

Academy News

INTERNATIONAL ACTIVITIES

Indian Scientist nominated for various positions of ICSU & its Unions

- Dr. V Prakash, Distinguished Scientist of CSIR-India at JSS-MVP, JSS Technical Institution Campus, Mysore is nominated for the position of President-Elect as well as Council Member of International Union of Food Science & Technology (IUFoST) for the term 2014-2016.
- Professor S Ananthkrishnan, FNA is re-nominated for the position of Vice-President, International Union of Radio Science (URSI) for the term 2014-2017.
- Dr. Madhavan Nair Rajeevan, Adviser and Scientist G, Ministry of Earth Sciences, New Delhi is nominated for the membership of World Climate Research Programme(WCRP) Joint Scientific Committee.

Workshop/Symposia/Conference supported by the Academy

- An URSI sponsored Regional conference on Radio Science (RCRS-2014) was held at the Symbiosis Institute of Technology, Lavale, Pune during January 2-5, 2014 under the convenorship of Professor S Ananthkrishnan, FNA, Department of Electronic Science, Pune University Campus, Pune.
- An IUGS sponsored International Congress of the Jurassic System was held at the Department of Geology, University of Rajasthan, Jaipur during January 6-9, 2014 under the covenorship

of Professor DK Pandey, Department of Geology, University of Rajasthan.

- An IUPAC sponsored 27th International Carbohydrate Symposium (ICS 27) was held at the Indian Institute of Science, Bangalore during January 12-17, 2014 under the convenorship of Professor N Jayaraman, Department of Organic Chemistry, Indian Institute of Sciences, Bangalore.
- An International Workshop on 4th Current Trends in Structural Biology (CTSB) in Multi Drug Resistant Bacterial Therapeutics and Thrombosis was organized under the convenorship of Dr Sujata Sharma, Department of Biophysics, All India Institute of Medical Sciences, New Delhi during February 27-28, 2014. This was sponsored by INSA-National Committee for International Union of Crystallography (IUCr) as an activity to mark International Year of Crystallography 2014.

Support to Visiting Scientists during January 2014

The Academy supported 3 Indian scientists namely Dr. Som Kumar Sharma, PRL Ahmedabad, Dr. K Mahanakumar, Cochin University of Science & Technology, Cochin and Dr Siddarth Shankar Das, Scientist-SE, Space Physics Laboratory, Vikram Sarabhai Space Centre, Thiruvananthapuram (INSA Young Scientist Awardee 2012) for attending IGBP sponsored 5th Stratosphere-Troposphere Processes and their Role in Climate (SPARC-2014) conference held at Queenstown, New Zealand during January 12-14, 2014.

SUBJECTWISE AWARD LECTURES

Professor S Swaminathan 60th Birthday Commemoration Lecture (2013)

Professor GP Pandey, FNA, Director, Centre of Biomedical Research, Sanjay Gandhi Post Graduate Institute of Medical Sciences Campus, Raebareli Road, Lucknow, delivered the INSA - Professor S. Swaminathan 60th Birthday Commemoration Award Lecture on *sp³-C-H Activation by Photoredox Catalysis* at Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad on January 22, 2014.



Prof. Ganesh Pandey, FNA receiving the award from Dr. A V Rama Rao, FNA. Dr. S Ranganathan and Dr. (Mrs) M Lakshmikantam Fellows of the Academy are also present

During the lecture, Professor Pandey emphasized the demand of modern organic chemistry, to find a step-economy approach to build complex molecular structures through selective functionalization of a rather un-reactive C-H bond. The major difficulty in such endeavours lies with the selective C-H activation in a molecule that contains diverse C-H groups. Intense research activities by several research groups in this area have resulted in the development of very useful protocols for regioselective C(sp²)-H activation through transition metal catalyses.

The lecture ended with an extensive discussion on concepts, mechanism and application of the reactions.

Indira Gandhi Prize for Popularization of Science (2014)

Professor Rajesh Kochhar, Honorary Professor, Mathematics Department, Panjab University delivered Indira Gandhi Prize for Popularization of Science award lecture *Rise and Decline of Modern Science in India* at Indian Institute of Science Education and Research (IISER), Mohali, Chandigarh on February 18, 2014. During his talk Professor Kochhar described the current scenario of science in India in comparison to China and USA. He discussed Indian pursuit of science in three phases (Nationalist, International and Globalization Phases) marking the rise and decline of science in each phase.



Professor Rajesh Kochhar receiving the award from Professor N Satyamurthy, FNA in the presence of Professor RC Mahajan, FNA

SCIENTIFIC MEETINGS HELD DURING JANUARY & FEBRUARY 2014

- A meeting to discuss the organizational matter related to IGC 2020 was held on January 29, 2014 at INSA.
- A meeting of IUGS Executive Committee was held on February 6-11, 2014 in Goa.
- In continuation to his visit to attend IUGS Executive Committee Meeting, Goa, Professor Oberhansli, President, IUGS visited Delhi during February 11-14, 2014 and held a meeting with Secretary, Ministry of Earth Sciences

together with Professor DM Banerjee, FNA, Chairman, IUGS National Committee on February 13, 2014. On the same day he delivered a lecture at Delhi University on *The Use of Petrological Tools to Understand Plateau Building* and interacted with students. He also visited the proposed venue of International Geological Congress (IGC) 2020 to be held at Expo Mart, Greater Noida.

Science & Society Programme

Professor Roddam Narasimha, Honorary Professor, JNCASR, Bengaluru delivered a public lecture *Does India have a Strategic Plan in Aeronautics* on February 11, 2014 at INSA.



Professor Narasimha delivering the public lecture on Aeronautics

- Under the overall umbrella of IUGS activities, a joint INSA-Delhi University lecture was delivered by Professor Marjorie Chan, Distinguished Professor, Geological Society of America International Lecturer-2014, University of Utah, USA. She delivered a talk on *Mars for Earthlings: Using Earth Analogs to Decode the Sedimentary History of Mars*. Her talk highlighted the scientific exploration of Mars sedimentary environment mainly red rocks and blueberries. A comparative study with Earth's geology was also made to extrapolate the observations to the Mars environment.



Professor CS Dubey, Head, Department of Geology and Dean Faculty of Science, University of Delhi, Professor JP Khurana, FNA, Vice President INSA and Professor DM Banerjee, FNA honouring Professor Chan after the lecture

FELICITATION TO PROFESSOR CNR RAO

On November 16, 2013 the Government of India announced the conferment of *Bharat Ratna*, the highest Indian civilian award on Professor CNR Rao. Professor Rao, currently the Head of Scientific Advisory Council to the Prime Minister of India is a world renowned chemist. He has published over 1400 research papers and 45 books; and has honorary doctorates from 60 Universities from around the world. He is a recipient of most of the major scientific awards, fellowships of all leading science academies and member of many scientific organizations and committees across the world. He is National Research Professor, Linus Pauling Research Professor and Honorary President, Jawaharlal Nehru Centre for Advanced Scientific Research. Six Science Academies (IASc, Bangalore, INAE, INSA, NAAS, NAMS, New Delhi and NASI, Allahabad) and nine Science Departments (DAE, DARE, DBT, DHR, DoS, DRDO, DSIR, DST and Ministry of Earth Sciences) joined hands to celebrate this honour.

The event was organized on January 14, 2014 by INSA in consultation with DST. The felicitation function was organized in two parts. The morning function, aimed at a larger participation, was held at the Indian International Centre, under the Presidency of Shri S Jaipal Reddy, Hon'ble MoST & ES, where members from all the 15 scientific organizations were invited to celebrate Professor Rao's accomplishments.

Heads/representatives of all the 6 academies and 9 departments congratulated Professor Rao on receiving the *Bharat Ratna*. While celebrating this honour, speakers emphasized his significant contributions to the cause of promotion of science and education in the country and highlighted that *Bharat Ratna* is a testimony of his untiring commitment in the pursuit of science. A special publication entitled “*Felicitations by the Indian Scientific Community to Professor CNR Rao on his selection for Bharat Ratna*” containing messages from all the academies and departments was released by the Hon’ble Minister and a plaque was gifted to Professor Rao on behalf of all the organizations.



President INSA, Professor R Gadagkar, felicitating Professor CNR Rao at the function held at IIC, New Delhi. Also seen in the picture are Professor Kasturirangan, Shri Reddy, Professor Rao and Mrs Rao



Secretary DST, Dr. T Ramasami introducing Professor CNR Rao to the Hon’ble Prime Minister, Dr. Man Mohan Singh and Hon’ble Minister, Shri S Jaipal Reddy and the other guests at PM’s residence

In the second part of the celebration, Professor Rao was felicitated at 7, Race Course Road by Dr. Manmohan Singh, Hon’ble Prime Minister of India. The event was attended by Hon’ble Minister, Shri S Jaipal Reddy, Presidents/Heads of Academies and Secretaries/representatives of the science departments.

AWARDS AND HONOURS

The following Fellows of the Academy have been awarded with the Civilian Award by the Government of India.

Padma Vibhushan

Professor RA Mashelkar

Padma Bhushan

Professor Padmanabhan Balaram

Professor JB Joshi

Dr Thirumalachari Ramasami

Professor VP Sharma

Padma Shri

Professor SK Acharya

Professor Sushanta Dattagupta

Professor JK Ghosh

Professor RV Hosur

Professor ED Jemmis

Professor VK Singh

Professor Govindan Sundarajan

RECENT PUBLICATION OF THE ACADEMY

Indian Journal of History of Science (IJHS)

Vol. 48, No. 4 (December 2013) has been published. The issue includes papers on Evolution of Decimal Enumeration as evidenced from *R̥gveda*, Sawai Jai Singh’s Observatory at Jaipur, Astronomical significance of Udayagiri Lion Pillar, A Glimpse of Ruga-Garo Tangible Medicine, Prevention of Diabetes and Prof M Rangacharya and his translation of *Ganit Sār Sañgraha*. The issue also includes project reports on “*Growth of Scientific Societies in India and Travellers Accounts of Indian Medicine during 17-19th Century*”. It also has the features like book reviews and seminar and conference news.

OBITUARY

Harish Chandra Ganguli

Harish Chandra Ganguli (b 25 November, 1924; d 19 November, 2013) obtained his DPhil and DLitt from Calcutta University specializing in Industrial and Organizational Psychology. From 1947, Professor Ganguli was involved in teaching and research at the All India Institute of Hygiene and Public Health, Calcutta, Indian Institute of Technology, Kharagpur, Indian Institute of Science, Bangalore and Flight Safety Directorate, Indian Air Force. He joined Delhi University as Professor and Head, Department of Psychology in 1963, from where he retired in 1989.



Professor Ganguli's major findings relate to: incentives and motivation of workers; job satisfaction; organizational control, communication and effectiveness; epidemiology of mental disorders; sexual harassment of Indian working women; scale for measurement of sexual behaviour in Indian males; and fear of death and *Bhagvad Gita* mantra clusters. Professor Ganguli built up the Psychology Laboratory at Delhi University and trained faculty members.

Professor Ganguli received the Sandoz Award of Indian Psychiatric Society, Psychology National Award by Swami Pranavananda Trust and Suhrit Chandra Mitra Memorial Plaque of Asiatic Society, Kolkata. He was UGC National Lecturer, President of Indian Psychological Association, President of Psychology Section of Indian Science Congress and its Platinum Jubilee Lecturer.

Professor Harish Chandra Ganguli was elected to the Fellowship of the Indian National Science Academy in the year 1972.

Fedor Andreevich Kuznetsov

Fedor Andreevich Kuznetsov (b 12 July 1932; d 4 February 2014), PhD, specialized in the field of Physical Chemistry, Chemical Thermodynamics and Material Sciences. Dr. Kuznetsov was the Director of the Institute of Inorganic Chemistry, Siberian Branch of Russian Academy of Sciences. Dr. Kuznetsov was associated with Indo-Russian ILTP programme from its beginning. For many years, he was co-chair of this programme. He initiated the Asian-Pacific Academy of Materials (APAM) and was President of this academy. He was also Vice President of CODATA.



The main fields of Dr. Kuznetsov's investigations were: physicochemical fundamentals of developing materials and structures with certain properties for micro- and optical electronics, experimental and theoretical studying of synthesis and degradation of materials and structures, developing new technologies and equipment, material engineering informatics. He developed methods of quantitative investigations of the most widely used in microelectronics process – chemical precipitation of the gas phase. He substantiated the importance of and developed the technique of thermodynamic modeling of synthesis of materials and structures.

Dr Kuznetsov received the Medal for Labour Merit (1975), the State Prize of the USSR (1981), the Order of Badge of Honour (1986), the Order of Friendship (2007). He was the Fellow of The Russian Academy of Sciences.

Fedor Andreevich Kuznetsov was elected to the Foreign Fellowship of the Indian National Science Academy in the year 2014.

ANNOUNCEMENT

INSA TEACHERS AWARD - 2014

CALL FOR NOMINATIONS

The Academy has instituted the INSA Teachers Award to recognize and value excellence, consistency and high level of teaching in Indian Colleges, Universities and Institutions. The award aims to recognize and honour teachers who have provided guidance, inspiration and mentored students to take up careers in Science and Technology. All disciplines of Science and Technology including Medical & Engineering Sciences come under the purview of this award. The maximum number of awards to be made is 10 per year. The awardees shall receive a scroll, a cash award of Rs. 50,000/- and a one-time book grant up to Rs. 20,000/-.

The nominee should be currently working or worked till retirement in India, with at least 20 years of teaching experience at undergraduate or postgraduate level in any Indian Colleges/ Universities/Institutions.

A teacher may be nominated by Fellows of INSA, Principal of a College, Vice-Chancellor of a University, Director of an Institution, a colleague or by a former student who is associated with an academic/R&D institution. The nominator may forward only one nomination in a year.

The **last date** for receipt of nominations is **May 31, 2014**. For further details and nomination proforma, please visit our website **www.insaindia.org**.