

SEM/EDS-EBSD workshop

Tuesday 03/12 – Wednesday 04/12-2019

Tuesday program SEM/FESEM - EDS

- 10.30 - 10.40: Opening and introduction, Aslaug Hagestad Nag, Future Materials
- 10.40 - 11.10: Basic SEM (resolution, depth of field, imaging contrasts), Jarle Hjelen
- 11.10 - 11.40: Basic FESEM – Field Emission Scanning Electron Microscopy, JEOL
- 11.40 - 12.10 Basic EDS (Energy Dispersive Spectrometer) analysis, EDAX
- 12.10 - 13.00: Lunch
- 13.00 - 13.30: Introduction to analytical methods with higher spectral resolution: WDS and SXES, JEOL
- 13.30 - 14.10: Practical examples of SEM applications (metals/alloys, polymers, ceramics), JEOL
- 14.10 - 14.50: Practical examples of EDS applications (metals/alloys, polymers, ceramics), EDAX
- 15.50 - 16.10: Coffee, refreshments
- 16.10 – 16.40: Image processing. Bente Kroka, ELKEM
- 16.40 - 18.40: Lab Demonstrations i) FESEM (JSM-7200F), ii) EDS (JSM-6400/EDAX), iii)EDS off-line analysis. Participants divided into 3 rotating groups.
- 19.30 -: Dinner at restaurant, Grimstad.

Wednesday program – EBSD (Electron BackScatter Diffraction)

- 09.00 - 09.30: Basic EBSD – Electron BackScatter Diffraction, Rene De Kloe, EDAX
- 09.30 - 10.00: EBSD – how to acquire EBSD data. JH
- 10.00 - 10.30: EBSD specimen preparation, JEOL
- 10.30 - 10.50: Coffee, refreshments
- 10.50 - 11.20: EBSD data processing and analysis. Rene De Kloe, EDAX
- 11.20 - 12.00: EBSD – examples of applications, JH/Rene De Kloe, EDAX
- 12.15 - 13.15: Lunch
- 13.15 - 16.00: EBSD Lab Demonstration. i) EBSD (JSM-7200F), ii) EBSD (JSM-6400), iii) EBSD preparation (JEOL Cross Section polisher).
Participants divided into 3 rotating groups.
- 16.00 - 16.10: Summary, questions, closure. Tor Oskar Sætre

