



Information and Announcements*

Women in News!

Bengaluru-based Scientists Bag Padma Shri Award – 2019

Prof. Rohini M Godbole and Prof. Sharada Srinivasan, two leading Bengaluru-based scientists, were conferred with the prestigious Padma Shri Award by the Government of India on the country's 70th Republic Day, 26 January 2019. Prof. Rohini Godbole is a Professor at the Centre for High Energy Physics, Indian Institute of Science and Prof. Sharada Srinivasan is a Professor at the National Institute of Advanced Studies, Bengaluru.

Prof. Rohini Godbole is an Indian physicist and academic best known for her work in theoretical high energy physics. She has had a long association with CERN, the European Organization for Nuclear Research. Prof. Godbole has worked extensively on different aspects of particle phenomenology over the past four decades, in particular on exploring at the particle colliders different aspects of the Standard Model of Particle Physics (SM) and the physics beyond it (BSM). Her work has crucial implications for the design of next generation electron positron colliders.

Prof. Godbole is an elected fellow of all the three Academies of Science of India and also The Science Academy of the Developing World (TWAS). She is member of the international advisory board of the CEPC (Chinese Electron Positron Collider) and a member of the Linear Collider Board. She serves on the High Energy Physics Advisory Panel of the US. She has been a part of the International Detector Advisory Group for the International Linear Collider (ILC). She is the founding Chairperson of the 'Panel for Women in Science' initiative of the Indian Academy of Sciences.

Prof. Godbole champions gender equity in scientific careers, and has jointly edited *Lilavati's Daughters*, a collection of biographical essays on women scientists from India.



Prof. Rohini Godbole

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Prof. Sharada Srinivasan is an Indian archaeologist known for her pioneering contributions to the study of archaeology and history of art from the perspective of exploring engineering applications in these disciplines. Archaeometallurgy pertains to the technological study of metallic archaeological artefacts and art objects to gain insights into manufacturing techniques and sources of metal. Her landmark contributions include the archaeometric characterisation of bronze icons of South India using lead isotope ratio and compositional analysis to assist in their stylistic dating. Her work has also provided insights into the sophisticated high-tin bronze metallurgy in the Iron Age from Tamil Nadu, the early development of iron and steel metallurgy and rare craft survivals such as the metal mirrors from Aranmula. Her work has crucial implications towards preservation of ancient Indian metallurgical traditions, the finger-printing of antiquities and study of history of technology.



**Prof. Sharada
Srinivasan**

Prof. Srinivasan is a Fellow of the Royal Asiatic Society of Great Britain and World Academy of Art and Science.

Prof. Srinivasan is an acclaimed Bharata Natyam artist and is the first author of *India's Legendary Wootz Steel* and contributing author to *Ecstasy of Classical Art*, the bronze catalogue of National Museum, Delhi and co-editor of *Digital Hampi*.

Resonance wishes Prof. Godbole and Prof. Srinivasan heartiest congratulations!



Infosys Prize

Nalini Anantharaman, born in Paris in 1976, is a French mathematician. Her parents are both mathematicians: her father was born and brought up in India and her mother in France. They are now retired from the University of Orléans. Nalini is currently a professor of Mathematics at University of Strasbourg. She works in the area of dynamical systems, partial differential equations, semiclassical analysis, spectral theory and mathematical physics.

Nalini Anantharaman was awarded the Salem Prize in 2010 for work on eigenvalues of the Laplacian, and the Jacques Herbrand Prize in 2011 from the French Academy of Sciences. In 2012 she was awarded the Henri Poincaré Prize, which she shared with Freeman Dyson, Barry Simon and Sylvia Serfaty, "for her original contributions to the area of quantum chaos, dynamical systems and Schrödinger equations, including a remarkable advance in the problem of quantum unique ergodicity". In 2013 she received the CNRS Silver Medal, and in 2015, she was elected a member of the Academia Europaea. She was a plenary speaker at the 2018 International Congress of Mathematicians. Nalini has been awarded the 2018 Infosys prize from the Infosys Science Foundation.



Prof. Nalini Anantharaman

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Rosalind Franklin: Mars Rover Named After DNA Pioneer

Celebrating the contributions of women in science, the European Space Agency (ESA) has named its next Mars rover, due to touch down on the Red Planet in March 2021, 'Rosalind Franklin' after the British scientist Rosalind Franklin, whose research was crucial to determining the structure of DNA.

The Mars rover which until now was known by its project name – ExoMars – has been named 'Rosalind Franklin' after an expert panel chose the name from over 36,000 entries submitted by citizens from all ESA Member States, following a competition launched by ESA in July 2018.

The Mars rover built in the UK is designed to search for traces of habitability and life by roaming around on the Martian surface and drilling within the top 6.5 feet (2 meters) of the planet's surface.

British chemist and X-ray crystallographer Rosalind Franklin is one of the most influential women in science. The X-ray crystallograph image of DNA, known as Photo 51, developed by Franklin's team provided the essential insights for Watson and Crick to build the first 3D model of DNA. The discovery is hailed as one of the supreme achievements of 20th Century science as it enabled researchers to understand how genetic material is stored, copied and transmitted to maintain life.

According to ESA Director General Jan Woerne, "This name reminds us that it is in the human genes to explore. Science is in our DNA, and in everything we do at ESA."



Mars Rover Rosalind Franklin

