



International Year of Crystallography 2014

Golden year celebrations

Department of Physics
National Institute of Technology, Tiruchirappalli,
INDIA

Workshop on
“Element, compound and phase analysis by powder X-ray diffraction”
19-20th Sept. 2014

From ancient times, crystals have become one of the attractive materials due to their surface morphology, sparkles and colors. The discovery of X-ray diffraction from crystals by Max Von Laue helped to understand atomic/molecular structures and physical properties of them. Max Von Laue was awarded Noble prize in 1914 for his discovery. Now the year 2014 is celebrated as 100th anniversary of crystallography. To commemorate the International Year of Crystallography 2014, this workshop is organized.

Single crystal X-ray diffraction and powder X-ray diffraction methods are widely used for studying structure and physical properties of crystalline materials. Powder X-ray diffraction (Powder XRD) could be used when the material sizes are very small (less than mm). Recently, Nanoscience has become one of the emerging field and lot of nanomaterials are synthesized. Powder XRD has become one of important characterization tool for finding phase and size of nanoparticles. Many post graduate and research students do research work in nanomaterials.

The workshop aims at to impart knowledge to participants on element, compound and phase analysis of samples by powder X-ray diffraction. The workshop includes expert lectures, tutorials, X-ray lab visit and powder X-ray diffraction demonstration.

The interested participants can send their request to the organizer before 12th September 2014 with details of their research/project areas, contact address, e-mail and Mobile number to the organizers by email to: pxrd2014@gmail.com. Registration fee of Rs. 600 is to be paid at the registration desk, which includes lunch and resource materials. Accommodation will be arranged on request at student hostels on payment basis. Selected participants (about 50) will be intimated by email.

Organizers :

Dr. D. Sastikumar

Dr.M. Ashok

