

CSMS Conference - MICROSCOPY 2021

13 - 15 September 2021, České Budějovice

Monday 13th September

14:00	Meeting of the CSMS board
15:00	Registration
16:00	Member meeting of CSMS society
17:00	Registration
17:30	Conference opening
17:40	Announcement of the winner of the scholarship competition by Thermo Fisher / CSMS (Daria Drozdenko)
17:45	Announcement of the winner of the scholarship competition by CSMS (Václav Bačovský)
17:50	Announcement of CSMS award for merit in microscopy (Ondrej L. Krivanek)
18:00	Plenary lecture "Resolution revolutions in transmission electron microscopy" (Ondrej L. Krivanek)
19:00	Welcome party

Tuesday 14th September

9:00	Session I. - Optics and Instrumentation (chairs: Dušan Chorvát and Vladislav Krzyžánek)
9:00	Invited talk "Usage of industrial X-ray computed tomography with a high resolution" (Tomas Zikmund)
9:30	Miroslav Šlouf "Powder Nano-Beam Diffraction in Scanning Electron Microscope I: New, fast and easy method for analysis of nanoparticle crystal structure"
9:45	Radim Skoupý "Powder Nano-Beam Diffraction in Scanning Electron Microscope II: Signal Enhancement by Individual Image Deconvolution"
10:00	Dalibor Štys "Primary sin of multicolour digital imaging and its partial absolution via proper image capture and calculation of local spectra in visible range"
10:15	Christoph Naderer "A nano-photocrafting technique for protein immobilization for nanoscopic cell studies"
10:30	Poster session + coffee break
11:00	Technology news I (chair: Pavel Hozák)
11:00	Carl Zeiss spol. s r.o. / Joerg Lindenau "Scanning Electron Microscopy in Live Sciences - a widening field of applications"
11:30	Carl Zeiss spol. s r.o. / Pavel Krist "Quo vadis microscopy?"
12:00	JEOL (EUROPE) SAS / Regis Ravelle-Chapuis "Latest development in Jeol"
12:15	Pragolab s.r.o. / Daniel Smeets "Get Closer to the Truth - Confocal Microscope Platform STELLARIS"
12:30	Lunch
13:30	Session II. - Biomedical sciences (chairs: Oldřich Benada and Aleš Benda)
13:30	Invited talk "Cell Structure in Motion: Cryo-Electron Tomography and Rapid Correlative Light and Electron Microscopy" (Ludek Stepanek)
14:00	Fabian Hauser "3D localization microscopy of activated platelets on injured cells within a microfluidics"

14:15	Dušan Chorvát "Spectroscopy and time-resolved microscopy study of the effect of microplastics on sweet water algae <i>Chlorella</i> sp."
14:30	Jiří Týč "SBF-SEM analysis of unicellular parasite <i>Trypanosoma brucei</i> life cycle progression"
14:45	Václav Bačovský "The development of cytogenetic tools to study male meiosis and recombination suppression in dioecious plants" (winner of the scholarship competition by CSMS)
15:00	Poster session + coffee break
16:00	<p>Workshops</p> <ul style="list-style-type: none"> Měřicí technika Morava s.r.o. "Going beyond optics by touching and feeling your sample (integration of the Atomic Force Microscopy with advance optical techniques)" Specion, s.r.o. "Putting Dynamic Live Cell Data into the Ultrastructural Context With the Leica Nano workflow" <p>Panel discussions</p> <ul style="list-style-type: none"> "The art in microscopy" (in Czech) "Matching supply and demand in microscopic core facilities" alias "Do we offer what you need?"
17:00	Break
19:00	Social evening with banquet

Wednesday 15th September

9:00	Technology news II (chair: Pavel Hozák)
9:00	Telight Brno s.r.o. / Gabriel Sirat "Conical Diffraction Microscopy"
9:30	HPST, s.r.o. / Barbora Kobidová "Look closer and meet your cells with Nikon AX confocal microscope and Nanolive CX-A with EVE Analytics"
9:45	Olympus Czech Group, s.r.o. / Tomáš Pop "NoviSight 3D cell analysis software advances your discovery by providing statistical data for spheroids and other 3D objects in microplate-based experiments"
10:00	TESCAN ORSAY HOLDING, a.s. / Ondřej Šulák "Latest trends in 3D SEM/FIB-SEM tomography and data processing of biological samples"
10:15	Thermo Fisher Scientific Brno s.r.o. / Zuzana Hlavenková "Thermo Scientific™ Tundra Cryo-TEM: a new 100kV Cryo-TEM dedicated for Single Particle Analysis"
10:30	Poster session + coffee break
11:00	Session III. - Material sciences (chairs: Miroslav Šlouf and Alena Michalcová)
11:00	Invited talk "Microscopy in nanotechnology research" (Tomáš Šíkola)
11:30	Daria Drozdenko "Application of advanced in-situ techniques for investigation of plastic deformation of Mg alloys" (winner of the scholarship competition by Thermo Fisher / CSMS)
11:45	Tomáš Kruml "Measurement of planar faults energy by weak beam"
12:00	Jan Valenta "Optical microscopy of nanoparticles in microfluidic channels"
12:15	Michal Horák "Cathodoluminescence of semiconductors and plasmonic antennas"
12:30	Conclusion
12:40	Lunch