
OBITUARY

Prof. Harish-Chandra (1923-1983)

PROFESSOR HARISH-CHANDRA, one of the most outstanding mathematicians passed away at Princeton, New Jersey, USA on October 17, 1983 of a heart attack. He was aged 60.

After taking his M.Sc in Physics from the University of Allahabad, Harish-Chandra joined the Indian Institute of Science, Bangalore for research in quantum mechanics and particle physics. There the late Dr Homi Bhabha collaborated with him. After a stay for a year or so at Bangalore, Harish-Chandra left for Cambridge, England where he worked with Professor P. A. M. Dirac. He took his Ph.D. in 1946 and went to the Institute for Advanced Study at Princeton as a temporary member.

Prof. Harish-Chandra began his work on the theory of elementary particles, but in 1949 he switched over from physics to mathematics. His main interest was the study of infinite-dimensional representations, they first started in quantum mechanics during the 1930s when it was necessary to analyse the effect of symmetry on the motions of particles and waves. For these representations Prof. Harish-Chandra put forward a theory with implications for many domains from geometry to pure theory.

He then switched over to the study of Lie groups and Lie algebras. He spent two years (1949-51) as a Jewett Fellow at the Harvard University and then

joined the Mathematics Faculty of the Columbia University, New York. He spent the year 1952-53 as a visiting professor at the Tata Institute of Fundamental Research, Bombay and then left for New York. He joined the Faculty of the Institute for Advanced Study at Princeton as a permanent Professor in the late sixties

Prof. Harish-Chandra's work centres around semi-simple Lie groups, their structure and representation and their ramifications in Number theory and automorphic functions. His name has become synonymous with semi-simple Lie groups.

Prof. Harish-Chandra received many honours. He was elected Fellow of the Royal Society, London, National Academy of Sciences, USA, Indian Academy of Sciences, Bangalore and Indian National Science Academy, New Delhi. He was also an honorary Fellow of the Tata Institute of Fundamental Research.

Harish-Chandra was awarded the Cole Prize of the American Mathematical Society and the Srinivasa Ramanujam medal of the Indian National Science Academy.

A very great mathematician and an extremely warm and human person, his passing away is a great loss of to his family (wife and two daughters), the mathematical community all over the world and to his friends who loved, admired and respected him.

ANNOUNCEMENT

REGIONAL TRAINING COURSE IN STRUCTURAL GEOLOGY

A Regional Training Course in Structural Geology sponsored by the UNESCO and Department of Science and Technology, is being organised at the Wadia Institute of Himalayan Geology, 15 Municipal Road, Dehra Dun 248 001 (India) between 13 February-25

March 1984. Geoscientists who are interested in participating in the training course are requested to contact Dr V. C. Thakur (Course Organiser), Wadia Institute of Himalayan Geology, 15 Municipal Road, Dehra Dun.

THE P. C. MAHALONOBIS MEDAL 1984

The P. C. Mahalonobis Medal 1984 is awarded to Professor Govind Swarup, for his outstanding contri-

butions in the field of radio/astronomy and associated technologies in electronics and large antenna systems.

THE SISIR KUMAR MITRA LECTURESHIP 1984

The Sisir Kumar Mitra Lectureship 1984 is awarded to Professor (Mrs) Asima Chatterjee, for her out-

standing contributions in the field of Chemistry of Plant Products.

THE BIRESH CHANDRA GUHA LECTURESHIP 1984

The Biresch Chandra Guha Lectureship 1984 is awarded to Prof. B. K. Bachhawat, for his pioneering contributions to neurochemistry, protein energy mal-

nutrition, on liposomes as specific target oriented delivery systems, glycolipids, glyco-proteins and lectin enzymes immuno assays.

PROFESSOR K. RANGADHAMA RAO MEMORIAL LECTURE FOR 1983

The Professor K. Rangadhama Rao Memorial Lecture 1983 is awarded to Dr N. A. Narasimhan, for his

outstanding contributions in the field of Spectroscopy.

PROF. G. P. CHATTERJEE MEMORIAL LECTURESHIP FOR THE YEAR 1983

The Professor G.P. Chatterjee Memorial Lecture-ship for the year 1983 has been awarded to Dr B. N.

Singh, for his outstanding contributions in the studies of Pathogenic and non-pathogenic amoebae.

PROF. B. D. TILAK LECTURE AWARD FOR 1983

The Prof. B. D. Tilak Lecture Award for 1983 is secured by Professor P. V. Sukhatma, for his outstanding contributions to Rural Economy and Life

through innovative and effective application of Science and Technology.

INTERNATIONAL SYMPOSIUM ON BIOMOLECULAR STRUCTURE AND INTERACTIONS

Under the auspices of the Department of Molecular Biophysics, Indian Institute of Science, Bangalore, the International Symposium on 'Biomolecular Structure and Interactions' will be held during 17-22, December 1984, at the Indian Institute of Science, Bangalore.

The Symposium will focus on recent advances in the theoretical and experimental methods used for the study of biomolecular structure, function and interaction. The broad areas to be covered include: Theory of biopolymer conformation and studies on protein, polypeptides cyclic peptides and peptide antibiotics, polysaccharides, oligonucleotides and nucleic acids.

Dynamics and folding of proteins, polymorphism and structural transitions of nucleic acids and oligonucleotides.

Application of quantum chemistry to biomolecules.

Structure and interactions of biomolecules using Optical and Spectroscopic techniques.

X-ray crystallography and fibre diffraction studies of biological macromolecules.

Synthesis and physicochemical studies of biologically active model peptides and oligonucleotides.

Structural studies on glycoproteins, protein-nucleic acid complexes, viruses, etc., structure and organisation of chromatin.

Studies on membrane structure, trans-membrane channels and carriers, membrane transport and cell surface.

For details please consult: Prof. V. Sasisekaran, Molecular Biophysics Unit, Indian Institute of Science, Bangalore 560 012.

INDIAN ACADEMY OF SCIENCES, BANGALORE 'YOUNG ASSOCIATES'

The Indian Academy of Sciences has recognised twenty two outstanding scientists below the age of 35 working in various areas of science, medicine and engineering as 'Young Associates'. This scheme has been initiated by the Academy in order to promote and nurture young talented scientists and also to ensure a good future for science in the country. The 'Young Associates' will be given subscription free journals of the Academy and will be free to participate in the various activities of the Academy. This recognition would also help them in furthering their research career. The recognition as 'Young Associates' would be for a maximum period of 5 years and the upper age limit would be 35 years. The 'Young Associates' will be formally introduced to the Fellows of the Academy on 7 November, 1983 during the annual meeting of the Academy at Pune.

The persons recognised as 'Young Associates' are: *Physics*-1. Dr Deepak Dhar, (32 years, Theoretical Physics Group, TIFR, Bombay 400 005), 2. Dr Mustansir Barma, (33 years, Theoretical Physics Group, TIFR, Bombay 400 005), 3. Dr Ramesh Narayan, (33 years, Raman Research Institute, Bangalore 560 080), 4. Dr. H. R. Krishna Murthy, (32 years, Department of Physics, Indian Institute of Science, Bangalore 560 012); *Astronomy and Astrophysics*-1. Dr Ajit Kembhavi, (32 years, TIFR, Bombay 400 005), 2. Mr. K. R. Anantharamaiah (31 years, Raman Research Institute, Bangalore 560 080), 3. Dr Ashok Pati, (27 Years, Indian Institute of Astrophysics, Bangalore 560 034). *Biology*-1. Dr L. C. Padhy, (34 years, Molecular Biology Unit, Tata Institute of Fundamental Research, Bombay 400 005), 2. Dr Veronica F.

Rodrigues, (30 years, Research Associate, Molecular Biology Unit, Tata Institute of Fundamental Research, Bombay 400 005), *Ecology* 1. Dr Raghavendra Gadagkar, (30 years, Centre for Theoretical Studies, Indian Institute of Science, Bangalore 560 012), *Mathematics*-1. Dr R. Balasubramanian, (32 years, School of Mathematics, TIFR, Bombay 400 005), 2. Dr M. V. Nori, (32 years, School of Mathematics, TIFR, Bombay 400 005), *Crystallography*-1. Dr T. N. Guru Row, (32 years, Physical Chemistry Division, National Chemical Laboratory, Pune 411 008), *Engineering*-1. Dr J. B. Joshi, (34 years, Department of Chemical Technology, University of Bombay, Bombay 400 019), 2. Dr T. Balakrishna Bhat, (34 years, Defence Metallurgical Research Laboratory, Kanchanbagh, P.O. Hyderabad 500 258), 3. Mr. K. Neelakantan, (29 years, Instrumentation Programme, Reactor Research Centre, Kalpakkam 603 102); *Chemistry*-1. Prof. N. Sathyamurthy, (32 years, Chemistry Department, Indian Institute of Technology, Kanpur 208 016), 2. Dr S. R. Gadre, (33 years, Department of Chemistry, University of Poona, Pune 411 007), 3. Dr A. K. Lala, (33 years, Department of Chemistry, Indian Institute of Technology, Bombay 400 076), *Medicine*-1. Dr M. K. Mehra (34 years, Department of Anatomy, All Indian Institute of Medical Sciences, New Delhi 110 029), *Botany*-1. Dr I. V. Ramanuja Rao, (29 years, Department of Botany, University of Delhi, Delhi 110 007), *Earth Sciences*-Dr R. J. Azmi, (34 years, Scientist, Wadia Institute of Himalayan Geology, Dehradun 248 001).

The next batch of 'Young Associates' will be selected by Academy some time in September 1984.

TOXICOLOGY RESEARCH FOUNDATION, BOMBAY

The Toxicology Research Foundation, Bombay, announces the following Prizes: (1) Late Premalabai Bhide Prize of Rs. 1000 - for the best paper in Toxicology published by an Indian, in an Indian Journal. Applications along with 3 copies of the paper should reach the Foundation before 31 December, 1983; (2) Late Bhalchandra Tilak Prize of Rs. 1000/- for the best essay in Ayurved. The theme of the essay "Concept of toxicity of drugs and food in Ayurved. The essay should be not more than 8 pages (double spaced thesis size sheets). The last date is 31 December, 1983. The essay will be the property of the Foundation and may be published by it in any scientific and/or popular publication with due credit to the author.

A new journal *Indian Analyst* devoted to publication of articles, on analysis of drugs, drug intermediates, dyes, foods and agrochemicals etc., and instrumentation involved in it will be published on 18 February, 1984. The annual subscription is Rs. 60,-. The Journal will be published quarterly.

The Annual Conference in Toxicology will be held at Taj Hotel, Bombay, on 18 and 19 February 1984. The theme of the Conference is "Inhalation Toxicology". The Delegation fee Rs. 150 should be paid before 31st December 1983.

For details please contact: Chairman (Mrs Sudha M. Bhide), Toxicology Research Foundation c/o Indian Institute of Toxicology, 172 Hornby Building, D. N. Road, Fort, Bombay 400 001.

THE SECOND INTERNATIONAL SYMPOSIUM ON NEPHROTOXICITY

The Second International Symposium on Nephrotoxicity will be held in Guildford, England, from 6-9 August 1984. The two major themes will be: "Recent advances in monitoring the early renal functional changes in animals and man following nephrotoxic insult" and "The biological basis of chemically induced site/specific damage to the nephron".

The symposium will be multi-disciplinary and consists of a small number of Keynote lectures and as many unsolicited free communications as possible, an

approach that will make the meeting most beneficial to all those who attend. The abstracts of papers presented at the symposium and the full Proceedings will be published. The last date for registration is 1st May 1984.

Further information may be had from the Secretary, The Second International Symposium on Nephrotoxicity, Robens Institute of Health and Safety, University of Surrey, Guildford, GU2 5XH, Surrey, England.

INTERNATIONAL SEMINAR ON THE LIVING STATE

An International Seminar on the LIVING STATE is being organised at Bhopal during 13-19 November, 1983, under the joint auspices of Department of Science and Technology, Government of Madhya Pradesh and Department of Biophysics, All India

Institute of Medical Sciences, New Delhi.

Those who are interested in participation should immediately write to: Local Organising Secretary, H. K. Goswami, Bhopal University, E/33 Arera Colony, C.S.T. Office, Bhopal. (M.P.).

NATIONAL INFORMATION CENTRE FOR CRYSTALLOGRAPHY (NICRYS)

The National Information Centre for Crystallography has arranged for a Workshop on "X-ray Crystallographic Data Storage Retrieval and Dissemination", jointly sponsored by the Committee for CODATA in India (under INSA) and NISSAT (National Information System for Science and Technology, D.S.T., New Delhi) to be held at Madras

during 28-30 November, 1983. The object of the Workshop is to bring together both current as well as potential users of NICRYS data facility and for discussion and mutual exchange of views.

For details please contact Prof. R. Srinivasan, Convener, Department of Crystallography and Biophysics, University of Madras, Guindy, Madras 600 025.

XIV ALL INDIA CONFERENCE OF IASLIC

The 14th National Conference of the Indian Association of Special Libraries and Information Centres (IASLIC) sponsored by The Indian National Scientific Documentation Centre (INSDOC) New Delhi will be held at Delhi, from 26-29 December, 1983. It is expected that about 400 delegates comprising librarians, documentalists, information scientists, teachers,

archivists and other experts, representing various organisations from all over the country will be attending this Conference.

Further information may be had from The Convener, XIV All Indian Conference of IASLIC, INSDOC, 14 Satsang Vihar Marg, Special Institutional Area, New Delhi 110 067.

INDIAN PHYTOPATHOLOGICAL SOCIETY — PROF. M. J. NARASIMHAN ACADEMIC MERIT AWARD

Prof. M. J. Narasimhan Academic Merit Award for 1982 has been awarded to Dr J. L. Varshney, for his paper entitled "Production of toxin(s) Metabolite(s) from six isolates of *Aspergillus clavatus* and their

effects on some micro-organisms", at the Annual Conference of the Indian Phytopathological Society held at the University of Mysore.