CERIC
Central European Research Infrastructure Consortium

HERCULES Specialized Course 2021

The multi-technique approach of CERIC-ERIC as a tool for Nanoscience

	Monday May 31st	Tuesday June 1st	Wednesday June 2nd	Thursday June 3rd	Friday June 4th
08:30	**Welcome**				
08:45					
09:00	**CERIC**	**Introduction to X-ray Sectroscopy & Microscopy** Andrea Locatelli	**4 parallel sessions** **SAXS** H.Amenitsch, B.Sartor LS/MS **PGAA** Laszlo Szentmiklosi MS **ARPES** Natalia Olszowska Jacek Kołodziej Marcin Rosmus **Solid State NMR** Gregor Mali MS	**Liquid state NMR** Janez Plavec	**PIXE spectroscopy basics and applications** Iva Božičević Mihalić
09:15					
09:30	**Introduction to X/N-matter interaction** Maya Kiskinova			**Solid State NMR** Gregor Mali	
09:45		**Introduction to X-ray Imaging** Giuliana Tromba			
10:00					
10:15					
10:30	Coffee Break	Coffee Break		Coffee Break	Coffee Break
10:45					
11:00	**Introduction to NMR (Solid State NMR)** Gregor Mali	**Introduction to SAXS/SANS/LS H.Amenitsch** TUG		**Introduction to Ion Beams Analysis Techniques** Milko Jakšić	**Poster Session**
11:15					
11:30				**Introduction to Neutron Diffraction (PSD)** Alex Szakál	
11:45	**Introduction to Neutron Sources** Márton Markó				
12:00					
12:15					
12:30	Lunch	Lunch	Lunch	Lunch	Lunch
12:45					
13:00					
13:15					
13:30					
13:45					
14:00	**Introduction to Neutron Scattering** Márton Markói	**2 parallel sessions with smaller groups** **DXRL + Intro** B.Marmiroli MS **SAXS/LS** B.Sartori, H.Amenitsch, D.Naumenko **DXRL + Intro** B.Marmiroli MS **SAXS/LS** B.Sartori, H.Amenitsch, D.Naumenko	**4 parallel sessions** **SAXS** H.Amenitsch, B.Sartori LS/MS **RAD** Laszlo Szentmiklosi MS **ARPES** Natalia Olszowska Jacek Kołodziej Marcin Rosmus **Solid State NMR** Gregor Mali MS	**Multiple parallel sessions** **Liquid State NMR** Primož Šket LS	**RBS and ERDA Spectroscopies, basics and applications** Zdravko Siketić
14:15					
14:30	**Introduction to Neutron Imaging and PGAA** László Szentmiklósi				
14:45					
15:00					
15:15					
15:30	Coffee Break				Coffee Break
15:45					
16:00	**Intro to Synchrotron sources Spectroscopy I** Ada Wawrzyniak				**Ion microprobe techniques and applications** Georgios Provatas
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17:30					

	Monday June 7th	Tuesday June 8th	Wednesday June 9th
08:30			
08:45			
09:00	**Introduction to Near-Ambient Pressure XPS** Mykhailo Vorokhta	**X-ray diffraction - Macromolecular Crystallography** Annie Heroux	**Soft X-rays Imaging and XRF** Alessandra Gianoncelli
09:15			
09:30			
09:45		**Powder Diffraction** Jasper Plaisier	**FTIR Microscopy with Synchrotron Radiation** Lisa Vaccari
10:00			
10:15			
10:30	Coffee Break	Coffee Break	Coffee Break
10:45			
11:00	**Analytical Electron Microscopy for Materials Science: Introductory Notions** Corneliu Ghica	**Introduction to Electron Paramagnetic Resonance (EPR) Spectroscopy** Mariana Stefan	**Open Science**
11:15			
11:30			**FAIR Data**
11:45		**Applications of EPR in Materials Science** Daniela Ghica	
12:00			**EOSC**
12:15			
12:30	Lunch	Lunch	**Conclusions**
12:45			
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14:00	**3 parallel sessions** **SANS** László Almásy MS **SEM/FIB** Jaroslava Novakova **HRTEM** Corneliu Ghica MS	**3 parallel sessions** **PSD** Margit Fábián MS **NAPXPS** Bretislav Smid MS **EPR** Mariana Stefan Daniela Ghica MS	
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*** Practical sessions will be held in parallel**

Practical
Theory

CERIC facilties involed:

Graz University of Technology
Ruder Boskovic Institute
Charles Univerity Prague
Budapest Neutron Centre
Elettra Sincrotrone Trieste
Solaris Synchrotron
National Institute of Material Physics
National Institute of Chemistry