – Khategaon, Madhya Pradesh
- 6-2002 New hope in the hills: The demand for quality education Local Education Report – Jaunpur, Uttarakhand

#### PAPERS

Anitha, B K and Gurumurthy, A. 2001. Being true to feminism: The methodology of the Status of Rural Women in Karnataka. In: *Building Women's Capacities – Interventions in Gender Transformation* (ed. R K Murthy), Sage Publications, New Delhi, pp 229-251

Anasuya Devi, H K. 2002. Automated recognition of ancient Indian scripts. In: Proceedings of the National Workshop on Computer Vision, Graphics and Image Processing WVGIP 2002, Madurai, pp 216-219

**Madhusudan, M D** and Karanth, K U. 2002. Local hunting and the conservation of large mammals in India. *Ambio* 31: 49-54

**Menon, S.** 2001. Beside the 'intentor' and the 'integrator': Looking at two 'faces' of consciousness. In: *Consciousness and its Transformations: Proceedings of the Second International Conference on Integral Psychology* (ed. M Cornelissen), Sri Aurobindo International Centre of Education, Pondicherry, pp 295-306

**Menon, S.** 2001. Binding experiences: Looking at the contributions of Adi Shankaracharya, Tuncettu Ezuttacchan and Sri Narayana Guru in the context of recent discussions on consciousness studies. *Psychology in India – Past, Present and Future: Abstracts of the 12th Annual Conference of the National Academy of Psychology*, Kollam, p 104

The full text of this paper can be read at *www.infinityfoundation.com/mandala/i\_pr/i\_pr\_kerala\_frameset.htm* 

**Menon, S.** 2001. Binding experiences for a first-person approach: Looking at Indian ways of thinking (*Darsana*) and acting (*Natya*) in the context of current discussions on consciousness. Abstracts of the International Conference on Mind and Consciousness: Various Approaches, Kharagpur, p 16

The full text of this paper can be read at www.infinityfoundation.com/mandala/i\_pr/ i\_pr\_menon\_paper\_frameset.htm

Narasimha, R. 2001. Connecting up the North East: The untapped power of IT and aviation. *Indian Aviation* 16: 7-13

Narasimha, R. 2002. Satish Dhawan. *Current Science* 82: 222-225

Narasimhan, M G. 2001. Controversy in science. Journal of Biosciences 26: 299-304

**Ramesh, A**. 2002. Attitude towards widows in Karnataka. In: *Living Death – Trauma of* 

Widowhood in India (ed. V Mohini Giri), Gyan Publishing House, New Delhi

Vasanthi, A, Jiju, K, Ullal, G R, Sharma, R, Medha, A J and **Sinha, A**. 2001. Effects of repeated transcranial electroconvulsive shock seizures on the development of kindling. *Indian Journal of Physiology and Pharmacology* 45 (Supplement): 125. Abstract at the Forty-seventh Annual National Conference of the Association of Physiologists and Pharmacologists of India, Pune, December 2001

#### ARTICLES

**Devaraju, A**. Sketch of a writer: A life story of the late Dr G P Rajarathnam. *The Hindu,* March 8

REPORTS

Ahuja, D. Draft of the Program Status and Direction Review for Fiscal Year 2001, submitted to the Global Environment Facility, November 2001

#### DOCTORAL PROGRAMME IN NIAS

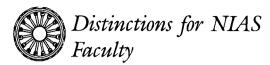
NIAS is a unique institution that conducts advanced research in multidisciplinary areas that bridge the gap between the natural sciences, technology and the social sciences. Complementing its research programmes, NIAS also offers courses in different areas of research, development and policy for different groups of professionals including teachers, bureaucrats, and executives.

One constraint that NIAS has functioned under so far has been the lack of a doctoral programme whereby young students are trained in the research areas that the Institute has traditionally been interested in. There is, however, an urgent need for such a programme for two principal reasons. First, the unique multidisciplinary academic culture that NIAS has so carefully been building up over the past years has to be nurtured and not allowed to dissipate with the passage of time. This would require that young, talented, and committed students are identified and absorbed into the organisation — they would then serve as the torchbearers of the future. Second, much of the research being conducted in the Institute, being of an interdisciplinary nature, requires cooperation between a number of specialists. Large groups such as these would definitely benefit from young researchers in different disciplines who can actively contribute to the progress of the group in their respective areas of expertise.

It must also be noted that there has been, in recent times, increasing awareness and interest in issues relating to the interfaces between the natural sciences, technology and the social sciences among young Indian graduate students. Many of them, in fact, are becoming increasingly attracted to pursuing a research career in these interdisciplinary areas. Very few opportunities, however, exist for such students, who have dared to think differently, to pursue a career of their choice within the country. NIAS has thus begun a doctoral programme in collaboration with the Manipal Academy of Higher Education (MAHE), Manipal, an innovative leader among institutions imparting higher education in the basic and applied sciences in the country. This programme specifically involves the awarding of doctoral degrees by MAHE to students interested in pursuing independent research in the areas that NIAS specialises in. For more information, please contact Anindya Sinha (asinha@nias.iisc.ernet.in).

Anindya Sinha

11



#### Arvind Kumar

Invited to be a Visiting Fellow by the Cooperative Monitoring Center (CMC), Sandia National Laboratories, Albuquerque, New Mexico, USA, to conduct research on ballistic missile monitoring in Southern Asia at the CMC during the period June to September 2002

#### M G Narasimhan

Nominated a member of the Subject Expert Committee of the Indira Gandhi National Open University, New Delhi



Complementing its research programmes, NIAS organises a variety of seminars, workshops, and academic courses each year. Some of the important events that were organised during the period from January to March 2002 are included:

## SIXTEENTH NIAS COURSE FOR SENIOR EXECUTIVES

۰.

#### January 7-19

The theme of the sixteenth NIAS Course for senior executives, held in early January, was Managing India's Diversity. There were thirteen participants representing organisations such as TISCO, DRDO, Syndicate Bank, DST, CSIR, IAS, IFS, Navy, ISRO, and HAL. The course particularly dealt with the complex manifestations of diversity in our country in fields ranging from economics to psychology. The topics for the course were chosen to represent this diversity and methods for effectively handling it. Along with the regular lectures there were also special evening lectures. There was also a panel discussion on Social Capital. A visit was arranged to Nrityagram, where the participants were introduced to different forms of Indian dance.

The early morning yoga sessions were highly appreciated by the participants and many have promised to continue it even after they go back. The self-introduction sessions of the participants were also very informative. There were three projects this year: Challenges for R&D in government and private sectors, managing organisations and creating leadership, and managing diversity: case studies. The projects were uniformly of high quality. There was also a croquet tournament; the teams of two persons each were composed of one NIAS member and one participant. The winners of this year's tournament were G Natarajan (ADE) and Pasha (NIAS).

The course was inaugurated by Mr B K Bhattacharya, former Chief Secretary, Government of Karnataka. The valedictory was given by Mr N N Vohra, Director, IIC, New Delhi. The participants found the course not only useful but also highly stimulating. The full programme of the course is given below.

- 1. Mr B K Bhattacharya: Inaugural Address
- 2. Kota Harinarayana: Lessons from the LCA Programme
- 3. M Govinda Rao: Macroeconomic Management of the Indian Economy





- 4. Narendar Pani: Diversity of Business Practices
- 5. M R Rao: Management Paradigms in a Globalized Environment
- 6. G Mohan Gopal: Diversity and the Indian Constitution
- 7. B V Sreekantan: Many Dimensions of Consciousness Studies
- 8. Raja Ramanna: Parliamentary Democracy
- 9. Shantha Mohan: Gender and Diversity
- 10. Valerian Rodrigues: Dalits and the Indian State
- 11. Nrityagram: Lecture demonstration on Odissi dance
- 12. Madhav Gadgil: Peopling of India
- 13. D M Nanjundappa: Planning for Agricultural Development and Finance
- 14. Panel Discussion: Social Capital Panelists: Ravi Eipe, P C Nayak, K Gopakumar and Peter Miovic
- 15. R Narasimha: Is a Scientific Revolution Possible in India?
- 16. F C Kohli: The Interface Between Industry and Society
- 17. Vijay Chandru: The Digital Divide
- 18. Senake Bandaranayake: Pre-modern Urbanism in Asia
- 19. U R Rao: Public Broadcasting in India
- 20. Saeed Naqvi: Media and Diversity

21. A R Vasavi: Agri-cultures: From Diversities to Homogeneity?



- 22. B Raman: Security Environment in South Asia
- 23. S Rajagopal: India's Nuclear Policy
- 24. Aditi Upadhya: Lecture Demonstration of Hindustani Classical Music
- 25. S F Rodriguez: Managing Diversity in the Indian Defence Services
- 26. Rajeev Bhargava: Multiculturalism and Secularism
- 27. R L Kapur : The Mind of a Terrorist
- 28. S Settar: The Contested Statement: Why History Becomes Controversial?
- 29. Mahesh Dattani: From Life to Page; From Page to Stage
- 30. Dilip Ahuja: International Responses to the Threat of Global Climate Change
- 31. Sundar Sarukkai: The Meaning of Diversity
- 32. N N Vohra: Valedictory Address

#### Sundar Sarukkai

#### CONSULTATIVE MEETING ON PANCHAYAT RAJ INSTITUTIONS

#### January 20

This consultative meeting was organised at NIAS by the Gender Studies Unit to evolve strategies for good governance in the Panchayat Raj institutions. The presidents and members of the Zilla, Taluk and Gram

panchayats from most of the districts in the State participated in the discussions. Representatives were also present from various NGOs as well as academic and research institutions. The consultation began with Prof Roddam Narasimha, Director, NIAS making the introductory remarks. The sessions were chaired by Dr K S Krishnaswamy and Prof Abdul Aziz. The outcome of the discussion was drafted into a memorandum and sent for feedback to all the districts, particularly to those who were unable to participate in the consultation. It was proposed that the finalised memorandum will be submitted to Mr M Y Ghorpade, the Honourable Minister for Rural Development and Panchayat Raj, Government of Karnataka.

#### N Shantha Mohan

## COLLOQUIUM ON SCHOOLING AND CITIZENSHIP

#### January 24-25

This colloquium, attended by scholars across the country, was organised to mark the final stage of the field research on elementary education conducted by the Sociology and Social Anthropology Unit at NIAS and to bring together some of the research partners and other individuals and organisations interested in and working on issues related to elementary education. By focusing on 'Schooling and Citizenship' the colloquium hoped to indicate the social, political and economic implications of elementary education deprivation and to call attention to the range of issues that emanate from an education system which is built on the contours of the social and economic hierarchies of the nation.

Fifteen papers were presented at the colloquium. In her introduction, A R Vasavi pointed out that to link issues of citizenship to education is not to focus only on the teaching of the rights and responsibilities of individuals and groups to the nation or to instill notions of nationalism in children. Rather, the idea of citizenship is to emphasise the importance of enabling both the practitioners and recipients of elementary education to critically reflect on a range of received ideas and values and to engage in activities that could enhance the civic and democratic bases of Society and the Nation. Inaugurating the colloquium, the Director of NIAS, R Narasimha, called for the need for the State to play a stronger and proactive role in ensuring education for all.

The first two sessions on the first day focused on identifying the economic, social and organisational bases of education deprivation. J B G Tilak noted the programmatic basis of the development of education and called attention to the interlinks between poverty and education deprivation. He concluded by noting the need for the State to continue to support elementary education including the range of incentive programmes. Vasavi presented a broad overview of the findings of the study conducted in six different states in India. She noted the extent to which elementary education deprivation continues to be the result of a range of social characteristics of the society and the bureaucracy within which elementary education institutions are located. The factors she identified were that of the bureaucracy's acceptance and legitimization of poverty, the impact of the teachers' notion of differential capabilities of children owing to their backgrounds and hence their construction of the educability of these children, and a range of household related

factors as being responsible for reproducing education deprivation.

Padma Sarangapani spoke about her recent field research among the Baiga in Chhatisgarh and indicated the ways in which the Baiga's constructions of knowledge and the patterns by which knowledge was transmitted were different from that of the formal learning patterns of schools. Sarada Balagopalan provided a broad overview of the new contexts and ideas in which the right to education is being articulated in the international arena and in the specific context of providing basic education to street children in Kolkata. In the session on Schooling and Class, three speakers addressed issues related to the orientation and to the ways in which schooling was organised in an urban middle class school and among two alternative schools, one for the rural poor and one for the urban elite. Jane Sahi detailed her own reflections on the problems and potential of running an alternative school in a rural area. She noted the parameters by which the new private convent schools had become models of education. Shalini Punjabi provided details of the ways in which a middle class school attempted to reorient itself to becoming a higher ranked school and to the way in which its teachers and children were treated. Geetha Narayanan drew on a range of theories that focused on ideas of democracy and schooling and indicated how she had sought to democratise the functioning and orientation of a school for the elite.

On the second day, the first session saw Malavika Kapur draw on her recent research among Adivasi or tribal children and indicate the ways in which the children's creativity and skills were enhanced by providing children-based

learning opportunities. R N Syag from Eklavya, Madhya Pradesh, drew on his experiences in engendering schooling for the poor and indicated the range of problems, especially that of the inability of the bureaucracy to deliver education to the poor. The session on civics education consisted of talks by three people who spoke about the problems associated with civics textbooks and the teaching of civics to children. Anjali Noronha drew on her observations of developing social science textbooks for Madhya Pradesh and indicated the challenges of disseminating ideas of democracy and rights within a hierarchical society. Manish Jain provided a historical overview of the ways in which civics teaching, and hence the conceptions and the dissemination of the idea of citizenship, were contoured by dominant groups. Pointing to the limitations of such conceptions he indicated the range of exclusions that were inbuilt into such perspectives. Alex George drew on his recent experiences of reviewing civics textbooks and indicated, through the ways in which children perceive the Government or 'sarkar', the gap between the textbooks' representation of the idealised world of politics and civics and that of the real world.

The final two sessions attempted to provide some overviews of philosophies of education and the new initiatives to enhance mass or public education. Lakshmi Rameshwar Rao spoke about the importance of J Krishnamurthy's ideas on education to establishing a democratic, non-authoritarian schooling system by which education could enable people to see the 'significance of life as a whole'. S P Udayakumar called for a review of the new peace studies and highlighted the importance of focusing on the agrarian metaphors so as to develop an education



system that could challenge the range of structural violence and provide for the wellbeing of all. Jaspreet, from the organization MAYA, showed a short film on her organisation's work in establishing education discussion groups in Karnataka and indicated how people's involvement in *school administration and management had* helped resolve several issues. Finally, C V Madhukar from the Azim Premji Foundation highlighted the ways in which public – private initiatives could help engender broad-based support for mass education.

At the concluding plenary session, the discussion focused on three questions or issues. First, how can research or such discussions be utilised to enhance actual programmes for mass elementary education? Second, how can these deliberations and ideas be disseminated to a wider audience? Third, could an e-group be formed among the participants so that the discussion on schooling and citizenship could be continued? It was indicated that many members of the colloquium were involved in programmes and policies to enhance elementary education. In addition, the recent interlinks and partnerships between academics, NGOs and policy makers were indicated as another way in which such colloquia helped address problems of education deprivation. An egroup was formed with all the participants, speakers and interested members from the audience, as members.

Funds for organising the conference were provided by the Canadian International Development Agency of the Canadian High Commission, New Delhi and the National Institute of Advanced Studies, Bangalore.

A R Vasavi

#### WORKSHOP ON UNDERSTANDING SCIENCE FOR COLLEGE TEACHERS AND STUDENTS



#### February 1

As its first activity, the Science and Society Unit has decided to start a course for college students aimed at inculcating an enlightened perception of the nature of scientific knowledge and thereby enabling them to appreciate better the complex relationship between science and society. Before launching the course, a one-day workshop was conducted in NIAS, in which 60 students and teachers from various colleges in Bangalore were introduced to some preliminary talks on the history, philosophy, psychology and sociology of science. Prof R Narasimha talked about the value of studying history and philosophy of science for understanding the differential nature of growth of scientific knowledge in different cultures like those of Ancient China, India and Greece. Prof R L Kapur, the Head of the Unit, dealt with the Psychosocial Aspects of Scientific Creativity, especially in the Indian context. Dr M G Narasimhan and Dr Sunder Sarukkai explained the different aspects of History and Philosophy of Science. Each talk was followed by enthusiastic discussion by the participants and in the light of their comments (from both teachers and students) a two-week course was planned.

#### **R** L Kapur

## SEMINAR ON SUSTAINING RURAL LIVELIHOODS

#### February 5

The Sociology and Social Anthropology Unit, in collaboration with the GREEN Foundation, Bangalore, organised a one-day seminar on Sustaining Rural Livelihoods at NIAS on Februrary 5. The objectives of the seminar were to generate discussions on the current issues linked to the declining conditions of rural livelihoods in the nation. Speakers from different institutions and academic backgrounds identified a range of problems such as the problem in implementing the new intellectual property rights, the need to redefine the national food policies so as to ensure national food security, the threat posed by the new transgenic modified organisms and plants, and the need for new forms of institutions and organisations to safeguard the rights of cultivators and workers.

#### A R Vasavi

#### RELEASE OF THE RESOURCE DIRECTORY ON SUPPORT SERVICES TO COUNTER VIOLENCE AGAINST WOMEN

#### February 20

A resource directory on support services to counter 'violence against women' in thirteen districts of Karnataka has been compiled with the support of the United Nations Development Fund for Women (UNIFEM). The directory, published both in English and Kannada, was released by Smt Teresa Bhattacharya, Chief Secretary, Government of Karnataka, on February 20, in the JRD Tata Auditorium, NIAS. Prof Roddam Narasimha, Director, NIAS welcomed the gathering and Ms Asha Ramesh of the Gender Studies Unit presented the summary and purpose of the directory. The programme was attended by representatives from the state government, NGOs, enforcement agency, research organisations, activists, and the media.

#### N Shanta Mohan

#### MEETING ON A POSSIBLE INDO-US COLLABORATION IN COOPERATIVE MONITORING



#### February 22

Mr Frederick Luetters of the Cooperative Monitoring Center (CMC), Sandia National Laboratory, USA, visited NIAS and attended two rounds of meetings organised by the International and Strategic Studies Unit. Eminent scientists of various national laboratories were the invitees in the forenoon session, the main objective of which was to identify some of the areas related to the interests of CMC on which India and the US can work together. Prof Roddam Narasimha, Director of NIAS, moderated and initiated the dialogue with Mr Frederick Luetters. There was a consensus in the group that the cooperative monitoring arrangements cannot function in the existing milieu across the India-Pakistan border. Hence, the role of CMC in the context of India's unilateral monitoring across these borders was also highlighted. The need to highlight and explore certain non-controversial areas was also pointed out during the discussion.

In the afternoon session, Mr Luetters gave a comprehensive overview of the CMC's role in cooperative monitoring concepts, projects and technologies, and also discussed some of its achievements, particularly in countries where such technologies have played an important role. It was also highlighted that the CMC assists political and technical experts from around the world to acquire the technology-based tools they need to assess, design, analyse and implement nonproliferation, arms control and other cooperative security measures. The afternoon session was an open session that finally ended with extensive discussions.

#### Arvind Kumar

#### DISCUSSION MEETING ON PROJECTS FOR THE GLOBAL ENVIRONMENT FACILITY

#### February 28

This day-long Retreat in NIAS was organised to kick-off discussions for developing a national strategy to develop projects for submission to the Global Environment Facility. The Retreat was attended by Rajeev Kher, S K Joshi, S K Agrawal, David Kothamasi and Saroj from the Ministry of Environment and Forests, P C Maithani from the Ministry of Non-Conventional Energy Sources (MNES), Venkata Ramana from UNDP-GEF, Ruma Tavorath of the World Bank and Madhav Gadgil, N H Ravindranath, P R Shukla, Shekhar Singh and Dilip Ahuja from the Expert Panel set up by MOEF.

The participants emphasised that no meaningful strategy can be developed without first understanding the problems with the current portfolio. Several problems were identified. The portfolio has stopped growing and there is a reluctance to prepare projects for GEF financing. Part of the problem lies in the inordinate delays in processing of projects and prolonged interministerial consultations for getting sectoral ministries on board (with the exception of MNES). There is a lack of accountability and a lack of mainstreaming of GEF projects within the GOI budgetary systems. Thus, a lack of ownership of projects has occurred and consequently the implementation of current projects has been poor.

The strategy therefore has to be multifaceted (that is, it cannot have a single objective). It must do both – address identified problems and exploit emerging opportunities. It must also be consistent with what is developed in different related ongoing activities (for example, the National Biodiversity Strategy and Action Plan).



There was a consensus that national interest must always be served by GEF projects. Long-term focus should be on a programmatic approach (that includes technical assistance) rather than a projectby-project approach. Similarly we should streamline development of national projects first before venturing to take on the additional complexities of regional projects.

It was clearly recognized that GEF cannot meet all or even a significant portion of the total financing requirements for sustainable development. It must therefore be used as a strategic tool (for example, to green projects of other ministries). It should also be possible to target financing for furthering innovation and technical capacities. Although there is a great deal of competence in the country, it is not as widespread as it should be. The strategy should target the improving national technical capacities; and concentrate on organising, nurturing, and marketing of intellectual competence and services (for example, in project design, monitoring, and evaluation).

#### Dilip Ahuja

#### FIRST NIAS-ASIA SOCIETY DIALOGUE

#### March 4-6

During the First NIAS-Asia Society Dialogue, hosted by NIAS in March, several strategic issues were discussed. These included confidence building measures, cooperation in advanced technologies, best practices and co-operation in physical protection.

#### S Rajagopal

#### RELEASE OF POSTERS IN THE ADVOCACY PROJECT ON 'VIOLENCE AGAINST WOMEN'

#### March 9

The communities of Bagalkot and Koppal districts of Karnataka State have conceptualised 'violence against women' in the rather specific forms of the devadasi and child marriage practice respectively. The NGO partner of the Gender Studies Unit in these two districts is Mahila Samakhya, Karnataka. Several posters, designed on the above themes, as part of the advocacy project on 'violence against women', were released by the sangha women, on March 9, in the valedictory function of the Mahila Samakhya Sammelana, "SAKHI" at the Manjula Mantap, Bangalore. The programme was attended by around 600 sangha women representing seven districts of Karnataka, various NGOs, the police and the media. The dignitaries who attended this function included Smt Mottamma, the Honourable Minister for Women and Child Development, Government of Karnataka, Smt Guramma Siddareddy, Chairperson of the Task Force for Women's Empowerment and Smt Shoba Nambisan, Secretary, Women and Child Development.

#### N Shantha Mohan





Ļ

The Institute maintains a strong outreach with its Associates Programme, organised by **PK Shetty**. The Associates of the Institute include prominent personalities from widely different backgrounds in the media, arts, policy-making and academia. Associates are invited to a monthly evening lecture series and other important events, and constitute a strong base of ongoing outside support and interactions for the Institute.

The Associates' Programmes during the period from January to March 2002 included the following events:

January 7	Lessons from the LCA Programme
	<i>Kota Harinarayana</i> Distinguished Scientist Aeronautical Development Agency Bangalore
January 9	Parliamentary democracy <i>Raja Ramanna</i> Member of the Parliament (Rajya Sabha) and Director Emeritus, NIAS
January 14	Pre-modern urbanization in Asia
	<i>Senake Bandarnayake</i> Sri Lankan High Commissioner, New Delhi

The lecture explored the archaeology of pre-modern urbanism in the historic civilizations in south and east Himalayas and the Tibetan Plateau, with special focus on the morphology and spatial organisation of urban forms in India and Sri Lanka, and a comparison with other states January 16

Managing diversity in the Indian Defence Services

General S F Rodriguez Former Chief of the Army Staff, Goa

January 17 From life to page; from page to stage

Mahesh Dattani Mahesh's Studio, Bangalore

Mahesh Dattani is a playwright, stage director and screen writer. He started his theatre company Playpen in 1984. His published works include Final Solutions and Other Plays, Tara and the recent!y published Collected Works from Penguin India. He has received the Central Sahitya Akademi Award in 1998. His plays have been and are being produced all over the country and abroad.

February 12 Thinking wood, carving stone

John Marr Bharatiya Vidya Bhavan, London

This lecture examined how the earliest extant sculpture documents elements of wood and timber prototypes that have since vanished in India, diachronically beginning with the Barabar caves to later developments such as the architecture of the Chalukyas of Karnataka and the temples of Kashmir

John Marr is currently Honorary Secretary at the Bharatiya Vidya Bhavan, London, and Convenor, South Asia Arts Diploma Course at the British Museum. He has taught at the School of Oriental and African Studies.



### Wednesday Discussion Meetings



The members of the Institute meet every Wednesday morning (and rarely on other mornings too!) for informal academic discussions after a talk delivered by a member of the faculty. These Wednesday meetings, organised by **Sangeetha Menon**, also serve as a forum for invited guest speakers to deliver a lecture on a subject of their choice. The discussions then continue over the high tea that follows these talks!

The Wednesday Discussion Meetings during the period from January to March 2002 have included:

January 2 January 2 Indian Constitution and backward classes Ravivarma Kumar Advocate, Bangalore High Court January 23 Numbers numbers everywhere: But can we find one or decide which is which? K Ramachandra This talk described some conjectures of

This talk described some conjectures of popular appeal

January 30 Personal development: Western approaches and their shortcomings

> Jane Henry Chair, Experiential Research Group Open University, Milton Keynes, U K

This talk reviewed the major approaches to personal development adopted in the West and argued that these privilege counseling, competency, insight and reflection. Some of the reasons for this bias were outlined. The speaker went on to review empirical evidence from work on well-being and self-report studies of long term personal change and advocated a greater role for strategies based on quietening of the mind, social support and active physical involvement (for example, gardening, walking)

Jane Henry chairs the Experiential Research Group at the Open University, UK. She edits the journal Consciousness and Experiential Psychology, chairs the BPS (British Psychological Society) CEP (Consciousness and Experiential Psychology) Section and is a member of the BPS Council. She developed a Masters course in Creativity, Innovation and Change taken by 1500 students every year in the UK, India and elsewhere. Her books include Creativity and Perception in Management (2001), Creative Management (2001), Managing Innovation and Change (2002), and the forthcoming A-Z of Parapsychology. She has written over 100 articles and made about 50 TV, radio, audio and video programmes, as well as several CD-ROMs. Her research interests include personal development, experiential learning, developing creativity and intuition, and cognitive style

February 6 Women's participation in the history of ideas: Some gleanings from the United Nations Intellectual History Project

> *Devaki Jain* Trustee Singamma Sreenivasan Foundation, Bangalore

Talking about the work in progress, this talk highlighted the attempts of some women to reconstruct knowledge along with findings, which revealed that time has stood still in relation to the valuation of a woman



Devaki Jain, the writer and activist, began her career as an economist with a tenured university position that she gave up to become involved in a range of activities revolving around women. She was very involved in helping develop women's networks both at the national and international levels. The most well known network of these is DAWN - Development Alternatives with Women for a New Era. Devaki was also one of the founding members of Kali for Women, Asia's first feminist publishing house. She has written and lectured extensively, and been involved in some pioneering work among women in India. She was able to develop a strong curriculum component of gender for the Institute of Social Studies, which has become renowned for its pioneering work on ensuring women's "visibility" in national statistics

February 13

## Gender and social protection

#### *Gurushri Swamy* Bangalore

Are women adequately protected during times of economic crises? Based on an ongoing study at the World Bank, this talk focused on two forms of social protection: compensation to retrenched workers and access to public employment schemes. It provided a cross-country perspective and posed several unresolved issues for discussion

Gurushri Swamy is an economist with over twenty years of developmental work experience with the World Bank in Africa and East Asia February 20

Mapping the landscape of identity: Who was Shivaji?

Ananya Vajpeyi Department of South Asian Languages and Civilizations University of Chicago Chicago, USA

This talk undertook a reconsideration of a single historical event: the 'abhiseka' or royal consecration of Shivaji, in 1674 AD. This ceremony had the effect of transforming Shivaji into Chattrapati Shivaji Maharaj, king over all of his dominions. But before he became a right royal personage, who was Shivaji? What do Shivaji's various personae - Maratha, Bhosale, Raja, Rajput - help us to understand about the relationship between practical power and ritual status at different points in his political career? How was this relationship transformed in the instant of the 'abhiseka', when he was reborn as 'Chattrapati'? More importantly, what does Shivaji's case tell us about the interpretation of terms like 'kshatriya' and 'sudra' in late-medieval Maharashtra? It would seem that modern meanings of caste do not necessarily lineup with their pre-modern predecessors. This is what makes a polyvalent figure like Shivaji liable to be misread through presentday projections of the categories of identity into the past

Ananya Vajpeyi is a doctoral candidate and Century Fellow in the Department of South Asian Languages and Civilizations at the University of Chicago. She received a BA from Lady Shri Ram College in 1992, an MA from the Jawaharlal Nehru University in 1994, and was a Rhodes Scholar at Oxford, where she received an M Phil in 1994. She was a Junior Research Fellow with the American Institute of Indian Studies, 1999-2000. She conducted her field and archival research in Pune, 2000-2001 and is currently writing up her dissertation here in Bangalore. Her presentation at NIAS drew upon a chapter of her dissertation, which undertakes a social history of the category of the 'sudra' in Maharashtra

February 27 Understanding the soul of mathematics, physics and engineering

#### Prabhakar Vaidya

This talk attempted to examine a few personal experiences and to generalise them in order to gain an understanding of these three disciplines and the people who work in them. It was proposed that each of these disciplines develops a metaphysical identity of its own. There are two reasons why more such studies should be undertaken. The first is that there is often a need for cross communication between these disciplines, and an understanding of the cultures of the other two is quite essential for the practitioners. The second reason has to do with career guidance. While some of the core skills for these three disciplines are guite similar, the personality traits of the practitioners are quite distinct

March 6 The vision of JRD and the Mentor, Jamshedji Tata

*M 'K Rao* Formerly Senior Executive, Telco, Jamshedpur Member, Film Censor Board, Bangalore

March 13 Management of disasters: How do others manage?

#### M K Paul

Major Ceneral Paul shared his experience on disaster management based on his recent study tour to USA and Germany. He has conducted an on-the-spot study in St Louis, New York, Washington DC, Berlin, Potsdam, Bonn and Darmstadt. He discussed the disaster management preparedness and strategies of USA and Germany and compared them with those of India

March 20

Money for sword and shield: Demystifying the defence budget

S Rajagopal and Shridhar K Chari

This talk attempted to go behind some of the numbers in the defence budget, focussing on significant shortfalls in spending, within budgetary allocations, over the last few years

The **guest lectures** at the Wednesday Discussion Meetings during this period included:

February 21 Greek philosophy and India

> Joachim Lacrosse Free University of Bruxelles Belgium

February 22 Cooperative monitoring concepts, projects and technologies

Frederick Luetters Sandia National Laboratories Albuquerque, USA

Fred Luetters is Manager of the International Security Initiatives Department at Sandia National Laboratories, Albuquerque, New Mexico, USA. A graduate of New York University's College of Engineering, he is a

registered Professional Engineer in Manufacturing. He was a staff member at Los Alamos National Laboratory, Los Alamos, New Mexico, for over 13 years (1962-1975), and subsequently at Sandia National Laboratories for over 26 years. In Los Alamos, his work was in process design, manufacturing, and testing of weapons components and assemblies. He was supervisor of a design engineering group, and later project manager of concept and feasibility studies for new weapon systems. At Sandia, Fred Luetters has developed nuclear material site-security systems, managed a bilateral exchange program with Germany on safeguards and security technologies, worked with the International Atomic Energy Agency in Vienna on containment and surveillance technologies, and was a member of the US/Russia Nuclear Material Security Task Force. He currently manages a department of specialists at the CMC offering technology solutions by building collaborations on challenging problems in regional security, nuclear nonproliferation, arms control, and other international security initiatives

#### SPECIAL PROGRAMMES

One special lecture and six public lectures were oganised at the Institute during the period from January to March 2002

#### Special lecture

March 11 Sex, tools and monkeys: Modelling primate behaviour

> *Gauri R Pradhan* Department of Biological Anthropology and Anatomy Duke University Durham, USA

This talk presented some models of primate behaviour in two distinct contexts: sexual selection and tool-use traditions. First, it explored how the vulnerability of females to infanticide by males affects female sexual behavior in many primates. The author argued that the paternity estimates produced among various males as a result of the female's sexual behavior forces males into avoiding costlier mistakes, thus making them refrain from attacking infants they probably did not sire and making them protect those they may have sired. This model was developed further to show mating conflict between the female and the dominant male and proposed an explanation that links infanticide and harassment of estrous females by high-ranking males.

Next, the speaker gave a model inspired by customary tool use among wild great apes. The model aimed at capturing the aspect of tradition and examined relative roles of innovation ability, ability for social learning and opportunities for social learning in a population-wide tool use survey. The main predictions arrived at included: learning from one's mother alone adds very little to the probability of acquisition of tool-using skill, especially when innovative ability is low and second, gregariousness, especially sociable gregariousness, strongly improves the likelihood that individuals acquire special skills, provided they were invented in the first place

#### **Public lectures**

January 10

Current trends in the conservation of biodiversity

*Ghillean T Prance* School of Plant Sciences University of Reading Reading, UK

36

Organised by the Indian Academy of Sciences and NIAS



The roles of ex situ versus in situ conservation of biodiversity was discussed in this talk with emphasis on the merits of in situ conservation. However, the important role of botanical gardens and seed banks was also discussed with examples from the work of the Royal Botanic Gardens, Kew. Earlier work tended to focus more on single endangered species. The current emphasis on habitat and ecosystem conservation is likely to be much more effective. It is essential to maintain the web of interactions between the different elements of biodiversity, pollination, dispersal, and mutualisms. The advantage of thinking in terms of biodiversity is that species, habitat and genetic diversity are all taken into consideration. Conservation today cannot be achieved without an equal emphasis on the sustainable use of biodiversity and examples of the move to sustainability were given from the Speaker's experience in Brazil. The Convention on Biological Diversity has had considerable influence on current thought about conservation and its pros and cons were also discussed. The speaker was of the opinion that it is essential to bring on board those few countries that have not yet ratified the Convention

January 11 Where facts are negotiable: A scientist goes into politics

> Congressman Rush Holt US House of Representatives

In his talk, Congressman Holt described the twin cultures of science and politics and how respect for facts and evidence could improve public discourse. He stressed the need for improving science teaching in all countries, especially at the high school level. Giving an example of where facts were in fact negotiated, Dr. Holt cited the debate over the feasibility of the Strategic (Ballistic) Defense Initiative in the United States. He graciously answered questions from the audience for over an hour

Congressman Holt was elected to represent the 12th Congressional District in New Jersey in 1998 and re-elected in 2000. Prior to that, Dr Holt, who holds a doctorate in physics, was the Assistant Director of the Princeton Plasma Physics Laboratory. He is one of the handful of scientists who have made a successful transition to electoral politics. He was accompanied on this trip by his wife, Dr Margaret Lancefield

January 14 What is a clock?

Roberto Casati Institut Nicod National Academy of Sciences – School of Higher Studies in Social Sciences Paris, France

What is a clock? There is a simple answer: a clock is an instrument for tracking and telling the time, and thus, is an instrument for generating in clock-users true beliefs about the time. Most clocks track the time by measuring and counting time intervals. A clock is thus an epistemic instrument, as are a magnifying lens or a book: one uses it in order to improve the quality of one's epistemic states. In the class of epistemic instruments, clocks fall in the subclass of measuring instruments, together with rods and counters. The author tried to clarify what the grain of truth in the thesis that clocks are instruments for tracking or measuring time could be; he specially did this by considering cases in which it is not always so clear whether some given thing is or is not a clock



A researcher in philosophy and the cognitive sciences with the French CNRS, Roberto Casati works mainly on the representation of space and time. His research projects cover the analysis of the conceptual structures (linguistic and perceptual) that deal with space and time, and he is particularly interested in bizarre spatial objects such as shadows and holes. He has published a number of papers and books on these topics, such as Holes and Other Superficialities (with Achille Varzi) (MIT Press, 1994), Parts and Places: The Structures of Spatial Representation (with Achille Varzi) (MIT Press, 1999), and The Discovery of the Shadow (Knopf and Little, Brown, forthcoming)

February 1

Population: The ultimate resource

Sauvik Chakraverti Senior Assistant Editor Economic Times, New Delhi

A large population is generally viewed as a problem, and as a cause of poverty, despite the fact that human beings are the only species capable of creating wealth. Free market economists believe population to be a resource: indeed, the ultimate resource. Using basic economics, this lecture illustrated how wealth is created, and provided a vision of a rich India

A staunch advocate of free-market economics, Sauvik Chakraverti is currently a Senior Assistant Editor at the Economic Times in New Delhi, author of the 'Antidote' fortnightly column and regular editorial articles. He has a BA (Hons) in Economics and an MA in Business Economics from Delhi University, as well as MSc in Politics and Public Administration from the London School of Economics. Earlier, he served in the IPS between 1983 and 1989, resigning at the rank of Deputy Commissioner of Police. Macmillan has published his Antidote: Essays Against the Socialist Indian State (2000)

March 19

International scientific cooperation and development: A Croatian view

> *Ivo Slaus, M P* Committee for Education, Science and Culture Committee for Foreign Affairs Croatia

The lecture addressed the following issues: Role of scientific research in assuring comprehensive sustainable development; science in Europe and specifically in former Yugoslavia and Croatia - successes and failures from European Physical Society in 1969 and European Science Foundation in 1974 to Eureka and Academia Europea 1988, European Research Area and Framework Six Programme 2002; the need for cultural diversity and the role of science. which stems from and is part of culture, in providing a glue of compatibility, nonexclusivity among cultures; necessity of a combination (coincidence) between political will and scientific achievements; role of scientific international cooperation for progress, peace and prosperity; science and culture as vehicle to link India, Asia and Europe

NIAS and Raman Research Institute (RRI) are organising a monthly Seminar on the History of Ideas, meeting usually on the second Friday of every month. The organising committee consists of R L Kapur, N Kumar, R Narasimha and M G Narasimhan (Convener). The series was inaugurated on March 8, the first talk being delivered by Prof N Kumar March 8

The idea of the atom *N Kumar* Director Raman Research Institute, Bangalore

The physical idea of finite divisibility of matter, and possibly that of space and time itself, is very old, and seems traceable to an even older idea of arithmetic discreteness vis-à-vis geometric continuum. This talk summarised the atomic hypothesis that was developed over ca. 450-50 BCE, by Leucippus, Democritus, Epicurus and Lucretius and by Kanada. The atoms were indivisible, hard, solid particles of insensibly small sizes and weights, having various shapes, moving incessantly in vacuum, ever colliding and occasionally compounding. This atomic world-view was suspended for two thousand years under Aristotle's influence of the belief that Nature abhors vacuum. The idea of the Atom reemerged in the post-Newtonian era. The author suggests that while no specific model for the atom may survive, the Greek-Kanada Atom most probably will

# CONSCIOUSNESS DISCUSSION FORUM

The Philosophy of Science Unit, in an effort to increase its activities in consciousness studies and to draw upon other existing sources of knowledge and interest in this area, has initiated a Consciousness Discussion Forum. The Forum has decided to meet once in about two months. Following the exchange of ideas in the first few meetings, an e-group on Consciousness has been formed. Those who are interested in this discussion forum can either log on to www.egroups.com/groups/NIAS-forumon-CONSCIOUSNESS/ and register themselves or subscribe to the group by sending an email to NIAS-forum-on-



C O N 5 C I O U 5 N E 5 5 subscribe@egroups.com. For more details, please contact Sangeetha Menon (smenon@nias.iisc.ernet.in).

On January 15, Roberto Casati of the Institut Nicod, CNRS-EHESS, Paris, France, spoke on "Are material objects central to cognition?". For details of this talk, please see http://groups.yahoo.com/group/NIASforum-on-CONSCIOUSNESS/message/25

On January 30, at the second meeting of the Forum, Jane Henry of the Experiential Research Group, Open University, Milton Keynes, UK, spoke on "Experiential psychology". For details of this meeting, please see

http://groups.yahoo.com/group/NIAS-forumon-CONSCIOUSNESS/message/26

# MEETINGS ATTENDED AND LECTURES DELIVERED BY NIAS FACULTY

## JANUARY TO MARCH 2002

## **Dilip Ahuja**

Made a presentation on "The concept of incremental costs in GEF programs" at the GEF Workshop on Institutional Strengthening in Least Developed Countries to Address Climate Change, Bandos Island, Maldives, October 1-3, 2001

Made a presentation on "The estimation of incremental costs" at the Training Program on Climate Change: Reduction in Greenhouse Gases Emissions – Opportunities and Liabilities, New Delhi, December 19-21, 2001

Delivered a lecture on "International responses to the threat of global climate change" at the Sixteenth NIAS Course for Senior Executives, NIAS, January 18 Participated in the first meeting of the Study Panel on Promoting Worldwide Capacity for Science and Technology of the InterAcademy Council, Amsterdam, the Netherlands, January 26-28

Participated in the Second Annual Board Meeting of the InterAcademy Council, Amsterdam, the Netherlands, January 28-30

Chaired the session on Impact of Climate Change on Water Resources in the meeting on Water and Security in South Asia, Dhaka, Bangladesh, February 2-4

Chaired the session on Energy, Climate Change and Sustainable Development at the Southern Regional Consultation for the World Summit on Sustainable Development, Bangalore, February 13

## H K Anasuya Devi

Presented a paper entitled "Automated recognition of ancient Indian scripts" at the National Workshop on Computer Vision, Graphics and Image Processing WVGIP 2002, Madurai, February 15-16

### Savita Angadi

Attended Biovision 2001, the International Conference on Biomedical Engineering, Indian Institute of Science Campus, Bangalore, December 21-24, 2001

Attended ICWA 2002, the Instructional Workshop and International Conference on Wavelets and their Applications, School of Mathematics, Anna University, Chennai, January 4-8

Delivered a series of joint talks (with Prabhakar Vaidya) on "How to communicate with engineers", "How to



communicate with biologists", "Introduction to embedding and its applications", "Mathematical modelling of pathogenesis", "Brief introduction to chaos", "Concept of time series analysis", "Relationship of chaos to ergodicity, "Practical applications of tent map", and "New ideas in image analysis" at the Department of Mathematics, Pondicherry University, Pondicherry, February 4-8

Gave a lecture-demonstration of MATHCAD at the Department of Mathematics, Pondicherry University, Pondicherry, February 7-9

Delivered a joint talk (with Prabhakar Vaidya) on "Application of nonlinear dynamics to biological problems" at the Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, February 28

# B K Anitha

Participated in the State Coordinators' meeting of Women in Water Network (WWN), South India, at the Centre for Water Resources, Anna University, Chennai, February 17

Presented a set of recommendations for Karnataka State in the workshop on Preparation of Programme for Action (PFA) for India Water Vision, organised for south India by the India Water Partnership, Anna University, Chennai, February 18

Presented the background on the issue of violence against women and development of partnerships with various stakeholders, including the police, PRIs, NGOs and primarily, the community, to check violence against women in the Valedictory function of the State-level Convention of Rural Women, organised by Mahila Samakhya-Karnataka, Bangalore, March 8 Participated in the Mahila Okoota (collective of women's organisations and well-wishers fighting against all forms of violence against women) campaign rally to commemorate the International Women's Day in Bangalore City, March 9



#### Sarada Balagopalan

Delivered a talk entitled "From street to school: Citizenship, formal education and the marginal child" at the Colloquium on Schooling and Citizenship, NIAS, January 24-25

Presented a paper entitled "Caste and education exclusion: Notes from a study in Madhya Pradesh" at the International Comparative Education Conference, Florida, USA, March 8

#### **R** L Kapur

Delivered a talk entitled "The mind of a terrorist" at the Sixteenth NIAS Course for Senior Executives, January 17

Delivered a talk entitled "Scientific creativity" at the one-day NIAS Workshop on Understanding Science, February 1

## **Arvind Kumar**

Participated in a one-day discussion meeting on Security Issues in South Asia, organised by Delhi Policy Group in collaboration with Pondicherry University, Pondicherry, January 30. Served as a discussant for one of the sessions on Non-military Dimensions of International Security.

Delivered a lecture on "Nehru and nuclear disarmament" in a national seminar on Nehru as a Nation Builder, organised by Centre for Nehruvian Studies, Pondicherry University, Pondicherry, February 12-13 Participated in a discussion meeting on the role of Cooperative Monitoring Center (CMC), Sandia National Laboratory, USA, in the field of surveillance technologies, organised by the International and Strategic Studies Unit, NIAS, February 22

Attended the 51<sup>st</sup> Pugwash Conference on Science and World Affairs: Challenges for Peace in the New Millennium, Agra, March 12-16

#### M D Madhusudan

Delivered a talk entitled "The unlikely links: Connecting cowpats, coffee markets and wild herbivore conservation in India" at the Annual Review Seminar of the Nature Conservation Foundation, Mysore, March 16, 2002

#### Sangeetha Menon

Delivered a talk entitled "Binding experiences: Revisiting the Bhagavad Gita to look at 'conscious experience' and the 'conscious experiencer' in the context of recent discussions on consciousness", International Conference on Scientific and Philosophical Studies on Consciousness: Toward a Systematic Theory, Centre for Advanced Study in Philosophy, Jadavpur University, Kolkata, January 2-4

Delivered the Infinity Foundation Lecture on "Binding experiences for a first-person approach: Looking at Indian ways of thinking (Darsana) and acting (Natya) in the context of current discussions on 'consciousness'", International Conference on Mind and Consciousness: Various Approaches, Indian Institute of Technology, Kharagpur, January 9-11

Delivered a lecture on "Love and relationship in the Naradabhakti Sutras and

the Bhagavad Gita", Sri Aurobindo Aradhana Trust, Bangalore, February 13

Delivered a talk on "Binding epistemologies and experiences" at a symposium on Consciousness, organised by the Indian Institute of Advanced Study (Shimla), Bangalore, February 18

## N Shantha Mohan

Delivered a talk and led the discussion on "Gender and diversity" at the Sixteenth NIAS Course for Senior Executives, NIAS, January 10

Conducted sessions on 'Sexual harassment at the work place' for senior executives of the Hotel Taj Residency, organised by the National Institute for Public Administration, Bangalore, January 11-12

Delivered a talk and led the discussion on "Gender, violence against women and gender justice" for around 200 police officials in the two-day Gender Training organised by the Karnataka Police Academy, Mysore, January 29

Gave a talk on "Self-organisation" for the two-day programme on Empowerment and Personality Development of Women Employees at Hotel Taj Residency, organised by the National Institute of Public Administration, Bangalore, February 18

Presented a paper on "Legal, social and political problems in marketing products encountered by women in agriculture and allied industries" in a workshop on "Challenges, Opportunities and Constraints Faced by Women in Agriculture and Allied Industries", Dharwad, February 19. The workshop was jointly organised by the College of Rural Home Science, University of Agricultural Sciences, Dharwad, the

47

International Federation for Women in Agriculture and the Indian Council of Agricultural Research, and sponsored by the National Commission for Women, New Delhi

Participated in the Mahila Okoota (collective of women's organisations and well-wishers fighting against all forms of violence against women) campaign rally to commemorate the International Women's Day in Bangalore City, March 9

## R Narasimha

Delivered the Presidential Address at the Aeronautical Development Establishment Foundation Day, Bangalore, January 5

Delivered a talk entitled "Is a scientific revolution possible in India?" at the Sixteenth NIAS Course for Senior Executives, January 14

Delivered the Inaugural Address at the Colloquium on Schooling and Citizenship, NIAS, January 24

Delivered a talk on "Aryabhata's sine language" at the Samskrita Sangha, Indian Institute of Science, Bangalore, February 28

Delivered a talk entitled "Model-makers and algorisers: Some thoughts on the Indian half of the Needham Question" at the National Seminar on Philosophical Consciousness and Scientific Knowledge: Conceptual Linkage and Civilizational Background, Delhi, March 1

# M G Narasimhan

Attended an International Workshop on Philosophy of Science, organised by CTNS-SRCP, ASSR – Jnana-Deepa Vidyapeeth, Pune and chaired the first session of the workshop, Pune, December 28 - January 2

# Sindhu Radhakrishna



Delivered a talk entitled "Conservation of slender loris (*Loris lyddekerianus lyddekerianus*)" at the National Seminar on the Conservation of Eastern Ghats, Tirupathi, March 24-26

## S Rajagopal

Participated in the First NIAS-Asia Society Dialogue, NIAS, January 4-6, and presented a paper entitled "Physical protection of nuclear facililities" in the session on Best Practices and Co-operation at the Dialogue, March 5

Delivered a lecture on "Indian nuclear policy" at the Sixteenth NIAS Course for Senior Executives, NIAS, January 16

Attended the 51<sup>st</sup> International Conference on Science and World Affairs: Challenges for Peace in the New Millennium as a Member of the Indian Pugwash Society, Agra, March 14-16. Served in the Working Group 1, which addressed issues relating to a "Nuclear Future"

## K Ramachandra

Delivered a Colloquium lecture entitled "Some remarks on the Riemann Zeta-Function", TIFR Centre, Indian Institute of Science, Bangalore, February 7

# Asha Ramesh

Served as a resource person in the South Asian Conference on Widows in South Asia, New Delhi, February 3-5

Delivered a lecture on "Status of minority women", Al Ameen Women's College, Bangalore, February 6

## Sundar Sarukkai

Delivered a talk entitled "The meaning of diversity" at the Sixteenth NIAS Course for Senior Executives, January 18

Delivered a talk entitled "Philosophy of science" at the one-day NIAS Workshop on Understanding Science, February 1

Delivered a talk entitled "Facets of science" at Jyoti Nivas College, Bangalore, March 4

Delivered a talk entitled "Knowledge and information" at the National Centre for Science Information, IISc, Bangalore, March 16

Delivered a talk entitled "Science and culture" at a seminar in the Centre for the Study of Indian Traditions, Madhubani, March 20-22

#### Anindya Sinha

Delivered a talk entitled "The monkey in the town's commons: Nine years among bonnet macaques" at the Annual Review Seminar of the Nature Conservation Foundation, Mysore, March 16

# C Srinath

Participated and contributed to the group discussions in the State-level Convention of Rural Women, organised by Mahila Samakhya-Karnataka, Bangalore, March 5-8

Participated in the Mahila Okoota (collective of women's organisations and well-wishers fighting against all forms of violence against women) campaign rally to commemorate the International Women's Day in Bangalore City, March 9

# N Sudhamani

Participated in the state-level seminar on the Role of Voluntary Organisations in Development of Karnataka, organised by NIPCCD, Bangalore, January 23-24



Participated in the State-level Convention of Rural Women, organised by Mahila Samakhya-Karnataka, Bangalore, March 5-8

Participated in the Mahila Okoota (collective of women's organisations and well-wishers fighting against all forms of violence against women) campaign rally to commemorate the International Women's Day in Bangalore City, March 9

#### Prabhakar Vaidya

Attended Biovision 2001, the International Conference on Biomedical Engineering, Indian Institute of Science Campus, Bangalore, December 21-24, 2001

Delivered a talk on "Some new ideas in Nonlinear Time Series Analysis" at the Physical Research Laboratory, Ahmedabad, January 2

Delivered a talk on "Decoding chaotic cryptography without an access to the superkey" at the Physical Research Laboratory, Ahmedabad, January 3

Delivered a series of joint talks (with Savita Angadi) on "How to communicate with engineers", "How to communicate with biologists", "Introduction to embedding and its applications", "Mathematical modelling of pathogenesis", "Brief introduction to chaos", "Concept of time series analysis", "Relationship of chaos to ergodicity, "Practical applications of tent map", and "New ideas in image analysis" at the Department of Mathematics, Pondicherry University, Pondicherry, February 4-8 Delivered a joint talk (with Savita Angadi) on "Application of non-linear dynamics to biological problems" at the Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, February 28

## A R Vasavi

Delivered a talk entitled "Agriculture and pluralism in India" at the Sixteenth NIAS Course for Senior Executives, January 15

Delivered a talk entitled "Social bases of education deprivation" at the Colloquium on Schooling and Citizenship, NIAS, January 24-25

Delivered a talk entitled "The reproduction of caste and its indignities" at the Indian Institute of Management, Bangalore, February 16

# VISITS MADE BY THE FACULTY

## Savita Angadi

Visited the Department of Mathematics, Pondicherry University, Pondicherry, and delivered a series of lectures there; February 4-9

## M K Paul

Visited USA and Germany in connection with a study on disaster management, January 18-31. The aim of the tour was to study how these countries anchor their disaster management schemes at the grass root level. The places visited in USA were WTC-New York, St Louis-Columbia and Washington DC, while those in Germany included Berlin, Potsdam, Bonn and Darmstadt. The programme was partially supported by the Sir Dorabji Tata Trust.

#### Prabhakar Vaidya



Visited the Physical Research Laboratory, Ahmedabad, and delivered two lectures there; January 2-3

Visited the Indian Space Research Organisation, Space Applications Centre, Ahmedabad, and held academic discussions with the Image Processing Unit of the Centre; January 3

Visited the Department of Mathematics, Pondicherry University, Pondicherry, and delivered a series of lectures there; February 4-9

## VISITORS TO THE INSTITUTE

Dr Rush Holt from the United States House of Representatives visited NIAS on January 11 and gave a public lecture titled "Where facts are negotiable: A scientist goes into politics".

Dr Frederick Luetters from the Cooperative Monitoring Centre, Sandia National Laboratories, New Mexico, USA, visited the Institute on February 22. He addressed a select gathering of experts in the Institute and also delivered a public lecture on the subject of "Cooperative monitoring concepts, projects and technologies".

Dr T Prabhakar Reddy, Joint Director, Panchayati Raj Unit, Centre for World Solidarity, Secunderabad, visited the Gender Studies Unit and the project area in Mysore District in relation to the Unit's work on Women and Decentralised Governance on February 27-28.

Prof Ivo Slaus, a parliamentarian from Croatia visited the Institute on March 19 and delivered a public lecture on the subject of "International scientific cooperation and development: A Croatian view".



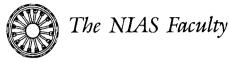
The Science and Society Unit is planning its first two-week course on 'Understanding Science', to be held in June 2002. This course will be an introduction to the history, philosophy and psychology of science. There will be about thirty sessions in which these topics will be discussed. Kindly note that the course will deal with subjects which are not *in* science but are *about* science. The course aims to introduce the students to the broader perspectives needed to understand science. Among the topics that will be covered are: History of ancient and modern science, what is scientific knowledge and truth? How do we understand creativity in science? There will be three lectures each day. The participants will also be expected to work on a project. A certificate will be awarded at the end of the course. The Unit invites students in science and arts to apply for this course. Ideally, it is desirable to have science and arts students in equal numbers. A daily honorarium will be paid to the students for travel and lunch expenses. Please send a covering letter, a resume and a statement of purpose explaining why you would like to attend this course to Prof R L Kapur, Science and Society Unit, National Institute of Advanced Studies, Indian Institute of Science Campus, Bangalore 560012. The last date for receiving the applications is April 30, 2002.

- One of the major programmes of the Science and Society Unit is to bring together experts from natural sciences, biological sciences, social sciences and humanities and encourage an understanding of the respective philosophies and methodologies. A oncea-month meeting is being planned. Informal discussions have already occurred on how to conduct these meetings. The Unit expects to start the meetings from May 2002. For more information, please contact R L Kapur Sundar (rlkapur@bgl.vsnl.net.in), Sarukkai (sarukkai@nias.iisc.ernet.in) or M G Narasimhan (narasim@nias.iisc.ernet.in).
- An international symposium on Science and Beyond: Cosmology, Technology and Indian Traditions will be held at NIAS from January 8-11, 2003, under the program of "Science and Spiritual Quest" of the Templeton Foundation, USA. This symposium will bring together scientists, philosophers, psychologists and spiritual leaders from India and the rest of the world to dialogue on what essentially constitutes the pursuit of knowledge. This will facilitate defining the frontiers and what falls in the 'beyond' of scientific knowledge. Discussions on questions of philosophical and spiritual issues according to the convictions and experiences of scientists as well as discussions on scientific and empirical questions according to philosophers and spiritual leaders are expected to generate a forum to bridge knowledge communities and unite them for global concerns both at personal and institutional levels. It is particularly expected that the conference will bring forth a dialogue, in a global context, on Indian traditions of science, art, music, medicine, philosophy, psychology and



spirituality. The program of the conference will include invited lectures, panels and discussions. For more details, please contact Sangeetha Menon (*prajnana@yahoo.com*)

×





÷ - +

R Narasimha (PhD Caltech) Director roddam@nias.iisc.ernet.in roddam@caos.iisc.ernet.in

Raja Ramanna (PhD London) Director Emeritus rr@nias.iisc.ernet.in

R L Kapur (PhD Edinburgh) | R D Tata Visiting Professor, Science and Society *rlkapur@bgl.vsnl.net.in* 

S Rajagopal (BTech Guindy) Homi Bhabha Chair, International and Strategic Studies rajgopal139@hotmail.com

Prabhakar G Vaidya (PhD Southampton) Professor, Mathematical Modelling Unit *pgvaidya@nias.iisc.ernet.in* 

Dilip Ahuja (PhD Virginia) ISRO Professor of Science and Technology Policy Studies dahuja@nias.iisc.ernet.in

Kenneth Keniston (DPhil Oxford) Sir Ashutosh Mukherjee Visiting Professor kken@nias.iisc.ernet.in

B V Sreekantan (PhD TIFR/Bombay) Honorary Visiting Professor, Philosophy of Science *bvs@ nias.iisc.ernet.in* 

K Ramachandra (PhD TIFR/Bombay) Honorary Visiting Professor kram@nias.iisc.ernet.in

H K Anasuya Devi (PhD IISc) Fellow, Epigraphy hka@nias.iisc.ernet.in

N Shantha Mohan (PhD ISEC/Bangalore) Fellow, Gender Studies shantham@nias.iisc.ernet.in

A R Vasavi (PhD Michigan State) Fellow, Sociology and Social Anthropology *arvasavi@nias.iisc.ernet.in* 

P K Shetty (PhD IARI) Fellow, Environmental Studies *pks@nias.iisc.ernet.in*  Sundar Sarukkai (PhD Purdue) Fellow, Science and Society sarukkai@nias.iisc.ernet.in sarukkai1@yahoo.com

Anindya Sinha (PhD TIFR/Bombay) Fellow, Philosophy of Science *asinha@nias.iisc.ernet.in* 

B K Anitha (PhD ISEC/Bangalore) Associate Fellow, Gender Studies anibk@nias.iisc.ernet.in

Sangeetha Menon (PhD Kerala) Associate Fellow, Philosophy of Science prajnana@yahoo.com www.geocities.com/prajnana

M G Narasimhan (PhD IISc) Associate Fellow, Science and Society narasim@nias.iisc.ernet.in

Suri Venkatachalam (PhD IISc) Adjunct Associate Fellow, Mathematical Modelling suri@ces.iisc.ernet.in

H N Shankar (PhD IISc) Adjunct Associate Fellow, Mathematical Modelling hn\_shankar@yahoo.com

Sharada Srinivasan (PhD London) Adjunct Associate Fellow, Philosophy of Science sharada@nias.iisc.ernet.in

Sarada Balagopalan (PhD New York) Adjunct Associate Fellow, Sociology and Social Anthropology saradab@vsnl.net

Sindhu Radhakrishna (PhD Mysore) Adjunct Associate Fellow, Philosophy of Science Ioris\_sr@yahoo.com

Arvind Kumar (MPhil JNU) Research Associate, International and Strategic Studies arvind@nias.iisc.ernet.in

Asha Ramesh (BSc Karnataka) Research Associate, Gender Studies aramesh@nias.iisc.ernet.in

C Srinath Research Associate, Gender Studies srinath@nias.iisc.ernet.in

N Sudhamani (MA Bangalore) Research Associate, Gender Studies

Sridhar Krishnaprasad Chari (MA Leicester) Research Associate, International and Strategic Studies sridhar\_kchari@yahoo.co.in skchari@nias.iisc.ernet.in M D Madhusudan (MSc Saurashtra) Research Scholar, Philosophy of Science madhu@nias.iisc.ernet.in



Savita Angadi (BE Karnataka) Research Scholar, Mathematical Modelling savita@nias.iisc.ernet.in

S K Uma (MSc Bangalore) Research Scholar, Science and Society

N Balakrishnan, Honorary Professor Information Sciences Division, Indian Institute of Science, Bangalore balki@serc.iisc.ernet.in

Vijay Chandru, Honorary Professor Computer Science and Automation, Indian Institute of Science, Bangalore chandru@csa.iisc.ernet.in

R K Kochhar, Honorary Professor National Institute of Science, Technology and Development Studies, New Delhi *rkk@nistads.res.in rkochhar2000@yahoo.com* 

V J Modi, Honorary Professor Mechanical Engineering, University of British Columbia, Vancouver, Canada

A Ramachandran, Honorary Professor Bangalore Tel: 225 5780

D P Sen Gupta, Honorary Professor Electrical Engineering, Indian Institute of Science, Bangalore

H N Sharan, Honorary Professor Netpro Renewable Energy India Ltd, Bangalore netpro@blr.vsnl.net.in

B V Subbarayappa, Honorary Professor Indian Institute of World Culture, Bangalore

#### ADMINISTRATION

Maj Gen M K Paul VSM (Retd) (BE Jadavpur) Controller mgp@nias.iisc.ernet.in

### PRINCIPAL S R GROVER LIBRARY

Hamsa Kalyani (MLISc Bangalore) Assistant Librarian niaslib@nias.iisc.ernet.in The National Institute of Advanced Studies (NIAS) was conceived and initiated by the late Mr. J R D Tata, who sought to create an institution which would conduct advanced research in multidisciplinary areas, and also serve as a forum to bring together administrators and managers from industry and government, leaders in public affairs, eminent individuals in different walks of life, and the academic community in the natural and social sciences. The intention has thus been to nurture a broad base of scholars, managers and leaders who may contribute to tackling the complex problems facing contemporary India in a more informed and effective manner.

The philosophy underlying NIAS is given shape by its research teams, which are drawn from a variety of disciplines in the natural and social sciences. The Institute is unique in its integrated approach to the study of intersections between science and technology and social issues.





Director National Institute of Advanced Studies Indian Institute of Science Campus Bangalore 560012, India Tel: 91-80-3604351, 3602050 Fax: 91-80-3606634 Telex: 0845-8349 IISC IN Email: niasoff@nias.iisc.ernet.in URL: www.iisc.ernet.in/nias/ www.nias.res.in

Published by National Institute of Advanced Studies, Indian Institute of Science Campus, Bangalore 560 012 and printed by Verba Network Services, Bangalore

For Private Circulation only