

## TEM COURSE SCHEDULE 2022

<b>Monday 21th November</b> <i>auditorium on the ground floor, No. 0.195</i>		
8:30 – 9:00	Registration	
9:00 – 9:15	Introduction/layout of the course	Vlada Filimoněnko
9:15 – 9:35	Short presentations of the participants	Participants
9:35 – 10:20	Sample preparation for transmission electron microscopy	Andreas Nowak
10:20 – 10:30	Coffee break	
10:30 – 11:15	Cryo sample preparation techniques for TEM / cryo TEM & its applications	Frederic Leroux
11:15 – 13:30	Practical sessions in two groups - Tokuyasu technique - group <b>yellow</b> - HPF and AFS – group <b>purple</b>	Andreas Nowak Frederic Leroux
13:30 – 14:00	Lunch	
14:00 – 16:15	Practical sessions in two groups - Tokuyasu technique – group <b>purple</b> - HPF and AFS – group <b>yellow</b>	Andreas Nowak Frederic Leroux
16:15 – 17:00	Q&A / application questions concerning entire sample prep techniques	ALL
<b>Tuesday</b>		
09:00 – 09:50	Theory: Basics of TEM - <i>auditorium on the ground floor, No. 0.195</i> - General TEM construction - TEM imaging - Energy filtered TEM - Digital cameras	Régis Ravelle-Chapuis
09:50 – 10:00	Coffee break	
10:00 – 13:00	Practical session: Alignments - JEM-1400Flash (room 01.152) – <b>group 1</b> - CM 100 (building "U") – <b>group 2</b> - JEM-F200 „F2“ (room 01.150) – <b>group 3</b> Direct alignments, alignments procedures, test specimens	Emanuel Katzman Oldřich Benada Régis Ravelle-Chapuis
13:00 – 14:00	Lunch	
14:00 – 17:00	Practical session: TEM imaging - JEM-1400Flash (room 01.152) – <b>group 3</b> - CM 100 (building "U") – <b>group 1</b> - JEM-F200 „F2“ (room 01.150) – <b>group 2</b> Bright/dark field, resolution, focus, astigmatism, contrast	Emanuel Katzman Oldřich Benada Régis Ravelle-Chapuis
19:00 – ?	Course dinner – Jeol sponsored – restaurant “U dvou koček”	
<b>Wednesday</b>		
09:00 – 12:00	Practical session - JEM-1400Flash (room 01.152) – <b>group 2</b> - CM 100 (building "U") – <b>group 3</b> - JEM-F200 „F2“ (room 01.150) – <b>group 1</b>	Emanuel Katzman Oldřich Benada Régis Ravelle-Chapuis
12:00 – 13:00	Lunch	
13:00 – 13:50	Theory: - Alignments in TEM – <i>seminary room, 2.102, 2<sup>nd</sup> floor</i> - TEM in life sciences – set up, applications and solutions	Régis Ravelle-Chapuis Emanuel Katzman
13:50 – 14:00	Coffee break	
14:00 – 17:00	Practical session - JEM-1400Flash (room 01.152) – <b>group 1</b> - CM 100 (building "U") – <b>group 2</b> - JEM-F200 „F2“ (room 01.150) – <b>group 3</b>	Emanuel Katzman Oldřich Benada Régis Ravelle-Chapuis

<b>Thursday</b>		
09:00 – 12:00	Practical session: Repetition of different parts - JEM-1400Flash (room 01.152) – <b>group 3</b> - CM 100 (building "U") – <b>group 1</b> - JEM-F200 „F2“ (room 01.150) – <b>group 2</b>	Emanuel Katzman Oldřich Benada Régis Ravelle-Chapuis
12:00 – 13:00	Lunch	
13:00 – 13:50	Theory: Cryo TEM - <b><i>seminary room, 2.102, 2<sup>nd</sup> floor</i></b>	Emanuel Katzman
13:50 – 14:05	Short test	
14:05 – 14:15	Coffee break	
14:15 – 17:15	Practical session (continued) - JEM-1400Flash (room 01.152) – <b>group 2</b> - CM 100 (building "U") – <b>group 3</b> - JEM-F200 „F2“ (room 01.150) – <b>group 1</b>	Emanuel Katzman Oldřich Benada Régis Ravelle-Chapuis
<b>Friday</b>		
09:00 – 11:00	- Cryo-TEM – demo of sample preparation (room 01.155.1, group <b>yellow</b> ) - Cryo-TEM – demo: imaging basics – (room 01.150, group <b>purple</b> )	Dominik Pinkas Emanuel Katzman Régis Ravelle-Chapuis
11:00 – 12:00	Lunch	
12:00 – 14:00	- Cryo-TEM – demo of sample preparation (room 01.155.1, group <b>purple</b> ) - Cryo-TEM – demo: imaging basics – (room 01.150, group <b>yellow</b> )	Dominik Pinkas Emanuel Katzman Régis Ravelle-Chapuis
14:00 – 14:20	Closure of the training part, results of the test <b><i>seminary room, 3.102</i></b>	Vlada Filimoněnko
14:20 – 15:00	Evaluation of the workshop - <b><i>seminary room, 3.102, 3<sup>rd</sup> floor</i></b>	Vlada Filimoněnko