

## WORKSHOP REPORT

### **Nano for Children-2014: Workshop for Budding Scientists**

The workshop entitled “Nano for Children-2014” was held at INST (Sector 64, Mohali) on 14<sup>th</sup> November 2014 to celebrate Children’s Day with the aim to inculcate science among students. This workshop was organized with an objective to get science out of the textbook and help to develop a genuine interest and stronger skills in science among students. The workshop was attended by a total of 23 students from four different schools along with one accompanying teacher, from the areas adjoining Mohali. The workshop started with the welcome note by Dr. Deepika Sharma (Co-ordinator, INST Outreach Programme). The main session of the workshop started with the keynote address by Prof. Ashok K Ganguli, Director, Institute of Nano Science the Technology (INST), Mohali. He encouraged the students to understand the basics and perform well in life. He further suggested that only by nurturing our budding scientist can ensure the immense impact on their growth, as young minds remain a mighty symbol of fate and hope for our country. After the keynote address by Prof Ashok K Ganguli, three special lectures were delivered to spark the interest of the future generation of scientists, doctors and engineers.

The first lecture was delivered by Dr Sonalika Vaidya (Scientist C, INST), in which she talked about importance of chemistry in the development of LCD and LED. The major emphasis of her talk was to explain that different materials used in OLED (organic light emitting diode) like hole injecting material, hole transport material, hole blocking material and electron transport material can be synthesized by simple understanding of chemistry. Dr. Sharmishta Sinha (Scientist D, INST) delivered a talk entitled “Proteins Function-Structure: Health and Disease”. In her lecture she talked about applications of proteins in our day to day

life and tools to study proteins structures. She further discussed about the human diseases which arise due to the deficiency of proteins. Dr. Suvankar Chakraverty (Scientist D, INST) in his lecture discussed about fascinating world of nano and answered the major questions like what is nano? why Nano? how to make nano? how to see nano? He explained the Laws of reflection and how Magnetic field is produced by a current carrying wire. He further explained the basics of Atomic Force Microscopy to students.

The second session of the workshop after tea break involved visit of the students the Faraday lab of INST. The principle and operation of various instruments like UV-VIS-NIR Spectrometer, Circular Dichroism Spectrometer, Confocal Raman Spectrometer, Powder X-Ray Diffractometer, Atomic Force Microscope (AFM), Scanning Electron Microscope (SEM) and Transmission Electron Microscope (TEM) were demonstrated to the students. Students were encouraged to ask questions to enhance their knowledge which will help in developing their interest in science. After the second session every student and the accompanying teacher of each school was awarded with a certificate by the Director. The teachers were also awarded by a book for their efforts. One student Mr. Himanshu Sharma (KV, Highgrounds, Zirakpur) was given an award by the Director for his interesting queries and activity. All the students were given a copy of map of India and the world for creating awareness, about the world and our neighbours.

As coordinator of INST Outreach Programme Dr Deepika Sharma extended her thanks to Professor Ashok K Ganguli for his vision behind this outreach programme and to outreach team members for their constant support and to all the speakers and students for making the event a grand success.