材料測製實驗所 Materials Characterisation & Preparation Facility (MCPF)



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Introduction of JEOL JEM-ARM200F Cs-corrected TEM in MCPF, HKUST

Dear MCPF TEM Users,

We are pleased to announce that the newly installed JEOL JEM-ARM200F Cs-corrected TEM is expected to be available in early September.

The JEM-ARM200F Cs-corrected TEM is housed in MCPF lab 2212, which is a purpose-built room that limits environmental variations (vibration, thermal, moisture and electromagnetic interference). This atomic resolution analytical microscope is integrated with a Cs-corrector in the condenser lens system and a cold field emission gun. It achieves an ultimate STEM-HAADF resolution of 83 pm at 200kV. Atom-to-atom chemical mapping of materials, including energy-dispersive X-ray spectroscopy (EDS) and electron energy-loss spectroscopy (EELS), is possible. Tomography and 3D Reconstruction is also available under both TEM and STEM modes.

We will have two introduction sessions on 27 and 28 September to provide our users a basic understanding of this new equipment. You are invited to attend one of the introduction sessions. Due to limited room space, please enroll in the session (by email to caiyuan@ust.hk) not later than 15 September 2017 (Friday). Admission is on a first-come-first-served basis. A confirmation letter will be sent to the participants on 18 September 2017 (Monday).

Session 1: 27 September 2017 (Wednesday) 14:00 am – 17:00 pm Session 2: 28 September 2017 (Thursday) 14:00 am – 17:00 pm Venue: Room 2212 (near lift 22), Academic Building, HKUST

Details: 1. High resolution STEM-HAADF Imaging of atoms at 100pm.

2. Spectrum analysis and mapping with both Energy Dispersive X-ray Spectrometer (EDS) and Electron Energy Loss Spectrometer (EELS).

Thank you for your attentions. For enquiries, please contact Dr. CAI Yuan (Tel: 2358 8723, caiyuan@ust.hk).

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