

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	Workshops <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" Panel discussions <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 Kobinová "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