

adviser to the government of India in organizing the interaction meetings. Dr. Gupta assured full support to all the participants and faculty members for the utilization of the Indus Synchrotron facility.



Participants of the Interaction meeting on X-ray lithography and microfabrication

Dr. V K Suri delivered the first lecture where he pointed out the need of micro and nano fabrication facilities for producing micro-nano engineering products. Dr. S K Deb gave an overview about the present and previous meetings held for x-ray lithography and a brief update about the Indus-2 synchrotron facilities. Prof. Shuji Miyamoto, Director of Laboratory for Advanced Science and Technology, Hyogo University, Japan and Prof. A Yamaguchi, Hyogo University delivered the lectures on the x-ray lithography facilities and nano magnets engineering respectively. Prof. B Bhattacharya (Jadavpur University), Prof. S Bhattacharya (IIT Kanpur), Prof. Monica Katiya (IIT Kanpur), Dr. Sunil Bhand (BITS-Pilani Goa Campus), Prof. N J Vasa (IIT Madras), Dr. V B Chandratre (BARC), Prof. Uday Dixit (IIT Gauwahati), Prof. A Sidpara (IIT Kharagpur), Dr. P Ram Sankar (RRCAT), Dr. Arvind Srivastava (RRCAT), Shri Vishal Dhamgaye (RRCAT) and Dr. Rahul Shukla (RRCAT), delivered the lectures during the interaction meeting covering various aspects of microfabrication.

There was a special session to discuss science involved in microfabrication and to identify new projects. Dr. Suri and Dr. Lodha chaired the session. The participants were asked to discuss their projects for 2-5 minutes. Following the interests of the participants it was decided to further explore the projects and its viability by the exchange of knowledge. It was also decided that all the necessary facilities and beam time at Indus-2 X-ray lithography beamline will be provided to carry out these projects.

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N.4: One Day Interaction Meeting on Engineering Applications of Beamline on Indus-2

One day interaction meeting was organized on 14th December 2013 on engineering applications of beamline. This meeting was organized to compile the needs of engineering research community in the country. This beamline is mainly based on x-ray diffraction experiments having the possibilities of both monochromatic and white beam. This beamline can be used for powder diffraction, stress and texture measurements in large size components up to 1 m in dimension. It can also be used for testing large size reflective x-ray optics. Scientists are invited from various national research centers and academic institutes for this meeting. In the meeting, the current plan of experiments on the beamline and ray tracing results were presented to participants. Thereafter, the invited scientists presented their plan and requirements from such a beamline. At the end, the inputs regarding facilities required in the experimental station were also taken from participants. These inputs are very useful to meet the requirements of a large user base.

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N.5: Indus Interaction meeting titled "Indus beamlines: their development and utilization"

A one day interaction meeting on Indus beamline utilization titled: "Indus beamlines: their development and utilization" was held on the 18th December 2013 at RRCAT. The speakers in this meeting were Dr. B.N.Jagatap (BARC), Dr. Chandrabhas Narayana (JNCASR, Bangalore), Dr. Shankar Ghosh (TIFR, Mumbai), Prof. B.D.Shrivastava, (Univ. of Ujjain), Dr. D.M.Phase (UGC DAE CSR, Indore) Dr. P.Ch. Sahu (IGCAR, Kalpakkam), Dr. G.S.Lodha (RRCAT) and Dr. Ravi Makde (BARC/RRCAT). The speakers talked about the various experiments carried out at the Indus beamlines and their personal association with the development and utilization of Indus-1 and Indus-2 beamlines. The meeting was attended by various scientists and researchers from different institutes, including, UGC-DAE-CSR, Indore; DAVV Indore; Univ. of Ujjain and RRCAT.

This meeting also coincided with the birthday of Dr. S.K.Deb, the then Head of Indus Synchrotrons Utilization Division, who superannuated on 31st of December 2013. It was an opportunity to felicitate Dr. Deb, and recount the immense contributions made by him towards the development of the beamlines at Indus and enhancing their utilization. The last session of this meeting was thus devoted to his felicitation where several senior scientists who had a