



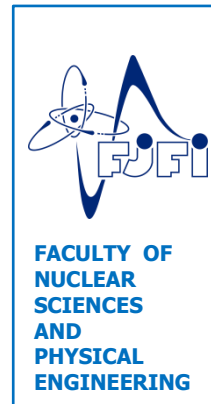
INVITATION

Department of Materials cordially invites you to participate in an intensive course of

Analytical Transmission Electron Microscopy

given by

Dr. Michael Stöger-Pollach, USTEM, TU Wien



Wed Oct 10

- 9-12h Introduction, elastic scattering of electrons (Rutherford scattering, scattering on shielded potential, Bragg diffraction, phonon scattering)
- 14-17h Inelastic electron scattering (Bethe theory, dielectric formalism, plasmon excitations, differential cross-section, Kramers-Kronig analysis, multiple scattering, ionization, ELNES)

Thu Oct 11

- 9-12h EELS (spectrometer, energy resolution, detection of electrons, spatial resolution, detection limits), Energy Filtered TEM (zero loss filtering, plasmon filtering, elemental maps)
- 14-17h Energy dispersive X-ray spectroscopy (spectrometer, interaction volume, detection limits, artefacts), chemical microanalysis (in EELS, in EDX)

Fri Oct 12

- 9-12h Cathodoluminescence (spectrometer, slit and grid diffraction, electron-hole recombination), Research topics (plasmonics, phase manipulation, atomic orbital imaging), Questions and answers, discussion

The lectures will take place in the hall ATRIUM, FJFI ČVUT, Břehová 7, Prague 1, ground floor

Please register by E-mail at: Miroslav.Karlik@fjfi.cvut.cz

