

Topic: Recent trends in cryo-SEM applied to biology and chemistry

Date: November 23, 2016

Venue: Institute of Scientific Instruments, Czech Academy of Sciences, Královopolská 147, 612 64 Brno ([map](#))

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Registration: <http://goo.gl/5J6jts> (no registration fee; deadline 15.11.2016)

Program:

8:30 – 8:45 **Registration**

8:45 – 9:00 **Welcome**

9:00 – 9:50 **Plenary lecture: Eyal Shimoni** (Weizmann Institute of Science, Rehovot/Israel) „*Cryo-SEM – principles and applications*”

Coffee break / Poster session

Morning session 10:10 – 11:50

10:10 – 10:30 **Jana Nebesářová** (Biology Centre, Czech Academy of Sciences, České Budějovice) „*Critical steps in biological specimens preparation for cryo-SEM*”

10:30 – 10:50 **Oldřich Benada** (Institute of Microbiology, CAS, Praha) „*Cryo-SEM of Steptomyces mycelia (first experiences) & cryo-SEM of biodegradable scaffolds*”

10:50 – 11:10 **Igor Lacík** (Polymer Institute, Slovak Academy of Sciences, Bratislava) „*Cryo-SEM analysis of hydrogel microspheres*”

11:10 – 11:30 **Adam Schröfel** (BIOCEV, Vestec) „*High resolution cryo scanning electron microscope with FIB – first year in the imaging facility*”

11:30 – 11:50 **Jiří Nováček** (CEITEC, Brno) „*Cryo-FIB sample preparation of vitrified cells*”

Lunch (only for registered) / Poster session

Afternoon session 12:30 – 14:00

12:30 – 12:50 **Miroslav Šlouf** (Institute of Macromolecular Chemistry, Czech Academy of Sciences, Praha) „*Cryo-SEM microscopy of synthetic polymer hydrogels*”

12:50 – 13:00 **Vladislav Krzyžánek** (Institute of Scientific Instruments, Czech Academy of Sciences, Brno) „*Cryo-SEM at ISI Brno*”

13:00 – 13:15 **Stanislav Obruča** (Faculty of Chemistry, Brno University of Technology, Brno) „*Bioplastics producing bacteria as seen (not only) by advanced microscopic techniques*”

13:15 – 13:30 **Filip Růžička** (Faculty of Medicine, Masaryk University & FNUSA, Brno) „*Microbial biofilms and cryo-SEM*”

13:30 – 13:45 **Ota Samek** (Institute of Scientific Instruments, Czech Academy of Sciences, Brno) „*Morphological and production changes in stressed red yeasts monitored using cryo-SEM and Raman spectroscopy*”

13:45 – 14:00 **Pavel Kulich** (Veterinary Research Institute, Brno) „*Imaging of cells containing nanodiamonds*”

Coffee break / Poster session

14:30 – 15:30 **Lab tour (cryo-SEM; only for registered)**

until 16:00 *Coffee break / Discussions*

Available languages for scientific talks and posters are English, Czech and Slovak.

The workshop is organized with the support by the project „The Strategy AV21 Czech Academy of Sciences“, the research program „Diagnostic methods and techniques“.