

The 5th Stanisław Gorczyca European School on Electron Microscopy and Electron Tomography
5 – 8th July, 2016

Programme

AGH University of Science and Technology, al. A. Mickiewicza 30, Kraków
 Lectures and poster sessions (L) – Centre of Energy, building C6 , 3rd floor
 Practical sessions (P) – building A2, ground floor
 Lunches – building C2, 1st floor

Tuesday, 5.07		
8.30	<i>Registration</i>	
L 9:00	Welcome and introduction	A. Czyrska-Filemonowicz (AGH-UST, Kraków)
L1 09.15-10.30	TEM basics	O. Kryshnal (AGH-UST, Kraków)
L2 10.30-11.45	Electron Diffraction and Diffraction Contrast	J. Mayer (ER-C/FZJ, RWTH; Jülich/Aachen)
11.45-12.45	<i>lunch</i>	
L3 13.00-14.15	Aberration correction: basics and current status	M. Haider (CEOS Heidelberg)
L4 14.15-15.30	Electron holography	R. Dunin-Borkowski (ER-C/FZJ, Jülich)
L5 15.30-16.00	<i>poster session - coffee break</i>	
P G1: 16.00 – 17.00 G2: 17.15 – 18.15 G3: 16.00 – 17.00 G4: 17.15 – 18.15	Training – TEM Tecnai G2 20, JEM-200CX	AGH-UST staff
P G1: 17.15 – 18.15 G2: 16.00 – 17.00 G3: 17.15 – 18.15 G4: 16.00 – 17.00	Training – Electron diffraction A2 room 26 H, A2 room 17	AGH-UST staff

Wednesday, 6.07		
L1 08.30-9.45	High Resolution Electron Microscopy	J. A. Pérez-Omil (UCA, Cadiz)
L2 09.45-11.00	STEM-EDS-EELS – part 1	P.A. Buffat (EPFL, Lausanne/AGH-UST)
11.30-12.30	<i>lunch</i>	
L3 13.00-14.15	STEM-EDS-EELS – part 2	P.A. Buffat (EPFL, Lausanne/AGH-UST)

L4 14.15-15.30	Electron tomography	B. Goris (EMAT, Antwerp)
15.30-16.00	<i>poster session - coffee break</i>	
P G1: 16.00 – 17.00 G2: 16.00 – 17.00 G3: 18.15 – 19.15 G4: 18.15 – 19.15	Training – HRTEM Titan ³ G2 60-300	AGH-UST staff
P G1: 17.00 – 18.00 G2: 17.00 – 18.00 G3: 19.15 – 20.15 G4: 19.15 – 20.15	Training – STEM-EDS-EELS Titan ³ G2 60-300	AGH-UST staff

Thursday, 7.07		
L1 09.00-10.15	SEM	D. Grüner (FZJ, Jülich)
L2 10.15-11.30	EBSD in materials science	E. Wessel (FZJ, Jülich)
11.30-12.30	<i>lunch</i>	
L3 13.00-14.15	Orientation imaging microscopy in TEM: basics and application	A.S. Galanis (NanoMEGAS)
14.15-15.30	FIB-SEM tomography- basics and application to structural materials	A. Kruk (AGH-UST, Kraków)
15.30-16.00	<i>poster session - coffee break</i>	
P G1: 16.00 – 17.00 G2: 17.15 – 18.15 G3: 16.00 – 17.00 G4: 17.15 – 18.15	Training - SEM and EBSD Merlin Gemini II, NEON CrossBeam 40EsB	AGH-UST staff and FZJ
P G1: 17.45 – 18.15 G2: 16.00 – 16.30 G3: 17.15 – 17.45 G4: 16.30 – 17.00	ASTAR demonstration Tecnai G2 20, JEM-200CX	NanoMEGAS
	<i>Kraków sightseeing; School dinner</i>	

Friday, 8.07		
L1 09.00-10.15	<i>In-situ</i> TEM experiments – basics and application	E. Olsson (Chalmers, Gothenburg)
L2 10.15-11.30	Sample preparation methods (including FIB) – an overview	G. Cempura (AGH-UST, Kraków)
11.30-12.30	<i>lunch</i>	

<p>L3 13.00-14.00</p>	<p>Company presentations:</p> <p>ZEISS Microscopy - Achieve More</p> <p>Integrated Differential Phase Contrast (iDPC) STEM for Simultaneous High & Low Z Detection and for Low Dose Imaging</p> <p>Quantitative Tools for In-situ Electron Microscopy in Liquids and Gases</p> <p>What if Alice is blind</p>	<p>H. Pavlicek (ZEISS)</p> <p>A. Yalcin (FEI)</p> <p>M. Mosig (Protochips)</p> <p>Q. Xu (DENSsolutions)</p>
<p>P G1-G4: 14.00-15.30</p>	<p><i>In situ</i> heating experiments</p>	<p>DENSsolutions</p>
<p>15.30-16.00</p>	<p><i>coffee break (A2 building, room 17)</i></p>	
<p>P G1: 16.00 – 17.00 G2: 17.15 – 18.15 G3: 16.00 – 17.00 G4: 17.15 – 18.15</p>	<p>Training – FIB: sample preparation; FIB-SEM tomography</p> <p>NEON CrossBeam 40EsB and A2 room 5 or 3</p>	<p>AGH-UST staff</p>
<p>P G1: 17.15 – 18.15 G2: 16.00 – 17.00 G3: 17.15 – 18.15 G4: 16.00 – 17.00</p>	<p>Training – conventional sample preparation</p> <p>A2 room 26H, A2 room 23H</p>	<p>AGH-UST staff</p>
	<p><i>Closing</i></p>	