



Department of Science & Technology
Ministry of Science & Technology
Government of India



Workshop on Neutron Scattering (Elastic and Inelastic) and Muon Spectroscopy

February 16-17, 2024

Venue: Conference Center, IIT – Guwahati

February 16, 2024

2:00 PM – 2:05 PM	Welcome by Prof. Subhash Thota	
2:05 PM – 2:10 PM	Inaugural Address Prof. Perumal Alagarsamy	
2:10 PM – 2:20 PM	On the first phase of the DST-RAL Project: Prof. A. Sundaresan	
2:20 PM – 2:25 PM	Remarks by Dr. Manoranjan Mohanty, Head Nanomission, DST	
2:25 PM – 2:30 PM	Vote of Thanks: Prof. Dilip Pal	
Session I	Chair: Zakir Hossain	
2:30 PM – 3:30 PM	Dr. S.M Yusuf	Basics of Neutron Diffraction and its Applications in Materials Research
3:30 PM – 4:30 PM	Prof. Atul Khanna	Structural analysis of glasses by neutron diffraction, pair distribution function analysis, and reverse Monte Carlo simulations
4:30 PM – 5:00 PM	<i>Tea/Coffee Break</i>	
5:00 PM – 6:00 PM	Dr. Anil Jain	Inelastic Neutron Scattering to Investigate Magnetic Excitations in Quantum Magnets

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Session II	Chair: S. M. Yusuf	
9:00 AM – 10:00 AM	Prof. Zakir Hossain	Magnetism and Superconductivity in Ternary and Quaternary Compounds Probed Using Muon Spectroscopy
10:00 AM – 11:00 AM	Prof. Amitava Bhattacharyya	Exploring Fundamental Techniques and Applications of Muon Spin Spectroscopy in Superconductivity
<i>11:00 AM - 11:30 AM</i>	<i>Tea/Coffee Break</i>	
11:30 AM – 12:30 AM	Prof. Dipanshu Bansal	Phonon measurement using inelastic neutron scattering and their application to superionic conductors
<i>12:30 PM - 2:00 PM</i>	<i>Lunch</i>	
Session - II	Chair: Vivek Kumar Malik	
2:00 PM – 3:00 PM	Prof. Vivek Kumar Malik	Polarized Neutron Reflectometry: An efficient tool to probe the magnetic profile of thin films and multilayers
3:00 PM - 4:00 PM	Prof. Sadafara A. Pillai	Small-Angle Neutron Scattering in Soft Matter Research: From Micelles to Polymers
<i>4:00 PM - 4:30 PM</i>	<i>Tea/Coffee Break</i>	
4:30 PM - 5:30 PM	Prof. A. Sundaresan	Neutron Diffraction Study of Magnetic Structures in Magnetoelectric and Multiferroic Materials
<i>5:30 PM – 6:00 PM</i>	<i>Discussion and Concluding Remarks</i>	