

Evolutionary biologist, inorganic chemist & malaria researcher bag SERB Women Excellence Award 2020

Dr Niti Kumar, a malaria researcher from Central Drug Research Institute (DCRI) Lucknow, Dr Deepa Agashe, an evolutionary biologist from National Centre for Biological Sciences (NCBS), Tata Institute of Fundamental Research (TIFR), Bangalore, and Dr K. Geetharani, an inorganic chemist from Indian Institute of Science (IISc), Bangalore have received the SERB Women Excellence Awards 2020. The awards were given by the Hon'ble President on the occasion of National Science Day celebration organized by the Department of Science and Technology on February 28 at Vigyan Bhawan.

Science and Engineering Research Board (SERB) Women Excellence Award has been instituted to recognize and reward outstanding research achievements of young women scientists in frontier areas of Science and Engineering. The award strives to serve as a source of inspiration to women scientists who have the potential to become world-class leaders in their field of research. Women scientists below 40 years of age who have received recognition from one or more of the National Science and Engineering Academies are considered for this award. The awardees are supported with a research grant of Rs. 5 lakh per annum for a period of three years. Fifty-five women scientists have been bestowed the SERB Women Excellence Award since 2013.

Dr Niti Kumar is a biologist, working as an independent group leader in CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow. Her research is focused towards understanding protein quality control machinery in human malaria parasite for exploration of alternative drug targets for malaria intervention. She is also involved in antimalarial screening for identification of scaffolds effective against drug-resistant malaria. She received her PhD from CSIR-Institute of Genomics and Integrative Biology, New Delhi. From 2009 -2013, she was a Postdoctoral Fellow at Max Planck Institute of Biochemistry, Munich, Germany. She is the recipient of various National and International awards and fellowships such as Innovative Young Biotechnologist Award (IYBA-2015), Ramalingaswami Fellowship, INSA Young Scientist award, EMBO Postdoctoral, Humboldt and Marie Curie fellowships.

Dr Deepa Agashe is a biologist, working at the interface of evolutionary biology, ecology, and molecular biology. Using diverse tools such as experimental evolution, genomics, molecular analyses and phylogenetics, she aims to understand how bacteria and insects adapt to new environments. Dr Agashe received her Bachelor's degree in Microbiology from Abasaheb Garware College (University of Pune) in 2003, followed by a PhD from the University of Texas at Austin, the USA in 2009. Her thesis work showed that genetic diversity can stabilize animal populations and facilitate adaptation to new niches. During her postdoctoral work at Harvard University, USA, she proved that so-called "silent" mutations can have enormous effects on bacterial evolution. In 2012, she returned to India to lead a research group at the National Centre for Biological Sciences (NCBS-TIFR), where her team is dedicated to unravelling the causes and mechanisms of evolution.

Dr K. Geetharani is an inorganic chemist, and her research focuses mainly on the development of cost-effective, earth-abundant, less toxic base metal catalysts or main group catalysts for the synthesis of organoboranes, which are important synthetic intermediates in pharmaceuticals, agrochemicals, liquid crystals, and organic light-emitting diodes. She obtained her PhD from Indian Institute of Technology Madras in 2012 and carried out postdoctoral research at

University of Wurzburg, Germany. She began her independent research career as Assistant Professor at Department of Inorganic and Physical Chemistry, Indian Institute of Science Bangalore, India, in 2016. She is a recipient of DST-Inspire Faculty Award, Young Associate-Indian Academy of Sciences, INSA-Young Scientist medal and NASI-Young Scientist Platinum Jubilee Award.