

President's Note

Dear Colleagues,

Having assumed the charge as the President, it is my privilege to write this column and present to you some of the latest news and developments in the Centre.

Our faculty have registered excellence in science through their discoveries and inventions. Vibrant research collaborations between ourselves, with institutions in India and abroad has contributed in no small measure to our success. One such recent example is the signing of the Memorandum of Understanding (MoU) with Public Health of England for the research and development of antimicrobial compounds and exploration of their pharmaceutical applications. Importantly, our discoveries and innovations need to get translated. While we have obtained a number of patents, we have to explore ways to get them licensed. The inauguration of our first start up called *Sankhya Sutra Labs Pvt. Ltd.*, is in that direction. This start up is of importance to the strategic sector of the country as well. Another start up is in pipeline and I think it is only a matter of time that these activities develop further. The visit of European Union (EU) delegation on October 28, 2015 led by Mr Denis Dambois, First Counsellor and Head of Research and Innovation from various member countries would give us an opportunity to develop more international collaborations. The recent visit of the Secretary, DST also provided us an opportunity to discuss with him the activities of the Centre and future directions. Meanwhile, we have registered our continuous involvement in the popularisation of science within Karnataka and in remote areas of the country. Efforts of Education Technology Unit deserves a special mention in this regard.

With the completion of 25 years of the Centre, now we are poised to move on in our research endeavour looking at opportunities to expand the base, innovate and reinvent ourselves. I believe, we have to have a road map and set higher goals and ambitions. I believe, we can reach newer heights with our combined efforts. Let us march ahead.



Prof V Nagaraja
President, JNCASR



Conferment of Honorary Fellowship of JNCASR on Dr Kiran Mazumdar-Shaw, November 09, 2015

In the picture: (Left to Right) Prof V Nagaraja, President, JNCASR, Dr Kiran Mazumdar-Shaw, Chairman and Managing Director, Biocon Ltd., Bangalore and the Bharat Ratna Prof C N R Rao, Linus Pauling Research

Inside this issue...

- › JNC in the News ... pg. 2
- › Education Technology & Science Outreach ... pg. 3
- › Academic & Extension Activities ... pg. 4
- › Intellectual Property ... pg. 5
- › Appointments and Awards ... pg. 6
- › Lectures & Meetings ... pg. 7
- › Past and Forthcoming Events ... pg. 8



JNC NEWS

Joining of New President

It's heartening to note that Prof V Nagaraja has assumed charge as President of the Centre from October 14, 2015. Prof K S Narayan (In-charge President) was felicitated by Prof C N R Rao and Prof Nagaraja on October 19, 2015, for his contributions as In-charge President.

Honorary Fellowship to Dr Kiran Mazumdar-Shaw

Honorary Fellowship of JNCASR was conferred upon Dr Kiran Mazumdar-Shaw, Chairman and Managing Director, Biocon Ltd, Bangalore in a ceremony held on November 09, 2015.

JNCASR as a nodal institute of PETRA III

JNCASR has become the nodal Institute for developing participation of Indian scientists in this major Indo-German collaboration project. Under the auspices of the Nano Mission Council, Department of Science and Technology, Government of India with Prof C N R Rao as the Chairman, this is a major initiative for the Synchrotron community of India.



Group Photo of IV India@DESY Steering Committee Meeting, in Goa on October 11-12, 2015.

In the picture: front row (Left to Right) Ajay Sood, Helmut Dosch, Milan Sanyal, Praveer Asthana, A.N. Jayachandra. Second Row (Left to Right) Christian Schroer, Wolfgang Drube, Edgar Weckert, Dipankar Das Sarma, Frank Lehner, Chandrabhas Narayana



In the picture: researchers of Molecular Mycology Lab with Dr Kaustuv Sanyal (second from left in last row)

Celebration of a decade of the Molecular Mycology Lab

The Molecular Mycology Laboratory celebrated its 10th anniversary at JNCASR on October 26, 2015. Under the supervision of Dr Kaustuv Sanyal, the laboratory, comprising of 12 members, focuses on genome indexing by histone H3 variants in several human pathogenic yeasts. A total of 55 researchers have been trained in this laboratory over the last decade. Five Ph D students have been awarded the degrees of which three of them received the best thesis awards in Biological Sciences. The celebration was attended by the President, faculty members of MBGU and the Senior Administrative Officer.

JNC IN THE NEWS

IISc Professor Nagaraja takes charge as JNCASR President

Prof Valakunja Nagaraja from the department of micro and cell biology of the Indian Institute of Science (IISc), on Wednesday, took charge as the president of interdisciplinary research institute Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR). Prof Nagaraja, whose appointment has been cleared by the appointments committee

of the Cabinet, the government of India, took over from Prof K S Narayan, who was holding an interim charge at the institution.

Source: Times of India, October 14, 2015.

Ebola drug has a Bengaluru link

Nine months after two drug candidates for Ebola from the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) were shortlisted among 20 globally by the Public Health England (PHE), one of them has made it to the final three. The UK government health body has also signed a memorandum of understanding with JNCASR to co-develop the drug. Dr Jayanta Haldar and two of his students -

Chandradish Ghosh and Mohini Mohan Konai - are the researchers from JNCASR.

Source: Ebola drug has a Bengaluru link, The Times of India, September 09, 2015.

Amorphous Solids: Glasses Pinned Down (News and Views in Nature Physics)

Glassy materials are amorphous solids: they have a liquid-like structure, but do not flow. Lower their temperature towards the glass transition and you'll see the viscosity rise smoothly and dramatically by ten or more orders of magnitude. There is no discontinuous change in the flow



properties at a specific temperature — as is seen with crystallisation — and no discontinuous change in the structure either. This makes explanations for the solidity of crystalline materials difficult to apply to glasses. But now, writing in *Nature Physics*, K Hima Nagamanasa and co-workers report experiments with colloidal samples that reveal subtle structural effects near the glass transition — suggesting potential structural mechanisms to explain the solidity of glasses.

Source: Eric R. Weeks, Amorphous solids: Glasses pinned down, *Nature Physics* 11, 381–382 (2015).

Watch out, the Himalayas are not done yet: News reported by Prof C P Rajendran

The magnitude 7.8 Nepal earthquake of April 25 was the worst Himalayan quake since the 1934 magnitude 8.2 Nepal-Bihar quakes that devastated the northern Bihar plains. Mahatma Gandhi, who visited Bihar after the 1934 quake wrote that it was "providential retribution for India's failure to eradicate untouchability", prompting Rabindranath Tagore to retort in a letter to Gandhiji's Harijan that "physical catastrophes must have an origin in physical facts".

Source: The Asian Age, May 03, 2015.

Startup on JNCASR campus will help industries simulate products

In its 26th year, the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) finally has a startup blooming on its campus. It will be headed by former director of Intel Labs' Parallel

Computing Research Sunil Sherlekar, who has worked as Sasken's chief technology officer and was the foundinghead of Research at Tata Computational Research Labs. Santosh Ansumali, a faculty member at JNCASR, is the brain behind the startup that is based on his research in the field of scientific simulation. His former colleague, Swiss scientist Salvatore Arcidiacono will also be part of the startup.

Source: Times of India, Aug 04, 2015.

Scientist invents biodegradable detergent

A city-based scientist and his team at Jawaharlal Nehru Centre for Advanced Scientific Research here have invented a biodegradable detergent that does not cause a build-up of toxic foam. The commonly used detergents are non-biodegradable. Dr Jayant Haldar and his student Jiaul Hoque have developed this class of cleave surfactants.

Source: The New Indian Express, May 15, 2015.

Education Technology and Science Outreach

Several events were organised in continuation of the mission of popularising science among students in schools and colleges and students pursuing graduate programmes in science.

On May 28 & June 3, 2015, a multimedia presentation from the CD-ROMs 'Nanoworld' and 'Understanding Chemistry' was given to the students of POCE.

The CNR Rao Hall of Science and Education Technology Unit commenced the teachers-students

programmes/workshops conducted under the auspices of the Science Outreach Programme on June 30, 2015. This year, JNCASR in collaboration with the CNR Rao Education Foundation presented the National Award for Chemical Education (Donated by AVRA Laboratories, Hyderabad) to Prof Uday Maitra, IISc., Bangalore. The recipients of the CNR Rao Education Foundation sponsored 2014 prizes for Outstanding Science Teachers were Smt Meenu Wadhwa, Kendriya Vidyalaya, Vigyan Vihar, Delhi and Shri Prakash Ramachandra Garagatti, Pandit Jawaharlal Nehru High School, Gokak Taluk, Belgaum. A lecture programme was followed by the award ceremony, attended by around 220 students and teachers, a lecture in Chemistry and one in Biology were delivered by Prof Uday Maitra (IISc., Bangalore) on 'fun with chemistry' and by Prof Utpal Nath (IISc., Bangalore) on 'how shape and size are controlled in biology'.

On July 13–16, 2015, a Science Orientation Workshop for Jawahar Navodaya Vidyalaya Students was organised and conducted for Class XI students of the school from across Karnataka.

At the Orientation Programme for new students of NCU and CPMU on August 3 and 4, 2015, Prof C N R Rao addressed the students on 'A brief history of chemistry (Great Pioneers)'. In the month of August another event, 'Programme in Physics for students' was organised for students and teachers of class XI and XII. Prof Jayant Murthy, Prof S M Shivaprasad, and Dr Urbasi Sinha delivered lectures and demonstrations. On August 24, 2015, around 190 students and teachers participated in 'Programme in Biology' in which three lectures in different areas of Biology were delivered followed by an interactive Q & A session with the



ACADEMIC & EXTENSION ACTIVITIES

speakers. In the month of September 2015, a programme in chemistry for students was conducted for Classes XI and XII students and teachers.

The Book 'Lives and Times of Great Pioneers in Chemistry (Lavoisier to Sanger)' authored by Prof C N R Rao and Dr Indumati Rao is to be published by World Scientific Publishers.

ACADEMIC ACTIVITIES

Degree Programmes

During the August admissions of 2015-16, 63 students joined, and during the mid-year admissions of January 2014-15, 10 students joined JNCASR under different degree programmes.

An orientation programme was held on 3 August 2015 for the new students.

The current student strength at JNCASR is 313. During this period, 29 Ph D, 3 MS(Engg) and 17 M S (of Integrated PhD) degrees have been awarded.

The advertisement regarding admissions to the M S (Engg/Research) and Ph D programmes for the January session of 2015-16 has been announced on our website. Applications are available online at www.jncasr.ac.in/admit until November 06, 2015.

Diploma Programmes

Three students who joined the Postgraduate Diploma in Materials Science are presently undergoing their course work. They will be completing their course requirements by July 2016. On successful completion of their course requirements, they will be awarded a

Postgraduate Diploma of the Centre.

FELLOWSHIPS & EXTENSION PROGRAMMES

NEW INITIATIVE

Student Buddy Programme

Under this programme, students from class XI/XII are invited to spend a day at JNCASR observing activities / experimenting in assigned research groups. Each visiting student is assigned to a student buddy from the JNCASR Int.PhD/Ph D students and post-docs. The program will run between October and January for up to 25 students each month.

The programme was formally launched on Monday, 19 October, 2015 by Prof C N R Rao. Twenty-five students from Jawahar Navodaya Vidyalaya,

Doddaballapur participated and were mentored by 25 JNCASR student buddies and the faculty.

ONGOING PROGRAMMES

Visiting Fellowship Programme

For the 2015-16 session, 13 scientists from research institutions across the country were selected. They are placed in MBGU, CPMU or TSU.

Summer Research Fellowship Programme

The SRFP 2015 was completed successfully. 69 students availed the scholarship and received research training in various areas of Physics, Chemistry, Biology or Engineering at research institutes in Bangalore and rest of the country. 13 students were awarded the Rajiv Gandhi Fellowship for the year 2015.

Call for applications for the SRFP 2016 programme will be advertised in November 2015.



Student Buddy Programme, October 19, 2015

In the picture: A student from Jawahar Navodaya Vidyalaya participating in a lab activity with a student buddy from JNCASR.



INTELLECTUAL PROPERTY

Project Oriented Biology Education (POBE) and Project Oriented Chemistry Education (POCE)

The POBE-POCE 2015 programme was initiated in June 2015 for ten students of each stream. Students admitted to POBE/POCE 2013 and 2014 returned for their third and second year training respectively. An orientation programme was held on 13 May, 2015 for all the visiting students, which included SRFP, POCE and POBE. The Inaugural Address for POBE/POCE 2015 was delivered by Prof C N R Rao on July 02, 2015 which was attended by all batches of POBE/POCE and SRFP students.

POBE/POCE students of the 2013 batch who completed their training were awarded a Diploma in Biology or Chemistry, as applicable, by Prof K S Narayan, President-in-charge, on July 01, 2015.

JNCASR-CICS (Centre for International Cooperation in Science) Fellowship Programme

Six scientists from the following countries

were shortlisted under the JNCASR-CICS Fellowship Programme 2015-16: Nigeria, Uzbekistan, Ethiopia, Sri Lanka, Zambia and Cameroon and are expected to join assigned laboratories during the next one year. The next call for applications has been advertised.

INTELLECTUAL PROPERTY

JNCASR enters into MoU with Public Health England (PHE), an executive agency of the U K Department of Health

This collaboration relates to the research and development of compounds comprising an aromatic radical and/or an aliphatic radical, an alkyl amine and amino acid moiety (Class 1 Compounds) and/or polyamine based antimicrobial conjugates (Class 2 Compounds) as well as testing, evaluation and potential commercialisation of their pharmaceutical applications including anti-microbial

properties.

Patents Granted

The Centre has obtained three patents (Europe-2, China-1):

- European Patent (No. 2585015) issued for "Artificial Retina Device" developed by Prof Kavassery Narayan Sureswaran et al.
- Received Notice of Allowance to grant Patent from the European Patent office for the invention "Cationic Antibacterial Composition" developed by Dr Jayanta Haldar et al.
- Received Notice of Allowance to grant patent from Chinese Patent Office for the invention "Optimal Wing Planforms For Reducing the Induced or Total Drag of the Wing of an Aircraft Driven by Wing-Mounted Tractor Propellers/Rotors" developed by Prof Roddam Narasimha et al.

Patent Applications Filed

Six Indian Provisional Patent Applications have been filed for the inventions of:

- Dr Tapas Kumar Maji et al
- Prof Giridhar Udapi Rao Kulkarni et al (2 inventions)
- Prof Govindaraju Thimmaiah et al (2 inventions)
- Dr Jayanta Haldar et al

Nine National Phase Applications (USA-2, Europe -1, China-1, Japan-1, Australia-1, Canada-1, Hong Kong-1, Brazil-1) have been filed:

- "Composition, Substrates and Methods Thereof" developed by Prof Giridhar Udapi Rao Kulkarni et al, Application filed in the USA.
- "Antimicrobial Compounds, Their Synthesis and Applications Thereof" developed by Dr Jayanta Haldar et al, Applications filed in the USA, Europe,



In the picture: (from left to right) Mr Duncan Selbie, Chief Executive, PHE, Prof C N R Rao, Prof K S Narayan, Prof S S Vasan, PHE, (In last row) Mr A N Jayachandra, Sr Administrative Officer, JNCASR and Dr Jayanta Haldar, NCU, JNCASR



APPOINTMENTS & AWARDS

China, Japan, Australia, Canada, Hong Kong, Brazil.

Technology Transfer

Three inventions of Dr Jayanta Haldar, viz. (1) 'Antimicrobial Compounds, Their Synthesis and Applications Thereof' (2) 'Antimicrobial Conjugates, Method for Production and Uses Thereof' have been transferred to Public Health England, an Executive Agency of the UK Dept. of Health; and (3) 'Nanoparticle Compositions Of Antibacterial Compounds And Other Uses Thereof' has been transferred to M/s. National Research Development Corporation, an enterprise of DSIR, Ministry of S&T, GOI.

NEW APPOINTMENTS & PROMOTIONS

Faculty Fellow

Dr T N C Vidya (Faculty Fellow)

Promotions

Associate Professors

Dr Jayanta Haldar

Dr Sridhar Rajaram

Dr Rajesh Ganapathy

Visiting Students

1. Mr Siddharth Gupta
2. Mr Rachit Saran
3. Ms Atreyee Banerjee
4. Ms Sanjukta Krishnagopal
5. Mr Arjun Sharma
6. Mr Alphy John
7. Ms Preeti
8. Ms Amreen Bano
9. Mr Sergio Bruno
10. Ms Sylvia Illa Tuset

Visiting Scientists

1. Dr Baasit Abubakr
2. Dr Irshad Ahmad
3. Dr Tokeer Ahmad
4. Dr Madhvendra Nath Tripathi
5. Dr Varma Hemant Rambaran

Research Associates (Provisional)

1. Mr SRK Chaitanya Sharma Y
2. Ms Sunita
3. Mr Saikat Debnath
4. Mr Shetty Ronak Kutty
5. Mr Gangaiah Mettala
6. Ms Himanshu Chakraborty

Research Associates

1. Dr Deepti Chugh
2. Dr A Muthuvinayagam
3. Dr Malini S Pillai
4. Dr Saikishan Suryanarayan
5. Dr I Pakrudheen
6. Dr K Anandasabari

AWARDS & RECOGNITION

Dr Indumati Rao

Elected as the Fellow of the National Academy of Sciences.

Prof Anuranjan Anand

Elected as a Fellow of Indian National Science Academy (INSA), New Delhi.

Prof Tapas Kumar Kundu

Dr Nitya Anand Endowment Lecture/Award (2015), Indian National Science Academy, New Delhi.

Adjunct Faculty in the Special Centre for

Molecular Medicine, Jawaharlal Nehru University, New Delhi (2015–2020)

Distinguished Visiting Professor, Sri Devaraj Urs Academy of Higher Education and Research, Karnataka (2015)

Visiting Professor, Department of Biological Science, Indian Institute of Science Education and Research, Kolkata (2015)

Advisory board member of Pharmaceutical Chemistry Department, Acharya and B M Reddy College of Pharmacy, Bangalore (2015)

Vice President of the Society of Biological Chemists (India) (2015–2016)

Dr Sebastian C. Peter

Selected for MRSI (Materials Research Society of India) Medal for 2016.

Dr Subi J George

Wins NASI–SCOPUS Young Scientist Award 2015 in Chemistry.

Dr Kanishka Biswas

Selected as Young Affiliate of The World Academy of Sciences (TWAS) for the year 2015.

Selected for the National Academy of Sciences (NASI)–Young Scientist Platinum Jubilee Award (2015) in Chemical Sciences.

Young Scientist Research Award, DAE–BRNS, India (2015).

Dr Ranjani Viswanatha

Chosen as one of the founding members of Indian National Young Academy of Science (INYAS), a Young Academy under the umbrella of INSA.

The Most Valuable Staff Member prize

Mr H S Seetharama Sarma, Sr Admin Assistant has been awarded "The Most Valuable Staff Member" prize for the year



LECTURES & MEETINGS

2015.

Best Ornamental/Vegetable Garden to the Centre

The Centre bagged consolidated prize for "Best Ornamental/Vegetable Garden" instituted by the Mysore Horticultural Society, Lalbagh, Bangalore. The prize was presented at a function on August 14, 2015.

LECTURES & MEETINGS

DISCUSSION MEETINGS

1. 19th DST Programme Advisory Committee (PAC) Meeting, May 20, 2015.
2. Frontiers in Materials Science, JNCASR & SSCU (IISC), June 15-18, 2015.
3. MCB75: From Molecules to Organisms, Prof Umesh Varshney, IISc, December 11-14, 2015.
4. JNCASR-FCBS Workshop for chemistry students and teachers, Prof M V George, NIIST, Trivandrum, October 15-17, 2015.
5. Indian Peptide Society Symposium (IPS-2015), Dr T Govindaraju, NCU, JNCASR, September 24-25, 2015.
6. Programme on Mathematical Biology, Dr Kavita Jain, TSU, JNCASR, September 7-11, 2015.
7. Chemical Frontiers 2015, Prof R Murugavel, IIT Bombay, August 15-18, 2015.
8. Frontiers in Advanced Materials, Dr Ranjani Viswanatha, NCU, JNCASR, June 15-18, 2015.

ENDOWMENT LECTURES

A V Rama Rao Foundation Lectures in Chemistry:

What can be learnt from the fluorescence behaviour of molecular systems in room temperature ionic liquids?, Prof Anunay Samanta, School of Chemistry, University of Hyderabad, Hyderabad; **Prize Lecture:** Functional organic molecules for biological application, Dr D Ramaiah, Director, CSIR-North East Institute of Science & Technology, Jorhat, Assam, May 21, 2015.

DAE-Raja Ramanna Lectures in Physics:

Symmetries and the birth of the universe, Prof Sandip Trivedi, Director, TIFR Mumbai. Prize Lecture: Materials modelling from first-principles electronic structure calculations, Prof Tanusri Saha-Dasgupta, Dept of Condensed Matter Physics and Materials, Sciences, S N Bose National Centre for Basic Sciences, Kolkata, September 24, 2015.

Prof V Ramalingaswami Lecture: A new fabric for the Biological Sciences in the 21st Century: The shifting geography and language of biology, Prof Satyajit Mayor, Director, National Centre for Biological Sciences and inSTEM, Bangalore, July 27, 2015.

Prof C N R Rao Oration Award Lecture: Theoretical Prediction of Novel Structures and Phenomena in Solids: Basic Science behind Modern Technologies, Prof Umesh Waghmare, TSU, JNCASR, August 04, 2015.

Darwin Lecture 2015: How predictable is evolution?, Prof Joachim Krug, Institute of Theoretical Physics University of Cologne, September 15, 2015.

ISRO Satish Dhawan Lecture: Indian Agriculture: Harvest of Hope, Dr S Ayyappan, Director General, Indian Council of Agricultural Research, November 02, 2015.

SPECIAL LECTURE

Fifth Annual Materials Lecture:

Understanding two dimensional nanomaterials using light, Prof A K Sood, Department of Physics, IISc Bangalore, June 12, 2015.

SYMPOSIA / WORKSHOPS / CONFERENCES

1. ComSol Workshop, organised by COMSOL Inc, May 12, 2015.
2. Satellite meeting on 'BioInspiration' organised in London by Royal Society London in celebration of 350th anniversary of first scientific journal "Philosophical Transactions", co-chaired by Dr T Govindaraju, NCU, JNCASR, May 27, 2015.
3. BD-JNCASR Flow Cytometry Workshop, BD Biosciences, June 08-10, 2015.
4. Workshop on Basic Flow Cytometry, convened by Prof Ranga Udaykumar, MBGU, JNCASR, June 17-18, 2015.
5. JNCASR-IKST Joint Workshop for promoting collaborative research, convened by Prof Umesh V Waghmare, TSU, JNCASR and Dr. Seung Cheol Lee, R&D Director, IKST (Indo-Korea Science and Technology Center), July 21, 2015.
6. One-day symposium cum laboratory visits organised for the students of National College, Basavangudi, convened by Prof Chandrabhas Narayana, CPMU, JNCASR, August 25, 2015.
7. Analyzing Indian monsoon rainfall: a time series statistical approach, Dr Sarita Azad, IIT Mandi, October 08, 2015.
8. Conference on Growing Length Scale Phenomena in condensed matter physics, convened by Dr Subir K Das, TSU, JNCASR October 8-10, 2015.



PAST AND FORTHCOMING EVENTS

SEMINARS

1. The role of regulatory and accessory proteins of HIV-1 in pathogenesis, Dr Akhil Banerjee, National Institute of Immunology, New Delhi, May 7, 2015.
2. Strong hybridization effects on the "Hubbard U" and "Hund's Rule" in strongly correlated electron systems, Dr Subhra Sen Gupta, June 19, 2015.
3. Quantum Phases and Phase Transitions in two-dimensional diffusive metals at oxide interfaces, Prof R C Budhani, IIT Kanpur, June 24, 2015.
4. Whole mouse brain imaging using oblique plane tomography, Dr Arun Narasimhan, Cold Spring Harbor Laboratory, New York, June 29, 2015.
5. Modulation of lncRNAs as an anti-cancer therapeutic: MALAT1 as a paradigm, Dr Gayatri Arun, Cold Spring Harbor Laboratory, New York, June 30, 2015.
6. Studies of hydrogen generation by semiconductor heterostructures and P, Cl substituted CdS, Mr Anand Kumar Roy, JNCASR at Sheikh Saud Hall (ICMS Building), July 02, 2015.
7. Sizing up worm growth: from organelle to populations, Dr Sravanti Uppaluri, Princeton University, July 09, 2015.
8. LhX2 controls position, specification and maintenance of optic identity, Dr Achira Roy, Centre for integrative brain research, Seattle Children's Research institute, Seattle, Washington, USA, July 23, 2015
9. Dynamics of inertial particles in a turbulent flow: Settling and Coalescences, Prof Smariddhi Sankar

Ray, International Center for Theoretical Sciences, Tata Institute of Fundamental Research, TIFR Centre Building, Indian Institute of Science, Bangalore, September 08, 2015.

10. Emergent states of quantum matter, Prof. Ross McKenzie, University of Queensland, Brisbane, Australia, October 06, 2015.
11. Some surprises and open questions in soft matter, Prof Steve Granick, Ulsan National Institute of Science and Technology, Ulsan, South Korea, October 07, 2015.
12. UV/IR mixing in non-Fermi liquids, Dr Ipsita Mandal, Condensed Matter Theory, Perimeter Institute, Canada, October 15, 2015.
13. Disease resistance and tolerance in a natural host-parasite system: Eco-evolutionary drivers and epidemiological implications, Dr Guha Dharmarajan, IISER Kolkata, October 20, 2015.
14. Control of neural protein synthesis in health and disease, Dr Aditi Bhattacharya, Centre for Brain Development and Repair, inStem, Bangalore, 29-10-2015
15. Dynamic nuclear polarisation and the paradox of quantum thermalization, Prof Alberto Rosso, Universite Paris-Sud, Orsay, France, November 03, 2015.
16. Investigation of some aspects of the structure of turbulent shear flows and flow stability, Dr Sourabh Suhas Diwan, Imperial College London, U K, November 06, 2015.

OTHER PROGRAMMES

Wellness Workshop

Wellness Workshop on International Yoga

Day was organised in co-ordination with Isha Foundation, Bangalore on June 19, 2015.

Hindi Week

Hindi Week was organised from September 14-23, 2015 in which a Hindi Workshop; Hindi Entertainment Programme by RJ Red FM 93.5; Hindi Quiz and a scientific Talk in Hindi delivered by Dr D D Oza, Jaipur. The Prizes and Prabodh, Praveen and Pragya Passed Certificates were distributed to staff members.

Vigilance Awareness Week

Vigilance Awareness Week was organised from October 26 – 31, 2015. A pledge on vigilance was taken by all Faculty, Students and Staff of the Centre on October 27, 2015. A lecture on Preventive Vigilance was delivered by Mr K N Narayanaswamy, Assistant Commissioner of Police, City Special Branch, Bangalore, on October 29, 2015.

FORTHCOMING EVENTS

1. Winter School 2015, convenors: Prof S M Shivaprasad, CPMU and Prof Umesh V Waghmare, TSU, JNCASR, December 5-11, 2015.
2. TWAS-ROCASA Conference on Frontiers in Scientific Research at JNCASR, December 21-22, 2015.

Annual Faculty Meeting

The Annual Faculty Meeting of the Centre will be held on November 13, 2015. Prof N Balakrishnan, Prof Shobhana Narasimhan, Prof K N Ganesh, Dr Jayanta Haldar and Prof V Nagaraja will deliver the lectures. A cultural programme will be held in the evening. An in-house symposium is scheduled on November 13-14, 2015 at Jakkur Campus.