



NIAS

NEWS

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No. 2

This is the eleventh issue of the NIAS Newsletter. The activities of the Institute continued to increase manifold during the year 1997 and particularly in the second half.

The NIAS steps into its eleventh year and looks forward to further growth in its faculty as well as in its project and research activities.

During the year, apart from conducting the 11th NIAS Course on "An Integrated Approach to Knowledge and Information" for Senior Executives, a one week course for the Probationers of the Indian Foreign Service was also conducted between September 15 and 20, 1997. This module was conducted for the first time and the Ministry of External Affairs is keen on continuing this course in future. A brief report on this course appears in the Newsletter.

Yet another important course, the 5th NIAS Course on "An Integrated Approach to Knowledge and Information" for University and College Teachers co-sponsored with the University Grants Commission



Participants of the 5th NIAS Course for University / College Teachers with the Faculty

(UGC) and Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore was held between October 6 and November 1, 1997. The theme of the course was "Fifty Years of India's Independence". This course has been attended by the highest number of participants (25 in number) so far in its history and had representatives from almost all parts of the country. It was heartening that five participants attended from the isolated, north-eastern part of the country. Dr Armaity Desai, Chairperson, UGC inaugurated the course and spoke on "Higher Education: Challenges before the System and the Role of the Teacher". A brief report on this course also appears in the Newsletter.

NIAS is now preparing for the 12th NIAS Course on "Management and Society - An Integrated Approach to Knowledge and Information" for Senior Executives, which is scheduled to be held between January 5 and 24, 1998.

CHANGE OF GUARD

Prof Roddam Narasimha has taken over as Director of the Institute on August 1, 1997.

Prof Narasimha is a leading aerospace and atmospheric scientist, internationally known for his work in fluid dynamics. He has been closely involved with the development of aerospace technology in India, at both technological and policy-making levels. He was Director of the National Aerospace Laboratories during 1984-1993, and has been associated with Hindustan Aeronautics Limited for many years. He has been an advisor on various issues connected with academic, technological and industrial spheres in India and abroad, and is currently a member of the Space Commission and the Scientific Advisory Committee to the Cabinet. He has edited several books and published more than 150 scientific papers.

Prof Narasimha has been at the Indian Institute of Science (IISc) since 1962 and at present holds the ISRO K.R. Ramanathan Distinguished Professorship at IISc and the Jawaharlal Nehru Centre for Advanced Scientific Research.

Prof Narasimha is a Fellow of the Royal Society of London, the Indian Academy of Sciences (of which he was the President during 1992-1994) and the Indian National Science Academy; he is also a Foreign Associate of the US National Academy of Engineering and a Distinguished Alumnus of both IISc and California Institute of Technology. He has held various academic positions abroad, including the Clark B Millikan Professorship at the California Institute of Technology and the Jawaharlal Nehru Chair at Cambridge. He has received several other national and international awards, including Padma Bhushan from the Government of India.

Prof Narasimha brings vast all round experience with many different institutions, and we look forward to working with him at NIAS.

Our heartfelt congratulations to Dr Raja Ramanna, who continues as Vice-Chairman of the Council of Management of the Institute, for having been recently nominated as Member of Rajya Sabha. As Founder Director of NIAS, his contribution in building and bringing up the Institute to its firm footing will be remembered for all time to come.

Prof C.V. Sundaram has relinquished the Homi Bhabha Chair with effect from December 1, 1997. He will continue to be associated with NIAS as an Honorary Visiting Professor and Senior Associate of the Institute. NIAS will always remember his dedicated contribution during the formative years of the Institute. We wish him success.

Prof R.L. Kapur who headed the Health and Human Behaviour Unit of the Institute also leaves us on January 31, 1998 after about a decade of dedicated service in NIAS. Dr Kapur as the First Professor at the Institute, contributed a great deal in building up the Institute and in almost all its activities. He will continue as Honorary Visiting Professor and Senior Associate of NIAS. We wish him success in his new venture.

From the Director's Desk

In the four months since I came to NIAS, I have been getting to know more closely the various projects and programmes that the Institute has on hand and its distinguished faculty are pursuing. As I settle down to planning its future, with you and my colleagues at the Institute, I would like to share some thoughts with you.

India has several fine institutions, in the natural sciences, in engineering and technology, and in the social sciences. But these fine institutions harbour different cultures, and, indeed, are often worlds unto themselves. And there are too few bridges between and among them. The most interesting and challenging problems of the coming century probably lie in the interfaces between these cultures and disciplines - interfaces that are studied far too little in our country. It is in these no-man's lands that I believe the future of NIAS lies - in subjects that do not belong to the tidy little pigeon-holes that the current knowledge system of the world has created - artificially, and for technical or bureaucratic convenience, not because that is the way the world operates. How to build these bridges, how to bring different intellectual and social communities together, and how to look at the future of our nation and the world with the greatest possible intellectual integrity as well as public and social confidence these I think are aims worth pursuing at NIAS.

But there are more immediate and mundane problems! We do not have the resources we need to pursue these high goals; at the same time, that pursuit demands a certain degree of autonomy to be successful. I therefore intend to launch a campaign with the New Year to increase substantially the small endowment that we now have. The generosity of the House of Tatas has given us some splendid facilities, and we now need to build on this foundation, diversify our sources of income and carry out programmes that are at one and the same time sensitive to public and national needs and the rigorous demands of intellectual scrutiny. In this effort I shall come back to you with specific plans, and will need all the support that you can give me.

And if we have to achieve these goals it is necessary for us to bring together the best in the natural and social sciences. The late JRD Tata, whose brain-child this institution is, had the extraordinary idea that we need to form a new kind of leader - he imagined an institution that could harness creativity and commitment, mathematics and management. With my distinguished colleagues on the faculty of NIAS, and the eminent persons we count among our Associates, I am hopeful that we can carve a unique niche for ourselves in the public and intellectual life of this country, moving in the direction that our Founder so clearly saw as essential for the future health of our nation.

R Narasimha

THE FACULTY

UNIT: HEALTH AND HUMAN BEHAVIOUR

The project "A Psycho-social Study of Creativity Amongst Indian Scientists" is nearing completion.

Prof Kapur went to Canada during September - October, 1997, where he delivered two lectures at McGill University and also negotiated a possible project on "A Psychological Study of Spirituality".

UNIT: PHILOSOPHY OF SCIENCE

Dr Sundar Sarukkai continues with his Homi Bhabha Fellowship work. From June to August 1997, he collaborated with Prof James Morley (St. Joseph's College, Connecticut, U.S.A.) on the French philosopher Merleau-Ponty and the connection of his philosophy with certain yogic traditions. A draft of this work is under preparation. His studies on philosophy of science continue with special emphasis on theory formation, symmetry and related topics.

CONSCIOUSNESS STUDIES

As a part of the lecture series on 'consciousness studies' there was a guest lecture on "Jung and Consciousness" by Prof George M. Williams of California State University, Chico, on July 22, 1997. Prof Williams elaborated on Jung's usage of Indian sources, and their influence on his theories, his explanations on the 'Four Types', and his models of human personality which are based more on his eidetic visions. Prof Williams is the Senior Professor of Asian Religions and was a guest of the Institute during his visit to India. He also had discussions with the faculty on initiating an electronic journal of "Indian journal of consciousness studies", and of making a database of different versions of Bhagavad Gita in the form of an electronic text.

On September 24, 1997 Dr Sumantra Chatterjee gave a lecture on "Emotional Memory and Memory of Emotions: Are they the same at the Cellular level?".

The most interesting event during the period, for the Faculty of Consciousness Studies, was a discussion meeting on December 11, 1997 with Sir

Roger Penrose (Rouse Ball Professor of Mathematics, University of Oxford, England) the famous mathematician and author of books like "The Emperor's New Mind" and "Shadows of the Mind". Prof. Penrose discussed in detail about the non-computability of consciousness. He agreed with the Faculty that there could be various ways of looking at or conceptualising a complex phenomenon like consciousness though the complexity need not be in a mysterious level. Prof. Penrose showed great interest in discussing with the Faculty about their specific areas of research in Consciousness Studies. Prof B.V. Sreekantan, Dr Sundar Sarukkai, Dr Sangeetha Menon, Dr Anindya Sinha, Dr M.G. Narasimhan and Prof K. Ramachandra participated in the discussion.

Dr Sangeetha Menon's work on the problem of 'intentionality of consciousness' is in progress. She has completed the paper attempting a comparison of Chalmersian 'hard problem' and Saankarite approach to consciousness, and the same was presented at the recent Vedanta congress in Rishikesh. This paper argues for a redefinition of the 'hard problem' replacing the notion of 'conscious experience' with the explication of 'conscious experiencer'. Her paper on "Towards a Saankarite approach to consciousness" has been shortlisted for presentation at the "Towards a science of consciousness" Tucson III Meet at Arizona in April 1998. In line with her attempts to initiate interdisciplinary dialogs on consciousness studies within a broader spectrum, in the coming months she will be collaborating with Dr Anindita Balslev, the Senior Advisor to Centre for Cultural Research, Copenhagen, who will be in NIAS for sometime.

Dr Anindya Sinha is continuing to explore the cognitive mechanisms that underlie the development and maintenance of social relationships in wild bonnet macaques (*Macaca radiata*). His current interest in this area is to understand whether individuals are able to comprehend the relationship between different kinds of behavioural interactions that are beneficial to themselves and use different kinds of affiliative behaviours as social currency during reciprocal interchanges among each other.

He is also involved in a project on the classical genetics of hot water epilepsy in collaboration with

P. Satishchandra of the National Institute of Mental Health and Neurosciences, Bangalore (NIMHANS) and G.R. Ullal of the Ramaiah Medical College, Bangalore. Hot-water epilepsy is a form of reflex epilepsy that is precipitated by a thermal sensory stimulus over the head. Interestingly enough, this form of epilepsy is most commonly seen in south India, though isolated cases have also been reported from across the world. Approximately 300 such patients have already been examined at the NIMHANS and the nature of the disease clinically characterised. This project now proposes to investigate the genetic basis of hot water epilepsy by documenting and analysing the genealogical history of selected patients. Attempts will also be made to develop a mouse model for this disease; such a model might be more amenable to rigorous genetic analysis.

UNIT: WOMEN'S POLICY RESEARCH AND ADVOCACY (WOPRA)

Ms Srilatha Batliwala, Fellow and Head of WOPRA, left NIAS on July 31st, to join the Ford Foundation, New York as Programme Officer - Governance and Civil Society. Dr N. Shantha Mohan joined the Unit as its new head in November. Dr A.R. Vasavi, Fellow, Sociology and Social Anthropology Unit had taken additional charge as head of WOPRA during the interim period.

In June this year, the first phase of the WOPRA Project came to an end with the completion of the primary research study on the "Status of Rural Women in Karnataka". The past few months have seen hectic activity in the Unit towards the analysis of data and the drafting of the preliminary findings of the report of the field research. To disseminate the findings of the study, a presentation was organised on the 8th of September at the NIAS Auditorium. Nearly 150 people attended the presentation and the audience included project partners of WOPRA, local non-government organisations, researchers, academics, government officials and representatives from the media - leading English and Kannada newspapers, other periodicals, Doordarshan, All India Radio and NDTV. Articles based on the presentation and discussion have appeared in several leading newspapers. A summary document of the findings was prepared and disseminated.

The Unit's representative was also interviewed by All India Radio - Bangalore. The interview was broadcast on the 22nd of October. The Unit's representative attended a training of trainers workshop organised by the Asia Foundation - The Global Women in Politics for the Asia Pacific Region in Subic, Philippines in September, 1997. The Unit participated in the NIAS-UGC Course and members of the Unit made two presentations, on Gender and Development and on Reproductive Rights.

The publication and dissemination of the findings of the study conducted in Phase-I, both in English and in Kannada (popular form) will constitute an important part of the Unit's initial priorities for the next "Advocacy" phase. The Unit is therefore currently engaged in the finalisation of the different chapters on the Status of Women in Karnataka based on secondary data - on health, education, work, violence, and political participation - for publication. Data will be analysed for individual districts and villages and documents in Kannada will be prepared. Simultaneously, gaps and issues for in-depth analysis will be identified and micro-studies undertaken. In the next few months, the Unit proposes to build a strong base for its advocacy at the district and state levels through consultative processes.

UNIT: ENVIRONMENT

Dr P.K. Shetty's collaborative Research Programme with Prof K.M. Madhyasta, Organic Chemistry, Indian Institute of Science, Bangalore and Dr Raghu and Dr N.B.K. Murthy, Nuclear Agricultural Division, Bhabha Atomic Research Centre, Mumbai, on 'Bioremediation of pesticide contaminated soils and effluents' is in progress.

During the last six months experiments were conducted to test the ability of a few fungal isolates to bring about transformation of Atrazine. The fungal isolate, *Mucor* sp. has been shown to bring about transformation of Atrazine. Fermentation carried out in neutral media for a period of four to five days resulted in the formation of at least two metabolites which were not seen in the control experiments. The isolation and identification of these metabolites is under progress. Apart from this, the transformation products of endosulfan were subjected for spectral and chemical analysis. From this, it was confirmed the presence of two

metabolites such as endosulfan sulfate, the major oxidation products of endosulfan and the endosulfan diol.

Ms K.N. Savitha and Mr Dinesh Babu are assisting Dr Shetty in this programme.

UNIT: EPIGRAPHY CENTRE

Dr H.K. Anasuya Devi, Principal Investigator, ISRO-RESPOND Project, along with two Software Engineers is continuing research work on the development of software techniques for epigraphic texts.

The task on hand is to decipher epigraphic texts which contain ancient rock inscriptions. The texts are understandably in a bad shape because of the degradation of the inscriptions due to the wear and tear of the rocks over the years. This disturbance introduced is technically termed as 'noise'.

Since this noise is highly non-deterministic in nature, the conventional filtering techniques have failed to make any impact. So we were forced to explore new techniques which might help in this case. After experimenting with a lot of other techniques, it was found that the segmentation based on region growing gave very encouraging results. We have successfully isolated most of the characters and are able to represent the characters as separate individual vectors for future recognition. The software is developed on UNIX platform (in C++) and the design is object-oriented which gives a lot of flexibility and reusability to the code.

Since the isolation of characters is complete, the next task is to recognise these characters. Efforts are on in this direction to represent each character by their features in the spatial and frequency domain.

UNIT: INTERNATIONAL STRATEGIC STUDIES (ISS)

A new project funded by the Department of Atomic Energy entitled "An Integrated Study of the Technical and Security Aspects of Selected Nuclear Treaties, Conventions and Agreements", has been taken up. The study includes NPT, CTBT, Fissile Material Cutoff Treaty (FMCT), 93+2

Programme, Convention on the Safety of Radioactive Waste Management, Nuclear Weapons Free Zones and Technology Embargoes. In analysing the linkages in treaties, conventions and agreements, it could ultimately allow for better policy integration and greater consistency between past and future plans and provide information for policymaking by Indian decisionmakers.

The study will proceed in different phases. Phase-I will examine and analyse a number of items which are currently on the global agenda i.e. FMCT, 93+2 Programme and Convention on the Safety of Radioactive Waste Management. The study will also consider the CTBT option which remains an open subject as well as ongoing embargo regimes. The Unit has proposed a workshop on FMCT to be held at NIAS to discuss the first phase of the project.

Ford Foundation has approved holding of a workshop on "South Asian Women in International Security: Building Co-operative Networks" in early 1998. The objective of this programme is twofold: 1) To launch a regional network for shared access to information and experience; for building sustained collective efforts in areas of common concern; and serving as a vital link in second track diplomacy in this fairly troubled region. 2) To provide a forum for professional development with the objective of increasing participation and access of South Asian women in decisionmaking in government agencies; international institutions; nongovernmental organisations; and opinion making and expert bodies. This workshop is designed to approach the question of security and gender in a limited and specific way by trying to address the concerns and needs of South Asian women who are already practitioners/academics in international security, broadly defined. The approach of the workshop is highly innovative and expected to serve as a pilot project and model for other regions of the world.

A new project entitled "Issues on Non-Proliferation and Total Elimination of Weapons of Mass Destruction" is expected to be funded by Rockefeller Foundation as continuation of its earlier support. The project would involve deepening Indian contribution to global efforts towards nuclear non-proliferation, particularly the complete abolition of weapons of mass destruction. Through

this project, the Unit proposes to upgrade the Institute's communication channels significantly to provide capability to network internationally. This will allow the Unit to have a robust interlink with groups involved in non-proliferation and energy security issues.

UNIT: SOCIOLOGY AND SOCIAL ANTHROPOLOGY

Drawing on its foundations of sociological theory and research, the unit plans to address issues related to the promotion of primary and higher education in the country. A proposal relating to conducting research on primary education in the state has been completed and submitted to two funding agencies. The emphasis is on delineating the social conditions which prevent the universalisation of primary education and on indicating measures to promote schools as key institutions in communities. Focusing on the need to understand the problems related to institution building in higher education, a survey-based study of teachers in universities and colleges is being designed.

The unit has lent consultancy support to two projects. Detailed inputs were provided to the Women's Policy Research and Advocacy (WOPRA) unit's preliminary and summary reports of the project on the status of rural women in Karnataka. A sociological commentary on the whole study is also being prepared by the unit. At the invitation of the Centre for Interdisciplinary Studies of Hill and Mountain Environments, New Delhi, Dr A.R. Vasavi developed a brief outline of social issues to be integrated into the Tuvai river development project.

In preparation for his three month lecture tour to the United States Prof M.N. Srinivas prepared several lectures. As a special invitee to the International Conference on "Affirmative Action in India, South Africa and the United States", to be held at University of Missouri, Prof Srinivas also prepared a review response paper to the conference's paper, "Affirmative Action without Race". The unit prepared and updated a paper on "Sociology and Social Anthropology in India" for the newsmagazine, **India Abroad**, (U.S.A.), for their independence day special issue.

CONTINUITY DISCRETENESS AS A SOLUTION TO THE PROBLEMS OF UNSTABLE NUCLEAR SYSTEM

During the last two years Dr. Raja Ramanna and his colleagues have been working on a new approach to the problem of nuclear physics and particle physics. The theory starts with the assumption that a parameter 'n', where n is related to the half-life of any nuclear unstable system and M is the mass energy necessary for the decay to take place. The three of them are connected by the simple formula;

$$\hbar/MT = n/2^n$$

It is also assumed that 'n' is an integer and the departure from integer play rather an important role in determining the flavours of particles especially considering that $p = \log_{10} 2^n/n$ are very close to prime numbers (1, 2, 3, 5, 7, 11, etc.). It is also shown that the spin and parity of β -decaying particles can be understood if one considers a small changes to the 2 of the above formula. It is also shown that the energy levels of light nuclei is essentially due to the transfer of resonance mesons from one level to the other, thus explaining the level distributions of very light nuclides. In the case of complex nuclides many mesons are involved and the analysis becomes difficult.

The papers were inspired by the relation of Cantor which states that for any set of cardinality 1, there is always a set of cardinality 2. If we associate cardinality 1 with discreteness and cardinality 2 with continuity, one finds that a great many aspects of nuclear physics and particle physics fall in the place because of this duality of nature. Discreteness and continuity of unstable particles are more general and therefore able to explain very wide range of phenomenon even including such things as Binding Energies of nuclides and connection between flavours and prime numbers and life-time of less orthodox case including the life-time of the proton which comes out to be $\sim 5.33 \times 10^{33}$ years.

Raja Ramanna

VISITING CHAIRS

HOMI BHABHA CHAIR PROF C.V. SUNDARAM

During the period under review, the studies related to Nuclear Materials Development, Materials Resources in India, and also the characterisation of India's metallurgical heritage were undertaken.

Work was also continued on the 'Writing of a History of the Indian Atomic Energy Programme'.

Prof Sundaram has since relinquished this chair with effect from December 1, 1997.

Mr S. Rajagopal is presently holding this chair. Mr Rajagopal is working on a project entitled "An Integrated Study of Technical and Security Aspects of Selected Nuclear Treaty, Conventions and Agreements". He is also co-ordinating the works connected with a possible project entitled "An Assessment on India's Future Energy Options" in association with one of the leading American universities.

J.R.D. TATA CHAIR PROF M.N. SRINIVAS

Prof M.N. Srinivas's autobiography project is nearing completion. His paper on "Practicing Social Anthropology in India" has been published in the Annual Review of Anthropology (Palo Alto, U.S.A.)

He was on three month lecture tour to the United States. He was also a special invitee to the International Conference on "Affirmative Action in India, South Africa and the United States", held at University of Missouri, U.S.A.

DR S. RADHAKRISHNAN CHAIR PROF B.V. SREEKANTAN

Prof B.V. Sreekantan, Dr S. Radhakrishnan Visiting Professor from August 1, 1997, has continued his collaborative research in the field of Cosmic Rays and High Energy Astronomy with his colleagues at the Tata Institute of Fundamental Research, of which he is an Honorary Fellow.

During the period of the Homi Bhabha Fellowship, Prof B.V. Sreekantan has completed

writing along with Prof M.V.S. Rao of TIFR a technical book entitled "Extensive Air Showers" which is under publication by World Scientific. He also has sent an article entitled "Cosmic Rays" for the Encyclopedia Asiatica. He is currently writing another detailed book on "Cosmic Rays" covering all the high energy and astrophysical aspects, several chapters of which have already been completed. He has been requested by National Book Trust of India to write a popular book on the "Story of Cosmic Rays" work on which is in progress.

Prof Sreekantan has continued his interests on scientific aspects of Consciousness studies and has given several lectures on this topic at various forums.

SIR ASHUTOSH MUKHERJEE CHAIR DR ANINDITA BALSLEV

Dr Anindita Balslev will occupy this chair from January 1, 1998. Dr Balslev's study will be on "Cross-cultural Conversation" focusing on the theme of consciousness.

REPORT ON THE IFS COURSE

This course of one weeks duration (September 15 - 20, 1997) was organised by NIAS for Indian Foreign Service Probationers, 1996 batch. The course co-ordinator was Dr Sundar Sarukkai.

The thrust of the course was to introduce the

probationers of the IFS to developments in Indian science and technology, in the hope of creating awareness among the Indian diplomatic community to science and technology policies which are increasingly playing a dominant role in global politics.

The course was inaugurated by Mr Madhavan, Former Ambassador, who spoke on "Towards a Science-Conscious Diplomacy". The other topics, presented by eminent scientists and technocrats, included Information Technology, Nuclear S&T, Space Technology, Frontiers in Physics, Astronomy in India, The Chemical Industry in India, The Science and Politics of Climate Change, Molecular Biology, Metallurgy, Indian Philosophy, India's Medical Legacy, Development, Agricultural Research in India and International Politics.

Special evening talks included talks by eminent speakers on the Indian Software Industry, Caste, India's Biodiversity, Foreign Policy and S&T, Efforts at Non-Proliferation.

Visits were also arranged to Jawaharlal Nehru Centre for Advanced Scientific Research, Indian Space Research Organisation, National Aerospace Laboratories, Raman Research Institute and the Supercomputing Centre at IISc, Bangalore.

This module was very well received. As one participant, put it, the course was a "whopping success".

LIST OF INDIAN FOREIGN SERVICE (IFS) PROBATIONERS OF 1996 BATCH WHO ATTENDED THE 5 DAY MODULE AT NIAS

1.	Mr. Manish Prabhat	-	M.A. (History)
2.	Mr. Munu Mahawar	-	B. Tech (Electrical Engg.)
3.	Ms. Pooja Kapur	-	M.A. (Political Science)
4.	Mr. Hemant H. Kotalwar	-	B.E. Hons. (Electrical and Electronics Engg.)
5.	Mr. Sandip Chakravorty	-	B.Sc. (Physics Hons., PGD in Forest Management)
6.	Ms. Nutan Kapoor	-	M.A. (Economics)
7.	Mr. Charanjeet Singh	-	B.Sc (Hons.) Maths M.Sc (Physics)
8.	Mr. Ajneesh Kumar	-	B.Sc. (Hons.) Physics, LLB
9.	Mr. M. Sridharan	-	B.Sc. (Chemistry), PGD in Journalism
10.	Mr. Arun Kumar Sahu	-	M.A. (History)
12.	Mr. Rajesh Vishnu	-	B.Tech (Electrical Engg.)
13.	Mr. Puneet Roy Kundal	-	B.E. Hons. (Civil) M.A. Sociology
14.	Mr. Sanjay Rana	-	B.E. Electrical Engg.
15.	Mr. Y.K. Sailas Thangal	-	M.Sc.

ASSOCIATES' PROGRAMME

The topics of the Associates' Programme during the period were:

1. June 27, 1997 - A lecture on "Dead Sea Scrolls - discovery and implications" by Prof Navaratna S. Rajaram, formerly Director, Continuing Engineering Programs, University of Houston, USA.
2. July 25, 1997 - A lecture on "The Internet Revolution: or How Networking Technology is changing the way we work, live and play" by Prof G. Anandalingam, Chairman, Department of Systems, University of Pennsylvania, USA.
3. August 14, 1997 - "Veena Duet" by Dr V. Doreswamy Iyengar and Shri D. Balakrishna, accompanied by Shri V.S. Rajagopal on Mridangam and Shri M.A. Krishnamurthy on Ghatam.
4. September 26, 1997 - A lecture on "S. Chandrasekhar: His life & work" by Prof G. Srinivasan, Head, Astronomy and Astrophysics, Raman Research Institute, Bangalore.
5. October 24, 1997 - A lecture on "Hindustani Vocal Music: A Guided Tour through its Principal Forms" by Shri J.S. Pande, Joint Secretary, Foreign Service Institute, New Delhi, accompanied by Shri Gourang Kodical on Tabla and Md. Nizamuddin Khan on Tambura.
6. November 28, 1997 - A lecture on "Towards a Better Bangalore" by Dr A. Ravindra, IAS, Commissioner, Bangalore City Corporation.
7. December 19, 1997 - A lecture on "The Many - Splendoured Personality of J.R.D. Tata" by Mr R.M. Lala, Director, Sir Dorabji Tata Trust, Mumbai and author of "Beyond the last Blue Mountain".

THE FIFTH NIAS COURSE FOR UNIVERSITY AND COLLEGE TEACHERS

The Fifth NIAS Course on "An Integrated Approach to Knowledge and Information" for University and College Teachers, co-sponsored with the University Grants Commission (UGC), New Delhi, and the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore,

was held between October 6 and November 1, 1997. The course co-ordinator was Dr Anindya Sinha.

The primary objective of this course, as in the previous years, was to invite university and college teachers of varied disciplines from all across the country and expose them to new advances in various fields of knowledge, put them in touch with India's socio-cultural roots and engage them in discussions on major problems facing the country. This was achieved through lectures, panel discussions, participatory dialogues, group projects and educational tours.

The theme that had been chosen for this year's course was Fifty Years of India's Independence. We accordingly designed the programme such that it would review the history, document the progress and project the future of our nation's development in different areas of endeavour, ranging from the natural sciences through the humanities and social sciences to the literary and the performing arts.

We received about 350 applications from across the country; the 30 best-qualified of them were invited to participate in the course. These included teachers from undergraduate colleges as well as from university departments spread over 17 states, and specialising in various branches of the natural and applied sciences, social sciences and the humanities.

The course was inaugurated on October 6, 1997 by Dr Armaity Desai, Chairperson of the UGC, who delivered a fitting inaugural address on **Higher Education: Challenges before the System and the Role of the Teacher**. This was followed by an interesting session when the participants expressed their frank views on the problems of the educational system in our country; Dr Desai responded to these views with equal candour.

The course consisted of a number of lectures delivered by the Institute faculty as well as by other eminent workers from outside the Institute. Some of the varied areas covered included problems of research in our universities and in national institutions, the history and ethos of Indian scientific research, Western philosophy of science and the philosophy of Indian thought, gender issues, legal issues involved in secularism and their political misuse, national identity, historiographical and sociological issues, public health and the psychological problems faced by college students in particular, conservation of natural resources and pollution, food and agriculture, energy and

material resources of our country, the global arms-race, and artificial intelligence. Discussions on the performing arts focussed on Hindusthani vocal music and Indian theatre.

There were four panel discussions during the course which debated some of the outstanding problems in the areas of education, national development and poverty; we were also reminded of the ideals of Gandhi, Nehru and Ambedkar during one of these discussions. In addition, weekly study tours were arranged to the JNCASR, the Indian Space Research Organisation, and to the Vikasana School which specialises in non-formal education. The recreational tours took the teachers around Bangalore and to the historic temples of Sravanabelgola, Belur and Halebidu.

The teachers actively participated in two programmes during the course. First, each

participant presented a self-introduction which briefly outlined the life, career, research work and some aspects of the philosophical ideals of the speaker. Second, the participants worked on a group project, each of which involved three or four teachers and dealt with a current problem facing our country.

The course was very well-received and appeared to have met some of its principal objectives. This is attested to by the extremely positive comments that the participants presented during their evaluation of the course, both anonymously and otherwise. It seemed to have had an impact not only on their academic lives, but perhaps more important, on their personal lives as well. In the words of one participant, "...we have been able to enrich ourselves and now look forward to improve the lives of those around us...".

LIST OF PARTICIPANTS OF THE FIFTH NIAS COURSE FOR TEACHERS

- | | | | |
|-----|---|-----|--|
| 01. | Dr K. Surekha Rao
Lecturer
Dept. of Social Work
Sri Padmavati Mahila Visvavidyalayam
Tirupati - 517 502. Andhra Pradesh | 06. | Ms Jayashree Handigol
Faculty
Dept. of Agricultural Economics
College of Agriculture
University of Agricultural Sciences
Dharwad - 580 005
Karnataka |
| 02. | Dr S. Sivaraj Pandian
Lecturer
Dept. of Education
Arunachal University
Itanagar - 791 111. Arunachal Pradesh | 07. | Mr Shiva Swamy
Lecturer
Dept. of History and Archaeology
Kuvempu University
Shankarghatta - 577 451
Karnataka |
| 03. | Dr Z.A. Haider
Senior Scientist/ Associate Professor
Dept. of Plant Breeding & Genetics
Faculty of Agriculture
Birsa Agricultural University
Ranchi - 834 006. Bihar | 08. | Dr G. Viswanathappa
Lecturer in Education
Regional Institute of Education
(NCERT)
Mysore - 570 006
Karnataka |
| 04. | Mr M.U. Paily
Lecturer
G.V.M.'s College of Education
Goa University
P.B. No. 139, Farmagudi
Ponda - 403 401. Goa | 09. | Dr T.B. Karegoudar
Reader
Dept. of Post-Graduate Studies
and Research in Biochemistry
Gulbarga University
Gulbarga 585 106
Karnataka |
| 05. | Ms Urmila A. Thaker
Reader
Post-Graduate Dept. of Library
and Information Science
Sardar Patel University
Vallabh Vidyanagar - 388 120
Gujarat | | |

10. Mr P. Haridasan
Lecturer in Zoology
Government Sanskrit College
Pattambi - 679 306
Kerala
11. Dr K. Mohandas
Project Officer in Adult and
Continuing Education
CACEE/PERC
University of Kerala
Kariavattom
Thiruvananthapuram 695 581
Kerala
12. Mr M.V. Kanakaraj
Assistant Professor in Economics
Government College, Pendra
P.O. Pendra
Dist. Bilaspur - 495 119
Madhya Pradesh
13. Mr Gopal S. Gond
Lecturer in Biochemistry
Gurunanak College of Science
(Nagpur University)
Ballarpur. Maharashtra
14. Ms Nusrat J. Shaikh
Principal-in-charge
Mahatma Education Society's
Vidyadhiraja College of Physical
Education and Research
Sector 8, New Panvel
Dist. Raigad. Maharashtra
15. Dr Erbanoris Jyrwa
Project Officer
Centre for Adult and
Continuing Education
North-Eastern Hill University
Mayurbhanj Complex, Nongthymmai
Shillong - 793 014
Meghalaya
16. Mr Sukumar Dey
Senior Lecturer in Physics
Tura Government College
Tura - 794 001. Meghalaya
17. Mr Laltanpuia Rengsi
Dept. of Geography
Government Kolasib College
Kolasib - 796 081
Mizoram
18. Dr N.D. Chandra
Reader
Dept. of English
Nagaland University
Kohima - 797 001
Nagaland
19. Mr Bidyadhar Behera
Lecturer in Logic and Philosophy
D.A.V. College, Titilagarh
P.O. Titilagarh - 767 042
Orissa
20. Dr K. Natchimuthu
Assistant Professor
Rajiv Gandhi College of Veterinary
and Animal Sciences
Kurumbapet - 605 009
Pondicherry
21. Dr M.S.Hadda
Assistant Professor
Dept. of Soils
Punjab Agricultural University
Ludhiana 141 004
Punjab
22. Dr K. Raja Mohan Rao
Lecturer in Economics
Gandhigram Rural Institute
Gandhigram - 624 302
Tamil Nadu
23. Dr Juliet Vanitharani
Lecturer
Dept. of Zoology
Sarah Tucker College
Tirunelveli - 627 007
Tamil Nadu
24. Dr Achal Kumar Gaur
Lecturer
Dept. of Economics
Banaras Hindu University
Varanasi - 221 005
Uttar Pradesh
25. Dr Kishore Kumar Banerjee
Demonstrator
Dept. of Occupational Health
& Public Health
All India Institute of Hygiene
& Public Health
110, C.R. Avenue
Calcutta - 700 073
West Bengal

OTHER SEMINARS/WORKSHOPS

1. July 22 - 30, 1997 - National Law School of India University conducted a one-week Refresher Course on "Intellectual Property" for Professors of Indian Institute of Technology and Indian Institute of Management .
2. August 12 - 14, 1997 - Hindustan Lever Limited conducted three day in-house programme on "Creativity Workshop" for officers of Hindustan Lever Limited.
3. August 22-24, October 2-5 and November 7-9, 1997 - Landmark Education - India, conducted its Forum.
4. August 25 - 29, 1997 - The Foundation for Research in Health Systems, Ahmedabad conducted a workshop. This workshop was on sharing research findings on the status on health and health behaviour of Adolescent men and women carried out by this organisations.
5. September 26 - 27, 1997 - Sales and marketing Council of WIPRO Corporation conducted a two day seminar on "Relationship Marketing".
6. November 11- 12, 1997 - Rajiv Gandhi Institute of Contemporary Studies (RGICS) in collaboration with the China Association for International Friendly Contact (CAIFC), Beijing conducted a two-day Seminar on "Economic Reforms, Poverty Alleviation and Urbanisation: A comparative study of India and China". Both Dr. Raja Ramanna and Dr. R. Narasimha attended the Seminar.
7. November 16-21, 1997 - Tata Institute of Fundamental Research in collaboration with National Centre for Biological Sciences conducted Indo-Israel meeting on "Human Genetics".
8. December 12 - 16, 1997 - Tata Institute of Fundamental Research in collaboration with National Centre for Biological Sciences conducted a Workshop on "Plant Development".

GUEST SPEAKERS

1. July 18, 1997 - "Harmonium Solo Concert" by Harmonium Vadana Vichaksana Rathna Shri C. Ramadass.
2. July 22, 1997 - A lecture on "Jung and Consciousness" by Prof George M. Williams, Senior Professor of Asian Religion, California State University, Chico.
3. July 29, 1997 - A lecture on "Spirituality and Psychopathology: Theoretical Reflections and Clinical Observations" Dr Alan Roland, Psychoanalyst, Columbia University, New York, USA.
4. August 11, 1997 - A lecture on "Subaltern Realism: International Relations Theory meets the Third World" by Dr Mohammad Ayoob, Distinguished University Professor of International Relations at Michigan State University, USA.
5. September 24, 1997 - A lecture on "Emotional Memory and Memory of Emotions: Are they the same at the Cellular level?" by Dr Sumantro Chatterjee, Department of Brain and Cognitive Sciences, MIT, USA.

FACULTY LECTURE PROGRAMME

October 22, 1997 - "Discreteness & Continuity in the Systematics of the Fundamental Particles" by Dr Raja Ramanna.

PUBLICATIONS

(JULY 1, 1997 TO DECEMBER 31, 1997)

ANITHA, B K - RESEARCH ASSOCIATE

Co-authored with Srilatha Batliwala and Anita Gurumurthy., "The Status of Rural Women In Karnataka - A Summary Report of Preliminary Findings", September 1997.

KAPUR, R L - PROFESSOR

1. Article on "The Roots of Torment" published in **India Today**, November 24, 1997.
2. Co-authored with Susmita Subramanyam 'Creativity in Indian Science' in **Psychology and Developing Societies**, Allahabad, Vol. 9, No.2, 1997.

KUMAR, ARVIND
RESEARCH ASSOCIATE

Article on "Indo-US Ties after the cold war" in **Deccan Herald**, December 20, 1997

MENON, SANGEETHA
RESEARCH FELLOW

The ontological pragmaticity of karma in Bhagavad Gita, **Journal of Indian psychology**, No.1, January, 1998.

OLLAPALLY, DEEPA, M
FELLOW

1. Article on "U.S. Takes Advantage of CTBT Loopholes", **Times of India**, October 2, 1997.
2. Article on "Identity Politics and the International System", **Nationalism and Ethnic Politics**, Vol. 2, No. 4, 1996, pp. 479-499.

RAMACHANDRA, K
HONORARY VISITING PROFESSOR

Co-authored with R. Balasubramanian, "Two Remarks on a paper by Jan Moser" **Bulletin of the Calcutta Mathematical Society**, Vol. 89 (1997), 199-208.

SARUKKAI, SUNDAR
RESEARCH FELLOW

1. Paper on *The Other in Anthropology and Philosophy*, **Economic and Political Weekly**, Vol. XXXII, No. 24, June, 1997.
2. Paper on *Symbols of Truth: Objectivity and Reality in Science*, Invited Paper presented at the National Seminar on 'Science and Tradition: Explorations in the Indian Context', December 22-24, 1997, IIT, Kanpur.

SHETTY, P K - RESEARCH FELLOW

1. "Effect of Pendimethalin on soil respiration and enzyme activities in the rhizosphere of wheat" **Indian J. Environ. and Toxicol.**, 7(1): 39-41, 1997.
2. "Effect of Pendimethalin on Mung Bean (*Vigna radiata* (L) Walzek) - *Bradyrhizobium Symbiosis*" **J. Soil Biol, Ecol.**, 16(2): 97-102, 1997.
3. Article on "Pesticide Pollution: Problems and approaches to remediation", **Deccan Herald**, November 30, 1997.

SINHA, ANINDYA
RESEARCH FELLOW

1. The Evolving Female: A Life-History Perspective. A review of the book edited by M.E. Morbeck, A. Galloway and A.L. Zihlman, Princeton University Press, 1997. **Current Science**, in press.
2. Co-authored with P. Satishchandra, G.R. Ullal, and S.K. Shankar, 1997. Genetics of hot water epilepsy. In: *Genetics of Epilepsy* (ed. S.F. Berkovic, Austin Hospital, Melbourne, Australia), in press.

SREEKANTAN, B V
DR S RADHAKRISHNAN
VISITING PROFESSOR

1. "A New measurement on the composition of primary cosmic ray flux over the energy range 10^{14} - 10^{15} eV with the grapes II EAS array at Ooty" (co-author with S.C. Tonwar, S.K. Gupta, D.K. Mohanty, R. Srivatsan and K. Sivaprasad). 25th International Cosmic Ray Conference, 1997. Contributed papers. Volume 4.
2. "A study of fine features in the energy spectrum of primary cosmic rays over the energy range 1×10^{14} - 3×10^{16} eV with the grapes III EAS array at Ooty" International Cosmic Ray Conference, 1997. Contributed papers. Vol. 1.
3. "A search for Cosmic Gamma Ray bursts at GeV Energies from simultaneous Observations with Grapes II and Grapes III arrays at Ooty" 25th International Cosmic Ray Conference, 1997. Contributed papers. Vol. 3.
4. "Grapes III: A new large EAS experiment" at Ooty (co-author with N Ito, Y. Aikawa, S.K. Gupta, Y. Hayashi, N. Ikeda, S. Kawakami, S. Miyake, D.K. Mohanty, M. Sasano, K. Shivaprasad and S.C. Tonwar). 25th International Cosmic Ray Conference, 1997. Contributed papers, Vol. 7.

SRINIVAS, M N
J R D TATA VISITING PROFESSOR

1. "Practicing Social Anthropology in India", **Annual Review of Anthropology**, U.S.A., Vol. 26, 1997.

2. New editions of "The Remembered Village", Oxford University Press and "Caste: Its Twentieth Century Avatar", October, 1997.

SUNDARAM, C V - HONORARY VISITING PROFESSOR

Article on 'Remembering Professor Brahm Prakash - the first Indian Head of the Department', contributed to the Golden Jubilee Souvenir of the Department of Metallurgy Indian Institute of Science, Bangalore (July, 1997).

LECTURES / ADDRESSES PRESENTATIONS, ETC.

(JULY 1, 1997 TO DECEMBER 31, 1997)

ANASUYA DEVI, H K - FELLOW

A. LECTURES:

1. October 23, 1997 - Lecture on "Artificial Intelligence and its applications" for the participants of the 5th NIAS Course for University and College Teachers.
2. November 28, 1997 - Lecture on "Role of computers in deciphering ancient scripts" held at National College organised by The Bangalore Science Forum.

ANITHA, B K - RESEARCH ASSOCIATE

A. LECTURE:

1. October 17, 1997 - Lecture on "Reproductive Rights" A Documentary and Discussion for the participants of the 5th NIAS Course for University and College Teachers.

B. COLLABORATIONS: GOVERNMENT/NGOs:

1. Review of the Status of the Block Cluster Resource Centres of the District Primary Education Programme in Karnataka, July 1997.
2. Appraisal of the field programmes of the Indo-Dutch Project Management Society (IDPMS), July 1997.

C. OTHER ACTIVITIES:

1. October 7, 1997 - Attended a one day training on participatory methods at Hengasara Hakkina Sangha.

2. October 28, 1997 - Participated in a preparatory meeting organised by the Community Health Cell, for the initial discussion on the Health for All by 2000 document.

GURUMURTHY, ANITA - RESEARCH ASSOCIATE

A. LECTURES/TALKS:

1. October 17, 1997 - Lecture on "Reproductive Rights" A Documentary and Discussion for the participants of 5th NIAS Course for University and College Teachers.
2. October 22, 1997 - Gave a talk on WOPRA's work, which was broadcast in All India Radio, Bangalore.

B. OTHER ACTIVITIES:

1. July, 1997 - Attended the final module of the Course for NGOs on Globalisation and the Challenges facing NGOs at IIM.
2. October 7, 1997 - Attended a one day training on participatory methods at Hengasara Hakkina Sangha.
3. Edited the Madhyam Journal Vol.XII no.1 July and August 1997. Design of a pre-coded questionnaire for a field study of women entrepreneurs for IDPMS, July to September 1997.

KAPUR, R L - PROFESSOR

A. LECTURES:

1. September 26, 1997 - A talk on "Relief of distress according to Indian tradition" given at Douglas Hospital, Montreal, Canada.
2. September 29, 1997 - A lecture on "Qualities of a good psychotherapist" given at Jewish Hospital, McGill University, Canada.
3. October 20, 1997 - A talk on "Suicide amongst students" during Fifth NIAS Course for University and College teachers.
4. November 30, 1997 - A lecture on "Working Towards Mental Health" at Ashirvad, Bangalore.
5. December 9, 1997 - Spoke on "Preparing Youth for the 3rd Millennium: Socio-cultural Aspects" at Jyothi Nivas College, Bangalore.

6. December 13, 1997 - A lecture on "Violence Amongst Youth" at Bishop Cotton Girls High School, Bangalore.
7. December 21, 1997 - A lecture on "Yoga for Psychiatric Disorder" at the International Yoga Conference organised by Vivekananda Yoga Research Foundation, Bangalore.
8. December 26, 1997 - A talk on "An Experiential Study of Yoga" at the World Householder's Yoga (WHY) Conference organised by International Board of Yoga at Bombay.
3. October 8, 1997 - "Structure and control of turbulence in combustion" Tenth ONR Propulsion meeting, Monterey, USA.
4. October 13, 1997 - "Down-to-Earth Temperatures: a Resolution of the Ramdas Paradox" Seminar at the Georgia Institute of Technology, USA.
5. October 14, 1997 - "Boundary layer stability: A new approach to the linear theory" Seminar at the Florida State University, USA.
6. November 3, 1997 - "Meteorological data", Special discussion meeting on Scientific Data of Public Interest, Indian Academy of Sciences Annual Meeting, Hyderabad.

MENON, SANGEETHA RESEARCH FELLOW

A. LECTURES:

1. July 7, 1997 - Presented a paper on "Towards Saankarite approach to consciousness: A discussion in the context of recent interdisciplinary scientific perspectives" at the Panel on Consciousness and Science at the ninth international Vedanta Congress organised by Miami University at Rishikesh.
2. October 15, 1997 - Lecture on "Evolution of Mind and Consciousness in Indian thought" for the participants of the 5th NIAS Course for University and College Teachers.
7. November 11, 1997 - "Turbulence" Keynote lecture at the RANS/LES/DNS Workshop, Indian Institute of Science, Bangalore.
8. November 18, 1997 - Inaugural talk at the Workshop on Tattiriyopanisad, Academy of Sanskrit Research, Bangalore.
9. December 15, 1997 - Inaugural talk at the 8th International Workshop on Technical and Scientific Aspect of MST Radar, Bangalore.

MOHAN, SHANTHA, N - FELLOW

A. OTHER ACTIVITIES:

1. November 7, 1997 - Attended the Selection Board Meeting in Regional Vocational Training Institute for Women.
2. November 14, 1997 - Attended the Board of Women Studies meeting in NMKRV College.

NARASIMHA, RODDAM - DIRECTOR

A. LECTURES:

1. September 4, 1997 - "Geospheric Challenges Foundation Day Lecture", Institute of Physics, Bhubaneswar.
2. September 7, 1997 - "Minnowbrook I and After" Inaugural lecture, also on September 10, 1997 - Valedictory lecture, Second Minnowbrook Workshop on Boundary Layer Transition Turbomachines, Syracuse University, USA.
4. October 7-8, 1997 - Lecture on "Socio-Political Sources of Human Rights in American Foreign Policy" for International Seminar on Human Rights: South Asian and American Perspectives", School of International Relations, Mahatma Gandhi University, Kerala.
5. October 16, 1997 - Lecture on "Arms, Politics and the Asian Balance of Power", to the participants of the 5th NIAS course for University and College Teachers.

**RAJAGOPAL, S - HOMI BHABHA
VISITING PROFESSOR**

1. July 29, 1997 - Lecture on Physical Protection and Control of Fissile Material - Indian Practice and Perspective" for Workshop on "A Comparative Analysis of Approaches to the Protection of Fissile Materials", organised by Stanford University.
2. October 24, 1997 - Lecture on "Energy Resources of India" to the participants of the 5th NIAS Course for University and College Teachers.

**RAMACHANDRA, K
HONORARY VISITING PROFESSOR**

A. LECTURES:

1. October 25, 1997 - Srinivasa Ramanujan Medal Lecture at Faculty Hall, IISc, Bangalore.
2. December 12, 1997 - Lecture on "A Theorem of K.F. Roth at TIFR Centre, Bangalore.

**SARUKKAI, SUNDAR
RESEARCH FELLOW**

A. LECTURES:

1. September 3, 1997 - Lecture on "The Meaning of Scientific Laws", Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore.
2. October 10, 1997 - Lecture on "Philosophy of Science", for the participants of the 5th NIAS Course for University and College Teachers.

B. OTHER ACTIVITIES:

1. Co-ordinator, NIAS Course for IFS Probationers, September 15 - 20, 1997.
2. Visited Indian Institute of Advanced Study, Shimla, November 26 - 31, 1997.

SHETTY, P K - RESEARCH FELLOW

A. LECTURES:

1. July 28, 1997 - Lecture on "Impact of Pesticides on Human Health and the Environment" at the Bangalore Science Forum, The National College Building, Basavanagudi, Bangalore.
2. October 23, 1997 - Lecture on "Pesticides and the Bio-environment" for the participants of the 5th NIAS course for University and College Teachers.

**B. RESEARCH PAPER IN SEMINAR/
CONFERENCE:**

1. Symbiotic Variability in Genotypes of Cowpea (*Vigna unguiculata* (L.) Walp) as influenced by *Bradyrhizobium* at the **International Conference on Ecological Agriculture: Towards Sustainable Development**, held at Chandigarh during November 15 - 17, 1997, organised by Indian Ecological Society and Centre for Research and Industrial Development.
2. Bioremediation - A safe Eco-technology, at the **International Seminar on Eco-restoration, Biodiversity Conservation and Sustainable development** held at Indian Institute of Science, Bangalore during 6-8 December, 1997, organised by the Environmental Research Academy, International and International Socio Environmental Awareness Studies.

**SINHA, ANINDYA
RESEARCH FELLOW**

A. LECTURES:

1. July 25, 1997 - Invited lecture on "Almost minds: Cognition in wild bonnet macaques", Centre for Cellular and Molecular Biology, Hyderabad.
2. September 1, 1997 - Invited lecture on "Social cognition in wild bonnet macaques", Centre for Ecological Sciences, Indian Institute of Science, Bangalore.
3. October 14, 1997 - Lecture on "Animal minds: How do they differ from ours?", for the participants of the 5th NIAS Course for University and College Teachers.

B. OTHER ACTIVITIES:

1. Co-ordinator of the Fifth NIAS Course for University and College Teachers, National Institute of Advanced Studies, Bangalore, October 6 to November 1, 1997.

**SREEKANTAN, B V
DR S. RADHAKRISHNAN, PROFESSOR**

A. LECTURES:

1. September 16, 1997 - Lecture on "Modern Astronomy" for IFS Probationers at NIAS.

2. October 10, 1997 - Lecture on "Century of Particles and Radiations" for the participants of the 5th NIAS Course for University and College Teachers.
3. November 19, 1997 - Valedictory Address on "Oneness in Upanishads and in Science" at the Seminar on "Taittiriya Upanishad" at IISc under the auspices of Academy of Sanskrit Research.
8. October 24, 1997 - Lecture on 'Material Resources in India', Fifth NIAS Course for University and College Teachers at NIAS.
9. October 25, 1997 - Chaired Panel Discussion on 'The Conservation of India's Cultural Heritage', Indira Gandhi Centre for Atomic Research, Kalpakkam.
10. November 16, 1997 - Chaired Technical Session on 'The Indian Heritage in Iron and Steel Technology', Annual Meeting of the Indian Institute of Metals, Jamshedpur.

SUNDARAM, C V
HONORARY VISITING PROFESSOR

A. LECTURES:

1. July 21, 1997 - Lecture on 'Ore to Nuclear Material' at the Annual Meeting of the Indian Nuclear Society, Bombay.
2. July 23, 1997 - Participation in the Function organised by the Gandhi Centre for Science and Human Values, Bharatiya Vidya Bhavan, Bangalore - to release the Book on 'Mukunda Mala' and 'Shivanandalahari' (with English translations by Dr Raja Ramanna and Prof C.V. Sundaram).
3. July 26, 1997 - Lecture on 'Electro-metallurgy of Common and Less-Common Metals - the Indian Scene', as Prof T.L. Ramachar Memorial Lecture, Electrochemical Society of India, IISc, Bangalore,.
4. August 6, 1997 - Lecture on 'The Legacy of Homi Bhabha and Vikram Sarabhai', at the Science Club Atomic Minerals Division, DAE, Hyderabad.
5. September 9, 1997 - Participation as Chairman of the Extractive Metallurgy Committee, for discussions on the processing of Ocean Nodules, Department of Ocean Development, New Delhi.
6. September 17, 1997 - Lecture on 'Metallurgy in India - Ancient and Modern', at the special course for IFS Probationers at NIAS.
7. October 22, 1997 - Chaired Panel Discussion on Development in India, 'The vision of Mahatma Gandhi, Jawaharlal Nehru and Babasaheb Ambedkar', Fifth NIAS Course for University and College Teachers at NIAS.
11. December 6, 1997 - A lecture on 'Nuclear Energy Programme in India and Chemical Metallurgy of Nuclear and Special Materials', at the refresher course for chemistry teachers, University of Mysore.
12. December 11, 1997 - Inaugural address at the National Welding Seminar, Indian Institute of Welding, Bangalore.

SUBRAMANYAM, SUSMITA
RESEARCH ASSOCIATE

A. LECTURE:

1. October 25, 1997 - Lecture on "Creativity in Indian Science" for the participants of the Fifth NIAS Course for University and College Teachers.

VASAVI, A R - FELLOW

A. LECTURES:

1. August 30, 1997 - Invited lecture on "Nation, Youth and Identities", for Public Forum on Education, Sutradar, Bangalore.
2. September 18, 1997 - Lecture on "Development: Local Implications" for Indian Foreign Service Probationers at NIAS.
3. September 24, 1997 - Invited lecture on "Ethnography for Education Research" for the NCERT, New Delhi sponsored course on Education Research for Southern Region Teachers, Bangalore.
4. October 27, 1997 - Lecture on "Communities, Identities and Institutions" for the participants of the 5th NIAS Course for University and College Teachers.

VIGNESH, V R
TECHNICAL ASSISTANT

A. SEMINAR:

1. December 4-5, 1997 - Attended a Seminar on "Web-technology and Multimedia, organised by Tata Consultancy Services.

VISITS ABROAD

Prof. B.V. Sreekantan

Prof. Sreekantan has participated in the International Conference on Cosmic Rays in Durban in July 1997, where some of the work he is involved in were presented.

Prof. M.N. Srinivas

During a three-month visit to the U.S., Prof. Srinivas delivered a series of lectures at various universities. The themes and titles of the talks and lectures were, "Caste: A Systematic Change?", "Social Change in India", "Roots of Indian Pluralism", "Some thoughts on Memory Ethnography". The talks were delivered at:

1. MIT, Cambridge, Massachusetts - September, 24.
2. Harvard University, South Asian Studies Center - September, 26.
3. McGill University, Canada - October, 7.
4. Concord University, Canada - October, 8.
5. University of Winnipeg, Canada - October, 9.
6. University of Manitoba, Canada - October, 10.
7. Harvard University, Department of Anthropology - October, 15.
8. University of Illinois/Urbana-Champaign - November, 5.
9. University of Chicago - November, 6.
10. A key note speaker and respondent at the International Conference on "Rethinking Equality in the Global Society", Washington University, St. Louis, Missouri - November, 8 - 10

Prof. S. Rajagopal

July 28-30, 1997 - Attended the Conference on "A Comparative Analysis of Approaches to the Protection of the Fissile Materials", organised by

the Center for International Security and Arms Control, Stanford University, U.S.A.

Dr. Deepa M. Ollapally

September 11-14, 1997 - Attended the 39th Annual Conference of the International Institute for Strategic Studies, London, held in Singapore. She was a member of Committee 8: India and its Asian Role.

Dr. B.K. Anitha

September 15-30, 1997 - Attended a training of trainers workshop organised by Global Women in Politics for the Asia Pacific region in Subic, Philippines.

Prof. R.L. Kapur

September - October, 1997 - Visited Canada and delivered two lectures at McGill University and also negotiated a possible project on "A Psychological Study of Spirituality".

THOSE WHO JOINED US

1. August 1, 1997 - Prof Roddam Narasimha taken over as the Director of NIAS.
2. August 27, 1997 - Mr Anand joined the Unit of Epigraphy Centre as Project Assistant.
3. September 16, 1997 - Ms K. Nagarathna joined as P.A. to the Director (on deputation from IISc).
4. November 3, 1997 - Dr N. Shantha Mohan joined as a Fellow and In-charge of the Women's Policy Research and Advocacy (WOPRA) Unit.

THOSE WHO LEFT US

1. July 31, 1997 - Dr Raja Ramanna laid down office as Director and stepped out to concentrate on his research pursuits. Dr Ramanna will continue as Vice-Chairman of the Council of Management of NIAS. He has recently been nominated as a Member of the Rajya Sabha.
2. July 31, 1997 - Ms Srilatha Batliwala, responsible for bringing up the Women's Policy Research and Advocacy (WORPA) Unit of NIAS, has joined as a Program Officer in the Ford Foundation, New York.

3. November 30, 1997 - Prof C.V. Sundaram, the first occupant of the Homi Bhabha Visiting Chair, has relinquished charge of this chair.
 4. December 31, 1997 - Ms Anita Gurumurthy, Research Associate of WOPRA Unit has left the Institute.
 5. December 31, 1997 - Ms Chandana S. Wali, Stenographer of WOPRA Unit has left the Institute.
- They will be missed by NIAS for long time to come.

HONOURS AND AWARDS

PROF K. RAMACHANDRA HONORARY VISITING PROFESSOR

1. Elected as an Honorary Fellow of Forum D'Analystes (Chennai)
2. Srinivasa Ramanujan Medal of I.N.S.A.
3. Selected as 'Senior Scientist of I.N.S.A. with effect from Janaury 1, 1998.

DR P.K. SHETTY RESERACH FELLOW

1. Elected as Fellow of the **Environmental Research Academy, International**, Visakhapatnam.

LETTERS TO THE EDITOR

Dear Editor,

Every one has got built-in 'receptors' to perceive and conceive the events going around. To keep pace with fast developments taking place across the earth, one has simultaneously to upgrade these receptors. In this era of high specialisation, what as a Teacher I feel, only a few receptors get upgraded while the rest become out-dated and go in dormancy. The fifth NIAS course on "An Integrated Approach to Knowledge and Information" was designed and executed in such a way that helped each participant to upgrade the junk dormant receptors in a short span of four weeks only. The inclusion of "yoga" in the course, what we all felt, made this job of "upgradation" easy for us. I take this opportunity to thank

members of NIAS family for holding such an innovative course and the same time to the speakers also for sharing their vast knowledge and experience. I thank you all once again.

Yours sincerely,

Z.A. HAIDER
Participant
5TH NIAS COURSE FOR TEACHERS

Dear Editor,

The month that I spent in NIAS attending the 5th NIAS Course for Teachers has been a fantastic experience, unique in its different dimensions. Initially, I was little reluctant to attend another refresher course because it would only involve receiving a certificate with no constructive knowledge added. Also, the insurgency problem in the North-East did not encourage me to undertake a trip to Bangalore. It was only because of the kindness and consideration of NIAS in arranging my journey and the authorities at NEHU that I decided to attend the course.

It was a rare experience to participate in the course which was so systematic in its academic organisation and unique in having a mixture of participants from the Sciences and the Humanities. Let me now briefly list what I personally gained most during this course.

The panel discussions addressed a variety of relevant themes, most of which we were not aware of. They gave me an insight into the various problems that the country is facing today. Secondly, our participation in the self-introductory talks stimulated original thinking and made each individual more aware of oneself and of the others. These talks also inspired a feeling of greater involvement and self-confidence as a teacher. Thirdly, the presentation of the group projects was a valuable experience. Besides gaining knowledge of some important national problems and their solutions, it gave us a sense of responsibility towards others participating in the projects.

One suggestion that I have is that since some of the participants are from the north-eastern region of the country, it would be meaningful if the future courses reflect on some issues connected with this region and its problems.

The visits that we made to the different scientific and social organisations were very exciting. At the same time, it also made me ask what I had done for the country. What also touched me very much was the involvement of women in some of these organisations. They were very inspiring moments.

On a more personal front, I would like to thank all the members of NIAS for their cordiality towards us. The discipline that I saw here seemed to me as if each individual had been trained before assuming their duty. I would also like to express my gratitude for the kindness and consideration shown by the faculty. My thanks also to Mr Javed

for introducing me to Yoga. It has become a valuable addition to my life.

Finally, the knowledge and experience that I received from NIAS during the course has enriched me in many many ways. I wish the Institute all the best for the future.

Yours sincerely,

ERBANORIS JYRWA

Participant from NORTH-EAST
5TH NIAS COURSE FOR TEACHERS

*The NIAS NEWS Wishes its Readers
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