

THE WINNERS

Humanities: Literary Studies

Prof. Amit Chaudhuri, Professor of Contemporary Literature, University of East Anglia, Norwich, U.K. for his imaginative and illuminating writings in literary criticism, which reflect a complex literary sensibility, and great theoretical mastery, along with a probing sense of detail.

**Engineering and Computer Science**

Dr. Ashish Lele, Scientist, National Chemical Laboratories (NCL), Pune, India for his work on smart gels which is based on the notion of connecting molecular properties to microscopic properties. This has potential impact in areas including soft actuators, smart drug delivery devices and stitchless wound healing.

**Life Sciences**

Dr. Satyajit Mayor, Professor of Cellular Organization and Signaling at the National Centre for Biological Sciences (NCBS), Bangalore, India for his breakthrough contributions that provide new insights into regulated cell surface organization and membrane dynamics. His work has helped in understanding the state of the cell and also the cell's function of being able to control and remodel the processes that happen inside it.




Infosys
Science
Foundation

Infosys Prize 2012 Honours Achievers in Science and Humanities

At a function held in New Delhi on 3 January 2013, the Infosys Science Foundation honoured seven winners of the fourth Infosys Prize 2012 for their outstanding achievements and contributions across six disciplines: Engineering and Computer Science, Humanities, Life Sciences, Mathematics, Physical Sciences and Social Sciences.

Mr. N.R. Narayana Murthy, Chairman Emeritus, Infosys, and Trustee, Infosys Science Foundation, informed that a new category – Humanities – had been added this year to “acknowledge the importance of humanistic pursuits like literature, legal studies and history in enriching and elevating our lives”.

The laureates were felicitated by former Prime Minister of Norway, Dr. Gro Harlem Brundtland. The prize in each category comprises a gold medallion, a citation and INR 50 lakh as prize money.

The ceremony was presided over by Mr. S. Gopalakrishnan, Executive Co-Chairman, Infosys and President of the Board of Trustees, Infosys Science Foundation. The jury chairs of the six categories were also present on the occasion and elucidated the importance of the winners' work to the audience. The jury chairs include – Prof. Amartya Sen, Humanities; Dr. Kaushik Basu, Social Sciences; Prof. Shrinivas Kulkarni, Physical Sciences; Prof. Pradeep K. Khosla, Engineering & Computer Science; Prof. Srinivasa S. R. Varadhan, Mathematics; and Prof. Inder Verma, Life Sciences.

Physical Sciences

Dr. Ayyappanpillai Ajayaghosh, Senior Scientist, National Institute for Interdisciplinary Science and Technology (NIIST), Council of Scientific and Industrial Research, Thiruvananthapuram, India for his pioneering development of methods for the construction of supramolecular functional materials. These materials can be used for sensing other molecules and also for imaging certain biological molecules that may be responsible for diseases; and can therefore be used for detecting diseases in their early stages. These materials may also be used as a security label for documents and for currency.



Social Sciences

Prof. Arunava Sen, Professor, Economics and Planning Unit, Indian Statistical Institute (ISI), New Delhi, India for his game-theoretic analyses of mechanism design. This is aimed at designing systems that can help achieve the best outcomes from diverse information and incentives. Prof. Sen's work has implications in areas like auction design, designing of a voting system etc. It may also help in addressing questions of how to allocate students to colleges in universities or how to match donor kidneys to people who need them.



Humanities: History

Prof. Sanjay Subrahmanyam, Distinguished Professor of History, University of California at Los Angeles (UCLA), U.S.A. for his path-breaking contribution to history. His work involves developing a new genre of 'connected history' – which looks at how histories of different regions may be inter-connected. Indian history, for instance, is not isolated but has been shaped by events in other parts of the world.



Mathematical Sciences

Prof. Manjul Bhargava, Professor of Mathematics, Princeton University, Princeton, U.S.A. for his extraordinarily original work in algebraic number theory. His work has revolutionized the way in which various fundamental arithmetic objects, such as elliptic curves, are understood. Number Theory as a field finds application in cryptography, coding theory, Internet transmissions and credit card security.



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Congratulating the winners, Dr. Gro Harlem Brundtland, former Prime Minister of Norway and former Director-General of the World Health Organisation in her address said that the most pressing task today was to develop renewable, clean energy sources to replace fossil fuel and that science must lead the way. She said that the countries that first make the transition will be the leaders of the next generation and that emerging economies like India and China, who have a particular stake in the transition to a future based on clean energy, must lead the way. Dr Brundtland also espoused the cause of cost-effective "frugal science" that is adapted to and addresses the context of developing countries. Citing the example

of Western medicine that is increasingly becoming costly, she said the need was to work towards affordable health care, which requires the development of science that is conscious of cost from the beginning. "Foundations such as Gates, Wellcome and others are already developing frugal medicine, and much of the health-care spending in developing countries is on technology that is, of necessity, frugal," she said.

The Chairman of the famous Brundtland Commission, whose mission was to unite countries to pursue sustainable development together, Dr Brundtland said that other developing country problems such as the management of mega-

cities, effective delivery of education, and provision of water and energy also must include cost considerations right from the outset.

Congratulating the Jury Chairs and the Laureates, Mr. S. Gopalakrishnan, Executive Co-Chairman, Infosys, and President of the Board of Trustees, Infosys Science Foundation, hoped that the work of the distinguished laureates "would prove to be an inspiration for the young generation to take up science and research and be the creators of the change that they want to see in the India of tomorrow".

Hasan Jawaid Khan