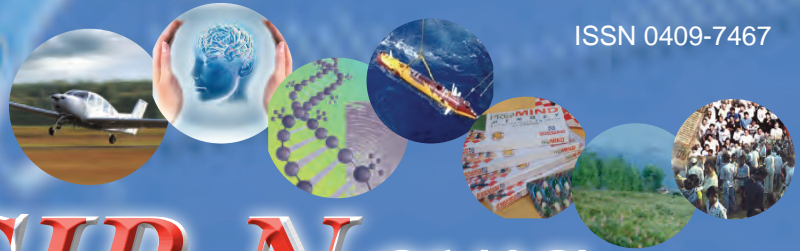




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In The News

Prime Minister Narendra Modi

Confers Shanti Swarup Bhatnagar Awards for S&T



ON the occasion of the National Science Day, Prime Minister Shri Narendra Modi conferred the Shanti Swarup Bhatnagar Prize for the years 2016,

2017 and 2018 for Science and Technology to the awardees in an award ceremony held at Vigyan Bhawan, New Delhi, on 28 February 2019.

The Hon'ble PM Shri Narendra Modi said that science, technology and innovation should be connected with the aspirations and requirements of the society.



Honourable PM Shri Narendra Modi called on scientists and researchers to adopt an interdisciplinary approach

The Honourable PM Shri Narendra Modi congratulated and appreciated the awardees and said that science, technology and innovation should be connected with the aspirations and requirements of the society. He also added that our scientific institutions should align with future requirements and try to find solutions for local problems.

In order to make India a global hub for manufacturing, knowledge

and technology-based industries, Mr Modi asked the scientific community to take advantage of the Fourth Industrial Revolution and develop technologies. Highlighting the need to think beyond silos, the Prime Minister further added that scientists and researchers should adopt an interdisciplinary approach which would help in finding faster and better solutions for the various scientific questions.

During his address at the award ceremony, Dr Harsh Vardhan,

Union Science & Technology Minister, said that the efforts of the scientific community have taken CSIR to the ninth position in international ranking out of 1207 institutions of the world. Further, he mentioned about the various Government initiatives to foster innovation and strengthen the Science and Technology space in India.

Dr Shekhar C. Mande, Director-General, CSIR, said “We know that the Shanti Swarup Bhatnagar Prize



Dr Harsh Vardhan, Union Science & Technology Minister, said that the efforts of the scientific community have taken CSIR to the ninth position in international ranking out of 1207 institutions of the world



Dr Shekhar C. Mande, Director-General, CSIR, said that CSIR has been playing an important role to bring about societal changes with the help of science & technology

is considered as the highest prize of this country in the field of science. It's a matter of pride to say that since independence CSIR has been playing an important role to bring about societal changes with the help of science & technology. As part of this role, CSIR has been motivating Young Scientists also.”

The Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology (S&T) was instituted in the year 1957, in the memory of late Dr (Sir) Shanti Swarup Bhatnagar, FRS, the founder director of the Council of Scientific & Industrial Research (CSIR). The SSB Prize is awarded each year on the basis of conspicuously important and outstanding contributions to human knowledge and progress, made through work done primarily in India during five

years, preceding the year of the prize.

Any citizen of India engaged in research in any field of science and technology up to the age of 45 years is eligible to be nominated. Overseas Citizen of India (CCI) and Persons of Indian Origin (PIO) working in India are also eligible.

The SSB Prize, comprising a citation, a cash award of Five Lakh rupees and a plaque is given to each person selected for the award in the following disciplines:

- Biological Sciences
- Earth, Atmosphere, Ocean and Planetary Science
- Chemical Sciences
- Engineering Sciences
- Medical Sciences
- Mathematical Sciences
- Physical Sciences



The Shanti Swarup Bhatnagar prize winners with the Hon'ble PM, Minister and DG

Shanti Swarup Bhatnagar Prize (SSB) for Science and Technology 2016



Dr Suvendra Nath Bhattacharyya

The Shanti Swarup Bhatnagar Prize for the year 2016 in Biological Sciences has been awarded to Dr Suvendra Nath Bhattacharyya of CSIR Indian Institute of Chemical Biology, Kolkata, for his outstanding contributions in the regulation of miRNA activities in mammalian immune and cancer cells, which have potential therapeutic applications.



Dr Partha Sarathi Mukherjee

The Shanti Swarup Bhatnagar Prize for the year 2016 in Chemical Sciences has been awarded to Dr Partha Sarathi Mukherjee of Indian Institute of Science, Bengaluru, for his significant contributions to coordination-driven self-assembly, leading to novel molecular architectures with interesting catalytic properties.



Dr Sunil Kumar Singh

The Shanti Swarup Bhatnagar Prize for the year 2016 in Earth, Atmosphere, Ocean and Planetary Sciences has been awarded to Dr Sunil Kumar Singh of Physical Research Laboratory, Ahmedabad, for his outstanding contributions in characterising and quantifying dynamic geological processes occurring at or near the earth surface and in the ocean using environmental radiogenic isotopes and elements.



Dr Avinash Kumar Agarwal

The Shanti Swarup Bhatnagar Prize for the year 2016 in Engineering Sciences has been awarded to Dr Avinash Kumar Agarwal of Indian Institute of Technology, Kanpur, for his outstanding contributions to the research related to Internal Combustion engine, alternate fuels, optical diagnostics, laser ignited hydrogen/CNG engine, spray characterisation, emission and particulate control, lubricating oil tribology and for developing industrially relevant technologies like low-cost diesel oxidation catalysts and HCCI engines.



Dr Venkata Narayana Padmanabhan

The Shanti Swarup Bhatnagar Prize for the year 2016 in Engineering Sciences has been awarded to Dr Venkata Narayana Padmanabhan of Microsoft Research India, Bengaluru, for his pioneering work on indoor localisation, smartphone-based sensing, and mobile communication, which has resulted in academic and industry-wide impact and also technology transfer to Microsoft's products.

Dr Amalendu Krishna

The Shanti Swarup Bhatnagar Prize for the year 2016 in Mathematical Sciences has been awarded to Dr Amalendu Krishna of Tata Institute of Fundamental Research, Mumbai, for his outstanding contributions to K-theory, proof of analogue of Atiyah-Segal completion theorem and a solution of Bloch-Srinivas conjecture.



Dr Naveen Garg

The Shanti Swarup Bhatnagar Prize for the year 2016 in Mathematical Sciences has been awarded to Dr Naveen Garg of Indian Institute of Technology, New Delhi, for his outstanding contributions in solving scheduling and facility location problems using mathematical programming techniques.



Dr Niyaz Ahmed A.S.

The Shanti Swarup Bhatnagar Prize for the year 2016 in Medical Sciences has been awarded to Dr Niyaz Ahmed A.S. of University of Hyderabad, Hyderabad, for his outstanding contributions to the functional epidemiology of chronic pathogens such as enteropathogenic bacteria and *Mycobacterium tuberculosis* by successfully combining the rigours of genome inspired epidemiology and decipherment of bacterial virulence mechanisms.



Dr Subramaniam Anantha Ramakrishna

The Shanti Swarup Bhatnagar Prize for the year 2016 in Physical Sciences has been awarded to Dr Subramaniam Anantha Ramakrishna of Indian Institute of Technology, Kanpur, for his fundamental contributions in the field of metamaterials, and in developing new forms of anisotropic photonic materials.



Dr Sudhir Kumar Vempati

The Shanti Swarup Bhatnagar Prize for the year 2016 in Physical Sciences has been awarded to Dr Sudhir Kumar Vempati of Indian Institute of Science, Bengaluru, for his outstanding contributions, with the common theme of Flavour violation, which span a wide range of Particle Physics from supersymmetry to extra dimensions and from the Higgs boson to neutrino physics. His leadership qualities in developing a supersymmetric spectrum generator are highly commendable.



Shanti Swarup Bhatnagar Prize (SSB) for Science and Technology 2017



Dr Deepak Thankappan Nair

The Shanti Swarup Bhatnagar Prize for the year 2017 in Biological Sciences has been awarded to Dr Deepak Thankappan Nair of Regional Centre of Biotechnology, Faridabad, for his outstanding contributions in providing deep mechanistic insights into the activities of specialized DNA polymerases and accurate initiation of genome replication by viral RNA polymerases.



Dr Sanjeev Das

The Shanti Swarup Bhatnagar Prize for the year 2017 in Biological Sciences has been awarded to Dr Sanjeev Das of National Institute of Immunology, New Delhi, for his outstanding contributions in the area of cancer biology, which have provided novel mechanistic insights into the functioning of p53 and sirtuins.



Dr G. Naresh Patwari

The Shanti Swarup Bhatnagar Prize for the year 2017 in Chemical Sciences has been awarded to Dr G. Naresh Patwari of Indian Institute of Technology, Mumbai, for his significant experimental work on vibrational spectroscopy in the gas phase that has led to advancement of fundamental concepts in hydrogen bonding.



Dr S. Suresh Babu

The Shanti Swarup Bhatnagar Prize for the year 2017 in Earth, Atmosphere, Ocean and Planetary Sciences has been awarded to Dr S. Suresh Babu of Vikram Sarabhai Space Centre (ISRO), Thiruvananthapuram, for his outstanding contributions towards understanding the radiative impacts of black carbon aerosols on atmospheric stability and climate.



Dr Alope Paul

The Shanti Swarup Bhatnagar Prize for the year 2017 in Engineering Sciences has been awarded to Dr Alope Paul of Indian Institute of Science, Bengaluru, for his work that made a paradigm shift in our understanding of multi-component solid state diffusion that impacted the technological development of complex high-performance alloys.

Dr Neelesh B. Mehta

The Shanti Swarup Bhatnagar Prize for the year 2017 in Engineering Sciences has been awarded to Dr Neelesh B. Mehta of Indian Institute of Science, Bengaluru, for his notable contributions in the areas of wireless communication, energy-harvesting wireless networks, interference modelling and co-operative communications.



Dr Amit Dutt

The Shanti Swarup Bhatnagar Prize for the year 2017 in Medical Sciences has been awarded to Dr Amit Dutt of ACTREC, Tata Memorial Centre, Mumbai, for his outstanding contributions to cancer genetics especially related to the FGF Receptor family in lung cancer, including novel mutations in Indian patients. This has major implications for our understanding of the disease as well as translational possibilities.



Dr Deepak Gaur

The Shanti Swarup Bhatnagar Prize for the year 2017 in Medical Sciences has been awarded to Dr Deepak Gaur of Jawaharlal Nehru University, New Delhi, for his discovery of novel molecular mechanisms that are essential for red cell invasion by malaria parasites and are highly potent targets for malaria vaccine development.



Dr Nissim Kanekar

The Shanti Swarup Bhatnagar Prize for the year 2017 in Physical Sciences has been awarded to Dr Nissim Kanekar of National Centre for Radio Astrophysics, TIFR, Pune for his outstanding contributions to astrophysics including the establishment of stringent observational bounds on the evolution of the electron-proton mass ratio and the fine structure constant over cosmological time scales.



Dr Vinay Gupta

The Shanti Swarup Bhatnagar Prize for the year 2017 in Physical Sciences has been awarded to Dr Vinay Gupta of CSIR National Physical Laboratory, New Delhi, for his outstanding and impactful contributions in the areas of organic solar cells, multifunctional fragmentation carbon nanotubes arrays, polymer-polymer Förster Resonance Energy transfer research with a focus on applications and taking them towards real technological products.



Shanti Swarup Bhatnagar Prize (SSB) for Science and Technology 2018



Dr Ganesh Nagaraju

The Shanti Swarup Bhatnagar Prize for the year 2018 in Biological Sciences has been awarded to Dr Ganesh Nagaraju of Indian Institute of Science, Bengaluru, for his outstanding contributions in uncovering the mechanistic basis of RAD51 paralogs functions in genome homeostasis.



Dr Thomas Pucadyil

The Shanti Swarup Bhatnagar Prize for the year 2018 in Biological Sciences has been awarded to Dr Thomas Pucadyil of Indian Institute of Science Education and Research, Pune, for his contribution in the development of methodologies for understanding the biogenesis and dynamics of vesicle compartments in biological membranes with important implications for application in medicine.



Dr Rahul Banerjee

The Shanti Swarup Bhatnagar Prize for the year 2018 in Chemical Sciences has been awarded to Dr Rahul Banerjee of Indian Institute of Science Education and Research, Kolkata for his outstanding contributions in using the principles of crystal engineering for synthesizing metal-organic frameworks and covalent organic frameworks (MOFs and COFs) for materials applications.



Dr Swadhin Kumar Mandal

The Shanti Swarup Bhatnagar Prize for the year 2018 in Chemical Sciences has been awarded to Dr Swadhin Kumar Mandal of Indian Institute of Science Education and Research, Kolkata, for his outstanding contributions in the area of catalysis oriented towards utilization of carbon dioxide and of relevance to fuel cell.



Dr Madineni Venkat Ratnam

The Shanti Swarup Bhatnagar Prize for the year 2018 in Earth, Atmosphere, Ocean and Planetary Sciences has been awarded to Dr Madineni Venkat Ratnam of National Atmospheric Research Laboratory, Tirupati, for his outstanding contributions to middle atmospheric structure and dynamics.

Dr Parthasarathi Chakraborty

The Shanti Swarup Bhatnagar Prize for the year 2018 in Earth, Atmosphere, Ocean and Planetary Sciences has been awarded to Dr Parthasarathi Chakraborty of CSIR National Institute of Oceanography, Goa, for his outstanding research that provided new insights into speciation and cycling of trace metals in tropical marine systems.



Dr Amit Agrawal

The Shanti Swarup Bhatnagar Prize for the year 2018 in Engineering Sciences has been awarded to Dr Amit Agrawal, Indian Institute of Technology, Mumbai, for his outstanding experimental, theoretical and numerical contributions to the area of Fluid Mechanics including the development of microfluidic devices.



Dr Ashwin Anil Gumaste

The Shanti Swarup Bhatnagar Prize for the year 2018 in Engineering Sciences has been awarded to Dr Ashwin Anil Gumaste, Indian Institute of Technology, Mumbai, for his outstanding contributions to the development of end-to-end carrier-class networking solutions and Carrier Ethernet Switch Routers which are deployed extensively in national infrastructure.



Dr Amit Kumar

The Shanti Swarup Bhatnagar Prize for the year 2018 in Mathematical Sciences has been awarded to Dr Amit Kumar, Indian Institute of Technology, New Delhi, for his outstanding contributions to the design of new models for online problems, and novel algorithms for problems in clustering, scheduling and network design.



Dr Nitin Saxena

The Shanti Swarup Bhatnagar Prize for the year 2018 in Mathematical Sciences has been awarded to Dr Nitin Saxena, Indian Institute of Technology, Kanpur, for his outstanding work on the Polynomial Identity Testing approach in the field of complexity theory.



Dr Ganesan Venkatasubramanian

The Shanti Swarup Bhatnagar Prize for the year 2018 in Medical Sciences has been awarded to Dr Ganesan Venkatasubramanian of National Institute of Mental Health and Neurosciences, Bengaluru, for his outstanding body of clinical research in Schizophrenia spanning from pathogenesis to treatment and indigenous device development.





Dr Aditi Sen De

The Shanti Swarup Bhatnagar Prize for the year 2018 in Physical Sciences has been awarded to Dr Aditi Sen De of Harish Chandra Research Institute, Allahabad, for her significant contributions to quantum information and communication, including the formulation of a computable entanglement measure and a novel density-matrix recursion method.



Dr Ambarish Ghosh

The Shanti Swarup Bhatnagar Prize for the year 2018 in Physical Sciences has been awarded to Dr Ambarish Ghosh of Indian Institute of Science, Bengaluru, for his outstanding contributions to understanding and control of motion at the nanoscale, through the magnetic and optical coupling, with potential applications in biotechnology.

“While working in Council of Scientific and Industrial Research (CSIR) we are trying our best to make the application of science to all the fields like agriculture also.”

Dr Shekhar C. Mande

Dr Shekhar C. Mande, DG-CSIR, Felicitated with Bharat Asmita Tantra-Vidnyan Shrestha Award

Dr Shekhar C. Mande, Director General, Council of Scientific and Industrial Research (CSIR) has been awarded the ‘Bharat Asmita Tantra-Vidnyan Shrestha Award’.

The Award Ceremony was held on 3 February 2019 jointly organised by MIT World Peace University, MIT School of Government and Bharat Asmita Foundation. Also present at the ceremony were Dr Raghunath Mashelkar and Dr Vijay Bhatkar, a well-known computer scientist.

At the award ceremony, Dr Shekhar Mande said, “While working in Council of Scientific and Industrial Research (CSIR) we are trying our best to make the application of science

to all the fields like agriculture also. In this way, we can contribute to increasing the ease and transparency in the voting process.”

Structural and computational biologist, Dr Shekhar C. Mande assumed the charge of Director-General of the Council of Scientific and Industrial Research (CSIR) on 16 October 2018.

Dr Mande has several other awards to his credit. In 2005, he was awarded the Shanti Swarup Bhatnagar Prize for Science and Technology – the most prestigious science award in India – in the category of Biological Sciences. He was also honoured with the B.M. Birla Young Scientist Award in 1999, and Wellcome Trust International Senior Fellow 2003-08.

He has been elected Fellow of all the three major science academies in the country – the Indian National Science Academy (INSA), National



Academy of Sciences, India (NASI), and the Indian Academy of Sciences (IAS). He is also Life member of the Indian Crystallographic Association, the Indian Science Congress Association and the Indian Biophysical Society. Dr.

Mande is also credited with the B.C. Guha Memorial Lecture of the Indian National Science Academy, 2017 and the B.K. Bachhawat Memorial Lecture of the National Academy of Sciences, India, 2017.



National Science Day 2019

CSIR-National Chemical Laboratory (CSIR-NCL), Pune

CSIR-National Chemical Laboratory (CSIR-NCL), Pune, celebrated the National Science Day on 28 February 2019. On the occasion, Prof. Gautam Radhakrishna Desiraju, Solid State & Structural Chemistry Unit, Indian Institute of Science, Bengaluru, delivered the National Science Day lecture on the topic “International Year of the Periodic Table-2019”.

Prof. Gautam R. Desiraju informed the audience that 2019 has been announced as the International Year of Periodic Table of Chemical Elements. He reminded the audience about the quotation of Dr Richard Feynman: “If the human race lost all the knowledge that was accumulated, and was allowed to keep only one fact from which it can re-build all the facts that were discovered, that fact would be ‘All matter is made up of tiny indivisible things which are known as atoms.’” Wherever you go in the universe either there is nothing or there is matter. Matter can be constituted with these 120 elements of the periodic table. At a certain level, it’s a strange concept that this entire thing we are seeing around is made up of 120 elements. These elements have a very simple pattern which we call the periodic table.

Prof. Desiraju told the story of the periodic table to the audience referring

to its hero Dmitri Mendeleev. He divided his talk referring to the periodic table as Antiquity, Mendeleev and post-Mendeleev period. It included the elements from the period of antiquity that included copper, gold, iron, zinc, carbon, oxygen, etc. in the first period. The story of the chemical elements was following one particular trajectory till the 17th century. Exemplifying the statement of Isaac Newton that tells, “If I have seen further than others, it is by standing upon the shoulders of giants”, he said that as a scientist, we always stand on the shoulders of the people

Wherever you go in the universe either there is nothing or there is matter.



Prof. Gautam Desiraju delivering the National Science Day lecture



Tree plantation programme in CSIR-NCL campus

Prof. Desiraju explained the methods of acquiring knowledge talking about knowledge by perception. The characteristics of the intuitive knowledge are communicability that believes in certainty. Intuitive thinking is not guesswork.

who came before us and then we look to the future and those who come after us will stand on our shoulders. That is the natural way in which science progresses. He discussed the contributions made by Antoine Lavoisier, Robert Boyle, John Dalton and Stanislao Cannizzaro that indirectly helped Mendeleev in the architecture of the periodic table.



Prof. Desiraju talked about the discovery of the most important element in the periodic table that is Oxygen. He also expressed his views about the phlogiston theory that dominated over one century. He explained the methods of acquiring knowledge talking about knowledge by perception. The characteristics of the intuitive knowledge are communicability that believes in certainty. Intuitive thinking is not guesswork. He said that the supply of the chemical elements on the planet is finite. He mentioned about elements that could be on the verge of extinction in the next few years.

Earlier, Dr S.P. Chavan, Director-in-charge, CSIR-NCL, gave the welcome remarks and introduced the speaker to the audience. Earlier, on the occasion of the National Science Day, Prof. Desiraju planted a tree sapling.

As part of the celebrations of National Science Day at CSIR-NCL, the research work being carried out in the laboratory was showcased in the form of poster presentations during 26-28 February 2019. A total of 134 posters were presented enthusiastically by the students — JRFs, SRFs, PAs and post-docs. The posters were arranged in seven categories — ORG (Organic Chemistry), CAT (Catalysis), PHY (Physical and Materials Chemistry), BIO (Biochemical Sciences & Biochemical Engineering), POLY (Polymer Chemistry), CEPE (Chemical Engineering & Polymer Engineering), and TCC (Theoretical & Computational Chemistry). An eminent panel of judges scrutinized and evaluated the posters in each category and selected the best posters. The winners were awarded the Agnimitra Banerjee memorial poster prizes. A total of 20 poster prizes were handed out at the hands of the Chief Guest for the day, Prof. Gautam R. Desiraju.

A large number of science college students visited various labs in CSIR-NCL, watched poster presentations and attended the National Science Day lecture.

CSIR-National Institute of Science Communication and Information Resources (CSIR-NISCAIR), New Delhi



Council of Scientific & Industrial Research
**National Institute of Science Communication
and Information Resources, New Delhi**

National Science Day Celebration 2019

Panel Discussion

Indian Scholarly Journals: Contemporary Issues and Aspects

Panelists

Prof. Amitabh Joshi, Editor of Publications, Indian Academy of Sciences, Bangalore
Dr. Archana Thakur, Joint Secretary, University Grants Commission, New Delhi
Dr. Praveen Arora, Scientist 'G' & Head, CHORD, Department of Science and Technology, New Delhi
Shri Madhavendra Narayan, Associate Editor, Indian National Science Academy, New Delhi

Panel Chair
Dr. Krishan Lal
Former President, Indian National Science Academy, New Delhi

February 27, 2019 at 11:00 am

Conference Hall, CSIR-NISCAIR
Dr. K. S. Krishnan Marg, Pusa, New Delhi-110012

Journals are an important medium of scholarly communication. India publishes a large number of journals but as is known, most of these journals do not have Impact Factors or have low Impact Factors. Further, in recent years, the Indian scholarly journals landscape has been mired with the problem of mushrooming of predatory journals. To discuss these and other issues, a panel discussion was organised by CSIR-National Institute of Science Communication and Information Resources (CSIR-NISCAIR) on the occasion of the National Science Day 2019.

The panel discussion held on the eve

of the National Science Day had Prof. Krishan Lal, former President, Indian National Science Academy (INSA) chairing the discussion. Prof. Amitabh Joshi, Editor of Publications, Indian Academy of Sciences (IASc), Bengaluru; Dr Archana Thakur, Joint Secretary, University Grants Commission (UGC); Dr Praveen Arora, Scientist G, Department of Science and Technology (DST) and Mr Madhavendra Narayan of the Indian National Science Academy (INSA) were the panellists.

In his opening remarks, Dr Manoj Kumar Patariya, Director, CSIR-NISCAIR welcomed the participants and said that NISCAIR publishes a

The panel discussion is an opportunity to share experiences, said Dr Manoj Kumar Patairiya

number of journals and so do the two academies, IASc and INSA and the panel discussion is an opportunity to share experiences and also discuss about policy initiatives taken by DST and UGC in this direction.

Dr Krishan Lal initiated the panel discussion by greeting all present on the occasion of the National Science Day. He also mentioned interesting anecdotes of Sir C.V. Raman and narrated the story of the discovery of the Raman Effect. He also talked about the importance of research journals.

Prof. Amitabh Joshi touched upon the issue of peer review, of how it has become increasingly difficult to get peer reviews done. Prof. Joshi also shared the positive experience that the Indian Academy of Sciences (IASc) had with



Dr Manoj Kumar Patairiya, Director, CSIR-NISCAIR, addressing the gathering

regard to co-publishing of the Academy journals with Springer.

Dr Archana Thakur of the University Grants Commission explained about the UGC's recently introduced Consortium for Academic and Research Ethics (CARE) programme that aims at maintaining a reference list of quality



Prof. Krishan Lal delivering his remarks



Dr Archana Thakur



Dr Praveen Arora



Mr Madhvendra Narayan



Release of the publication “Open Access: The Road to Freedom”

journals. She invited all present to give their inputs to the CARE programme.

Dr Praveen Arora apprised about a recent brainstorming session organised by DST on the research publication ethics that discussed various aspects of research journals including the lower preference of Indian scientists to publish in Indian journals. He was of the view that an accreditation agency may help in accrediting journals of good quality.

Mr Madhvendra Narayan of INSA was of the opinion that an Editors’ Guild comprising Editors of Indian scientific journals should be constituted.

Earlier, a publication, “Open Access: The Road to Freedom” edited by Dr N.C. Ghosh of CSIR-IICB was released on the occasion.

*Contributed by G. Mahesh
Senior Principal Scientist
CSIR-NISCAIR*

Dr Praveen Arora apprised about a recent brainstorming session organised by DST on the research publication ethics.

Events

CSIR-IITR Participates in “KUTUHAL”

The aim of setting-up the stall was to communicate information and to spread awareness regarding safe water, safe food and a healthy environment.

The CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, participated in “KUTUHAL” (Know, Understand, Test, Use Healthcare Appliance & Learn) held at the Visvesvaraya National Institute of Technology (VNIT), Nagpur, from 9 to 11 February 2019. The event was jointly organised by Vigyan Bharati, Indian Medical Association (IMA), National Cancer Institute (NCI) and VNIT, Nagpur.

The event was inaugurated by Union Minister Shri Nitin Gadkari and Nagpur mayor Mrs Nanda Jichkar. Dr Shekhar C. Mande, Director General, CSIR and Secretary, DSIR, delivered a plenary talk emphasising on human microbiome and health. Dr Mande also visited the CSIR-IITR stall in which technologies

developed by the institute including “Oneer” – a water disinfection system, Argemone Oil adulteration detection kit, Butter Yellow adulteration detection kit, etc. were displayed and demonstrated.

Team CSIR-IITR distributed informative brochures to the public for raising awareness on health and environmental safety issues. The aim of setting-up the stall was to communicate information and to spread awareness regarding safe water, safe food and a healthy environment. Team CSIR-IITR successfully met their objective as thousands of students, medical aspirants, professors and doctors visited the CSIR-IITR stall and greatly appreciated the work.



CSIR-CBRI Foundation Day



Lighting of lamps by the dignitaries

CSIR-Central Building Research Institute (CBRI), Roorkee, celebrated its Foundation Day with great enthusiasm on 12 February 2019. The Secretary of Housing and Urban Affairs, Government of India, Shri Durga Shankar Mishra graced the occasion as the Chief Guest and Dr Shailesh Kumar Agarwal, Executive Director, BMTPC (Building Materials & Technology Promotion Council), Housing and Urban Affairs, Government of India, was the Guest of Honour. Dr N. Gopalakrishnan, Director, CSIR-CBRI, presided over the function.

Speaking on the occasion, Shri Durga Shankar Mishra communicated the Prime Minister's vision of New India 2022 and said that it envisions India not as a developing but a fully developed nation — a nation devoid of poverty, dirt, discrimination and hunger; a global leader in terms of GDP and economy; a country with equal rights and opportunities; and most importantly, a nation with adequate housing for all. As



Shri Durga Shankar Mishra, Secretary of Housing and Urban Affairs, Government of India, delivering his Foundation Day Lecture

a premier Institute of the Government of India, CSIR-CBRI has a vital role to play in achieving this dream. Housing is a basic human necessity — and understanding this need the nation's first

Shri Durga Shankar Mishra said that the Institute should work to achieve the goal of providing affordable housing to the bottom 800 million of the pyramid, at the fastest pace.

Prime Minister laid the foundation of CSIR-CBRI. Since its inception, CSIR-CBRI has made sterling contributions in the fields of building materials, construction technology and processes, auxiliary equipment research, etc.

Shri Mishra said that the growing urban population is the major challenge of the housing construction sector today. Most of the villagers who migrate to the city in search of fairer opportunities create unauthorised and inadequate houses that lack even the basic supply and sanitation facilities and cannot withstand the weather changes. CBRI needs to take up the challenge to create an ecosystem of affordable housing for the urban areas, to tackle this problem.

Commending the Institute on its achievements, Shri Durga Shankar Mishra said that the Institute should work to achieve the goal of providing affordable housing to the bottom 800 million of the pyramid, at the fastest pace. India is a nation of diverse geographical features, varying climates and different disaster zones and CBRI needs to create varying housing construction designs

to fulfil the requirements of all. He also informed about the achievements of various programmes initiated by the Prime Minister of India including the Swachh Bharat Abhiyan, Housing for All, Smart Cities, etc. He also gave an overview of the development of the 151 aspirational districts under the NITI Ayog.

In his Presidential Address, Dr N. Gopalakrishnan, Director, CSIR-CBRI, congratulated and thanked everyone who had contributed to the Institute's success directly or indirectly. He said that the Institute has faced and overcome many challenges during this glorious journey, through its resilience and dedication. He assured that the institute will continue to serve the nation by carrying out R&D in all aspects of housing and assisting the building industry.

The Diamond Jubilee Best Research Paper was awarded jointly to Shri Manojit Samantha, Shri Piyush Punetha, Dr Shantanu Sarkar, Shri Ajay Dwivedi and Shri Mahesh Sharma for their paper titled "Slope Stability Assessment and Design of Remedial Measures for Tungnath Temple at Uttarakhand India:



Shri Durga Shankar Mishra addressing the gathering



Dr N. Gopalakrishnan during his Presidential Address

A Case Study” and Shri S.K. Singh, Ms Shilpa Kulkarni, Shri Vivek Kumar and Shri Prabhat Vashisht.

The Diamond Jubilee Technology Award having Maximum Societal Impact was awarded to three technologies — “Process Know-how of Manufacture of Building Components, i.e. Power Blocks, Tiles and Bricks from Construction and Demolition Waste” by Dr A.K. Minocha, Shri Soumitra Maiti, Dr Neeraj Jain, Ms Monalisa Behera and Shri Santha Kumar; “Interpenetrating Polymer Network (IPN) Coating for the Protection of Reinforcement in Concrete” by Dr Rajani Lakhani, Shri K.K. Asthana, Shri Francis Charles and Shri Shah Nawaz Khan; and “Round Boulders Mortar (RBM) Units for Hilly Regions” by Dr Ajay Chaurasia, Dr S.K. Panigrahi, Shri Jalaj Parashar and Shri Shubham Singhal.

The winners of the debate competition organised for the staff of Institute on the topic “Vedic Science: Truth or Fiction”, under the supervision of Shri Aman Kumar, were also felicitated during the programme. Shri Arpan Maheshwari stood first, Shri Shaksham Bharadwaj placed second, Shri Sushil Kumar stood third and Shri Ashish Kharkwal received the Consolation prize. Dr Atul Kumar Agarwal, Senior Principal Scientist, CSIR-CBRI and Shri Alok Gupta, Kendriya Vidyalaya No. 1 judged the competition.

Dr A.K. Minocha, Chief Scientist, CSIR-CBRI, conducted the function and Dr Suvir Singh, Chief Scientist, CSIR-CBRI, proposed the vote of thanks. Shri Chandresh Yadav, ADM Haridwar; Mrs Nikita Khandelwal, JM Roorkee; and Mrs Jayshree Gopalakrishnan also graced the event. The superannuated

employees of the Institute were also present on the occasion.

The dignitaries also visited the “Construction Demonstration Park for Mass Housing” and reviewed the Institute’s R&D achievements. The demonstration park displayed a wide array of technologies developed by the Institute from technologies suitable for both rural and urban spaces to those



Gathering of scientists, staff & guests during the programme



Guests in Technology Park



Dignitaries reviewing the Institute's R&D achievements



Shri Durga Shankar Mishra chaired the meeting on Global Housing Technology Challenge India

for different climatic regions, testing facilities, special equipment, etc.

Shri Durga Shankar Mishra also chaired a meeting with Dr N. Gopalakrishnan, Director, CSIR-CBRI, Roorkee; Prof. Ajit Chaturvedi, Director, IIT Roorkee; the team of CBRI scientists and a team of IIT professors

on Global Housing Technology Challenge India and discussed the roles, responsibilities and expectations in swift technology transition endeavour and the new eco-system being built to promote innovations, enterprises and keeping abreast with the latest technological breakthroughs.

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