# **CSIR Young Scientist Awards 2011**

Instituted in 1987, CSIR Young Scientist Awards seek to promote in-house excellence in various fields of science and technology. CSIR scientist, below 35 years of age, as reckoned on 26 September (CSIR Foundation Day) of the preceding year, is eligible for the Award.

These awards are given annually in the following fields:

Biological Sciences

> Chemical Sciences

Earth, Atmosphere, Ocean and Planetary Sciences

> Engineering Sciences

Physical Sciences (including instrumentation)

Each award consists of a citation, a cash prize of ₹50,000/- (Rupees fifty thousand only) and a plaque. CSIR Young Scientist Awardees are also entitled to a research grant of ₹5.0 lakhs (Rupees five lakh only) per annum for a period of five years and an honorarium of ₹7,500/- (Rupees seven thousand and five hundred only) per month till the age of 45 years.

Till 2010, 140 scientists (including 17 women scientists) have received the CSIR Young Scientist Award and out of these 15 scientists have been conferred with the prestigious Shanti Swarup Bhatnagar Prize. For the year 2011, Advisory Committee consisting of eminent scientists recommended the following seven scientists for the CSIR Young Scientist Awards. This year, none was found suitable in Biological Sciences and Physical Sciences (including instrumentation).

# **Chemical Sciences**

#### Dr Bikash Kumar Jena

The CSIR Young Scientist Award for the year 2011 in Chemical Sciences has been awarded to Dr Bikash Kumar Jena of CSIR Institute of Minerals and Materials Technology, Bhubaneswar, for his outstanding contributions in the area of materials chemistry particularly in developing methods for synthesizing shape control structures useful for sensing, electrocatalysis and surface enhanced Raman scattering studies.

## Dr Dattatraya Hanumant Dethe

The CSIR Young Scientist Award for the year 2011 in Chemical Sciences has been awarded to Dr Dattatraya Hanumant Dethe of CSIR National Chemical Laboratory, Pune, for his outstanding contributions in total synthesis of biologically active alkaloids, using novel methodology, which is expected to open new avenues to synthesis of various types of important molecular architectures.

#### Dr Rahul Banerjee

The CSIR Young Scientist Award for the year 2011 in Chemical Sciences has been awarded to Dr Rahul Banerjee of CSIR National Chemical Laboratory, Pune, for his outstanding contributions in the design of new materials for hydrogen storage and carbon sequestration based on metal-organic frameworks.

# Earth, Atmosphere, Ocean & Planetary Sciences

# Dr Arun Singh

The CSIR Young Scientist Award for the year 2011 in Earth, Atmosphere, Ocean and Planetary Sciences has been awarded to Dr Arun Singh of CSIR National Geophysical Research Institute, Hyderabad, for his significant contributions to understand the mantle deformation patterns of the Indian plate using seismic anisotropy studies. He has successfully demonstrated the anisotropic nature of the Indian plate and its linkage to the geodynamics of the Himalayan-Tibetan Mountain System.

### Dr Rajeev Saraswat

The CSIR Young Scientist Award for the year 2011 in Earth, Atmosphere, Ocean and Planetary Sciences has been awarded to Dr Rajeev Saraswat of CSIR National Institute of Oceanography, Goa, for his excellent work on developing unique techniques to infer relative strength of northeast and southwest monsoon during the past 140000 years using temporal changes in the morphology and abundance of benthic foraminifers and the first ever quantitative estimation of past sea water temperature changes in the Indian Ocean as well as study of foraminiferal response to various physio-chemical parameters underlaboratory conditions.

# **Engineering Sciences**

## Dr Amol Arvindrao Kulkarni

The CSIR Young Scientist Award for the year 2011 in Engineering Sciences has been awarded to Dr Amol Arvindrao Kulkarni of CSIR National Chemical Laboratory, Pune, for his outstanding work on microreactors and designing ability to transform basic understanding into viable processes.

#### Dr Kaushik Biswas

The CSIR Young Scientist Award for the year 2011 in Engineering Sciences has been awarded to Dr Kaushik Biswas of CSIR Central Glass & Ceramic Research Institute, Kolkata, for his outstanding contributions towards development of rare earth doped fluoride nanocrystal containing transparent glass ceramics which represent promising future materials.













