

if so, whether they could be amenable to modifications by chemistry approaches to define activity–toxicity profiles. It is to be noted that out of a total of 175,000 extracts, 16,000 showed activity in four therapeutic areas, among which only a 1000 were examined further. Even then, four NCEs and three NCAs could be detected. This encouraging result indicates that if properly exploited, the microbes collected through this programme could lead to the discovery of many more useful molecules.

### Creation of a repository

This exercise also resulted in the creation of a repository of microbes collected under the project. All the 175,000 isolates are being characterized, maintained and preserved here, making it the largest collection in the world and the only one that is biotechnology linked. The microbial culture collection at National Centre for Cell Sciences, Pune set up by De-

partment of Biotechnology, Govt of India has acquired the status of International Depository Authority under the Budapest Treaty and is also designated as National Repository by the Ministry of Environment, Forest and Climate Change, GoI, under the Biodiversity Act, 2002. This is the single largest repository in the Asian region. It has recently been renamed as the ‘National Centre for Microbial Resource’. The cultures collected under this project are available to any desirous researcher for large-scale screening under a Material Transfer Agreement. Besides this, the collection also offers a variety of microbial storage and identification services.

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## C. N. R. Rao wins the Materials Research Society’s Von Hippel Award

The Von Hippel Award, the Materials Research Society’s (MRS) highest honour, recognizes brilliance and originality of intellect, combined with vision that transcends the boundaries of conventional scientific disciplines. The award that includes a cash prize, honorary membership in MRS, and a unique trophy was presented to Rao in Boston on 29 November 2017 during the Materials Research Society’s Annual meeting. Rao who is the first Asian to receive this award is the National Research Professor at the Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru, India. He received this award ‘for his immense interdisciplinary contributions to the development of novel functional materials, including magnetic and electronic properties of transition metal oxides, nanomaterials such as fullerenes, graphene and 2-D inorganic solids, superconductivity and colossal magnetore-

sistance in rare-earth cuprates and manganates.’

Rao started his independent research efforts in materials chemistry when the subject was in its nascent stage. With the meagre facilities available then, he investigated phase transformations of TiO<sub>2</sub> and CsCl, and also carried out defect calculations. While working on rare-earth oxides, he made TbO<sub>2</sub> and PrO<sub>2</sub> using a simple solution route – this is an early example of chimie douce. He started working on metal oxides by building simple instruments including a thermobalance and furnaces. In 1987 he was able to fully characterize the first N<sub>2</sub> superconductor (YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>) using a home-built AC susceptometer. He has worked on various aspects of transition-metal oxides including metal-insulator transitions, colossal magnetoresistance and multiferroics. In the last two decades, he has been engaged in the synthe-

sis, characterization and measurements of properties of various nanomaterials, especially 2D nanosheets (graphene and its inorganic analogues). As part of his interest in designing new materials, he has covalently cross-linked 2D sheets and other nanomaterials to derive new materials with novel properties. Rao is actively working on water splitting and reduction of CO<sub>2</sub>, besides using aliovalent anion substitution to generate novel inorganic materials (Zn<sub>2</sub>NF in place of ZnO). He has authored more than 1500 research papers and 45 books.

*Current Science* had intended to publish the news of Rao winning the award under the news section in its 25 November 2017 edition. The misclassification of this news in the 25 November issue of the journal is deeply regretted by the Editor and Editorial staff.

1. <https://www.mrs.org/fall-2017-von-hippel>

## Infosys Prize 2017

The Infosys Science Foundation announced the winners of the Infosys Prize 2017 on 15 November 2017. Every year, the foundation gives away awards for

outstanding achievements to contemporary researchers and scientists in the areas of Engineering and Computer Sciences, Humanities, Life Sciences,

Mathematical Sciences, Physical Sciences and Social Sciences.

The winners of 2017 were shortlisted from over 236 nominations by a scholarly

jury panel consisting of renowned scientists and professors. The following are the winners of the Infosys Prize 2017.

**Engineering and Computer Science:** Sanghamitra Bandyopadhyay (Director, Indian Statistical Institute, Kolkata) has been chosen for her scholarly contributions to algorithmic optimization and its significant impact on biological data analysis. Her discoveries include a genetic marker for breast cancer, determination of co-occurrence of HIV and cancers, and the role of white cells in Alzheimer's disease.

**Humanities:** Ananya Jahanara Kabir (Department of English, King's College, London) has been selected for her highly original exploration of the long-standing historical elements – conceptual, social and cultural – in colonial modernity, and for her subtle and insightful ethnography of cultural and political life in Kashmir.

**Life Sciences:** The awardee is Upinder Singh Bhalla (National Centre for Bio-

logical Sciences, Bengaluru) for his pioneering contributions to the understanding of the brain's computational machinery. His investigations have revealed essential neuronal computations that underlie the ability to acquire, integrate and store complex sensory information, and to utilize the information for decision and action.

**Mathematical Sciences:** Ritabrata Munshi (Tata Institute of Fundamental Research, Mumbai and the Indian Statistical Institute, Kolkata) has been chosen for his outstanding contributions to analytical aspects of number theory. Besides ingenious contributions to the Diophantine problem, he has established important estimates known as sub-convexity bounds for a large class of L-functions with methods that are powerful and original.

**Physical Sciences:** Yamuna Krishnan (Department of Chemistry, University of Chicago, USA) has been chosen for her ground-breaking work in the emerging

field of DNA architecture. By successfully manipulating DNA – the building block of life – to create biocompatible nanomachines, she has created novel ways of interrogating living systems, increasing our knowledge of cell function and getting a step closer to answering unresolved biomedical questions.

**Social Sciences:** Lawrence Liang (School of Law, Ambedkar University, Delhi) has been selected for his creative scholarship on law and society. His prodigious output in the fields of copyright law, digital technologies and media, and popular culture raises probing questions about the nature of freedom, rights and social development. His provocative answers link historical context and ethical practice in unexpected and illuminating ways.

The award ceremony will be held on 10 January 2018, in Bengaluru. The winners will be facilitated by Nobel laureate Kip S. Thorne (California Institute of Technology, USA).

## MEETING REPORT

### Science jargon and society\*

The announcement of the Infosys Prize 2017 was followed by a panel discussion titled 'Science jargon and society – Do we need to bridge the gap'. The panel was moderated by Dipti Nair (Editor, *Your Story*). The members of the panel included N. R. Narayana Murthy (Founder, Infosys), Neha Satak (Co-founder and CEO, Astrome Technologies), P. Balaram (former Director, Indian Institute of Science) and Aashima Dogra (Co-founder, The Life of Science).

Narayana Murthy indicated that jargons are part of our daily lives and there is no problem in using them as long as they are used in the right context and in the company of those who understand it. He said that widespread use of jargons among the general public indicated that society as a whole, in a certain sense, has been elevated in its awareness of scientific terminology. He also mentioned that Indian media could popularize some of

the scientific ideas in ways that Jim Al-Khalili (British Iraqi theoretical physicist), Brian Cox (British physicist) and John Gribbin (astrophysicist and British science writer) have done.

Satak talked about the importance of communicating the impact of science on day-to-day life. She also talked about the importance of communicating the end goal of a research for obtaining funding. During the discussion, Neha emphasized the need for a fundamental change in the education system early on. She was of the opinion that original thinking and innovation needed to be given priority, rather than just getting a good grade. She indicated that educational institutions should engage students and create a framework in the system that rewards innovation.

Balaram urged the general population to develop appreciation for science, because it impacts them in different ways in their everyday lives. In the process of communicating science, one should not de-jargonize science so much that it dumbs it down. He mentioned that certain articles carried in the print media

promise advances in science, especially in the areas of medicine, which are not practically realizable. This is dangerous, because it creates false expectation among the people who are suffering from a disease, which is untreatable or cannot be treated well. He felt the need for a level of moderation in reporting science and stressed that people who are writing about it have a responsibility of learning science and checking the accuracy of information.

Dogra talked about the challenges that science writers face in terms of having to read scientific papers and interact with scientists who normally use jargons. She also laid emphasis on public engagement with science and technology as opposed to public understanding of the same. Agreeing that there is danger in dumbing down science, she felt the need for science reporters to go deeper into the subject areas.

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\*A report on the panel discussion organized by Infosys Science Foundation held at the Infosys Campus, Bengaluru on 15 November 2017.