

Workshop „Correlative microscopy of beam sensitive samples“

1st November 2018

Institute of Scientific Instruments, Czech Academy of Sciences, Královopolská 147, Brno ([map](#))

Preliminary program (for the updated schedule see <http://info.isibrno.cz/bioem/workshop.pdf>):

- 8:00 – 8:20 Registration
- 8:20 – 8:30 **Welcome** (Vladislav Krzyžánek)
- 8:30 – 10:00 **Morning session 1**
Thomas Heuser (Vienna Biocenter Core Facilities, Vienna/AT):
Introduction to Cryo-EM and cryo-FIB-SEM
Dimitri Scholz (University College Dublin, Dublin/IR):
New developments in 3D and correlative microscopy
Zuzana Burdikova (Geisel School of Medicine at Dartmouth, Hanover/USA):
Insight into physico-chemistry of dairy products by advanced microscopic techniques
- 10:00 – 10:30 Coffee break
- 10:30 – 12:00 **Morning session 2**
Marie Vancová (Biology Centre, Czech Academy of Sciences, České Budějovice):
Biological applications of cryo-SEM in CLEM
Oldřich Benada (Institute of Microbiology, Czech Academy of Sciences, Praha):
MALDI-Imaging and Scanning Electron Microscopy in an Invasive Aspergillosis
Miroslav Šlouf (Institute of Macromolecular Chemistry, Czech Academy of Sciences, Praha):
Preparation and micromechanical properties of new types of embedding resins
Ota Samek (Institute of Scientific Instruments, Czech Academy of Sciences, Brno):
Combined Raman spectroscopy and SEM for characterization of microorganisms
- 12:00 – 13:00 Lunch break
- 13:00 – 15:00 **Afternoon session**
Markéta Dalecká and Aleš Benda (BIOCEV, Vestec u Prahy):
Examples of correlative light and electron microscopy on cells from IMCF at BIOCEV
Petr Sedláček (Materials Research Centre, Brno University of Technology, Brno):
Contribution of EM to understanding flow and barrier performance of hydrogels
Radim Skoupý (Institute of Scientific Instruments, Czech Academy of Sciences, Brno):
Multi-detector imaging in SEM
Jana Nebesářová (Biology Centre, Czech Academy of Sciences, České Budějovice):
High pressure freezing: the crucial step in CLEM procedures
Vladislav Krzyžánek (Institute of Scientific Instruments, Czech Academy of Sciences, Brno):
Developments and new possibilities at BioEM lab
- 15:00 – 15:15 Coffee break
- 15:15 – 17:00 **Lab tour** (HPF, cryo-SEM, Raman spectroscopy, optical tweezers...)

Registration: <https://goo.gl/VFR6kZ> (deadline 25.10.2018)

Questions: Kamila Hrubanová (hurbanova@isibrno.cz) / Vladislav Krzyžánek (krzyzanek@isibrno.cz)

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