

Programme for WEM2011

Time	Title of the talk	Code	Presenting Author
Day 0: Tuesday, November 22, 2011			
20:00 – 21:30: Dinner for Outstation (non-local) Participants at the Hotel Suryansh			
Day 1: Wednesday, November 23, 2011			
08.30 – 09:30	Registration		
09:30 – 10:00	Inauguration		Directors: IIT, IOP
	Session -1(10:00-11:00) Chair: Prof. M. Chakraborty		
10:00 – 10:30	Quasi crystals, Noble Prize and Electron Microscopy	IT1	K. Chattopadhyay, IISc, Bangalore
10:30 – 11:00	Electron Microscopy: An Over View	IT2	J. Bellare IIT Bombay
11:00 – 11:20 Tea			
Session-2 (11:00 – 12:50); Chair: K. Chattopadhyay			
11: 20 – 11:50	Optics of Electron Microscopes	IT3	R Tewari, BARC
11: 50– 12:20	Aberration corrected high resolution phase contrast transmission electron microscopy and high resolution electron energy loss spectroscopy	IT4	Ranjan Datta, JNCAS
12:20 – 12:50	Simulation of STEM annular dark field Z-contrast imaging with the STEMsim software – theory and application	IT5	A. Rosenauer, UB
13:00 – 14:00 Lunch at IOP			

Session-3 (14:00 – 15:00) Chair: Dr. A. N. Ghosh			
14:00 – 14:30	Use of diffraction in TEM	IT6	Ravi Shankar, IISc
14:30 – 14:50	Transmission Electron Microscopy Sample Preparation for Material Science	IO2	B. Satpati. SINP
14:50– 15:10 Tea and snacks			
Session-4 (15:10 - 17:30) Chair: A. Rosenauer			
15:10 – 15:40	Fundamentals of SEM	IT7	Vikram Jayaram, IISc
15:40 – 16:10	Spectro-microscopy of nanostructured materials using cathodoluminescence in scanning electron microscope	IO3	T Chini, SINP
16:10 – 16:40	SEM - EBSD	IT8	G Ravi Chandra, ARCI
16:40– 17:00	Imaging and Characterization of Defects in Materials by Transmission Electron Microscopy	IT9	S. Bysakh, CGCRI
17:00– 17:20	Spin chain magnetism and frustration in fine particles of $\text{Ca}_3\text{Co}_2\text{O}_6$	IO	Niharika Mohapatra
17:20– 17:45 Tea			
17:45- 19:00	Poster Session (Tea would be served during the poster session)		Poster Session
19:00 - 20:00	Demonstration		Demonstration
20:00 – 22:00 Dinner for Registered Participants at IOP			
Day 2: Thursday, November 24, 2011			
Session -5(09:00-10:45) Chair: G. Ravi Chandra			
09:15 – 9:45	Cryo-Electron Microscopy & 3-Dimensional Computational Image Processing of Biological Macromolecules	IT10	A. Sen, Auckland, NZ
9:45 – 10:15	Electron microscopy of DNA: protein monolayer technique to cryoelectron microscopy	IT11	A. N. Ghosh, ICMR

10:30 – 11:00	Drug Delivery Applications	IT12	S. K. Sahoo, ILS
10:30 – 11:00 Tea			
Session-6(11:00- 12:50), Chair: N. C. Mishra			
11: 00 – 11:20	Quantification of High Resolution Images	IO1	J. Basu
11:20 – 11:50	<i>In-situ TEM: An Overview</i>	IT14	P. V. Satyam, IOP
11:50 – 12:20	Application of Transmission Electron Microscopy to study deformation behavior of materials	IT15	Rahul Mitra, IITKGP
12: 20 – 12:50	<i>In-situ SEM/TEM</i>	IT14	P. Ghosal, DMRL
13:00 – 14:00 Lunch			
Session – 7 (14:00-15:30) Chair: B. N. Dev			
14:00 – 14:30	X-ray Diffraction Methods	IT16	I Manna, CGCRI
14:30 – 15:00	Scanning tunneling microscopy, photoemission electron microscopy and spin polarized low energy electron microscopy	IT17	B N Dev, IOP
15:00- 15:30	Large area nanopatterning of semiconductor surfaces by ion induced sputter erosion	IT24	T. Som
15:30 – 16:00 Tea			
Session-8(16:00-18:00) Chair: Rahul Mitra			
16:00 -16:30	Basics of 3D Atom Probe Tomography: A complementary tool for Electron Microscopy	IT19	Balamuralikrishan, DMRL
16:30- 17:00	Application of Convergent Beam Electron Diffraction	ITO1	D.V.Sridhara Rao, DMRL
17:00 – 17:20	Nano scale phase segregation and alloy formation in Au-Ge system:A electron microscopy study.	IO	A. Rath. IOP
17:20 – 17:40	Scanning tunneling microscopy: beyond the realm of seeing atoms	IO	K. Bhattacharjee
18:00 – 19:30	Demonstration		Demonstration

Conference Dinner: 8:00 PM to 11:00 PM (24.11.11)

Sponsored by IIT BBS at Swosti Premium

Day 3: Friday, November 25, 2011

Session -9(09:00-10:30) Chair: Prof. V. R. Pedireddi

	Quantification of High Resolution Images	IT22	J. Basu, IGCAR
09:30 – 10:00	XPS	IT23	Shikha Varma,IOP
10:00 – 10:30	Ion-Scattering Methods - Complementary tool for Electron Microscopy (RBS)	IT18	P. V. Satyam, IOP
10:30 – 11:00	To be announced		Madangopal, BARC

10:30 – 11:00 Tea

Session – 10 (11: 00 – 12:00), Chairman: Prof. Madangopal Krishnan

11:00 – 11:30	High precision Mask fabrication using E-beam lithography	IT25	P K Sahoo, NISER
11:30 – 11:50	Size dependent optical properties of the Tin-oxide nanrods		S. Rath, IITBBS
11:50 – 12:10	Concluding Remarks		
12:10 – 13:10	Demonstration		

13:00 – 14:00 Lunch

14:30 – 17:00	Local Sight Seeing		

Note on Demonstration:

We have demonstration for 1 hour each on 23rd, 24th, and 25th November 2011.

Please give your names at the registration desk about your interest in participating demonstration.

There would be three groups: Group 1, Group 2, Group 3

	23.11.11 19:00 – 20:00	24.11.11 18:00 – 19:00	25.11.11 12:10 – 13:10
TEM/SEM	Group 1	Group 2	Group 3
Deposition Labs/XPS	Group 2	Group 3	Group 1
Peeletron/MBE	Group 3	Group 1	Group 2

For TEM demonstration purpose: each group would be further divided into three subgroups: each sub-group would go to Sample Preparation (demonstration done by MS Gatan Inc.), TEM and SEM