

Instrument workshop - Surface Analysis and Characterisation

Welcome to a one-day workshop on surface analysis and characterization instruments.

Who is this workshop intended for?

This workshop is intended for engineers, laboratory personnel and scientists working with research, development or quality control of products for which surface or interfacial properties have a major impact on product performance.

What will this workshop give me?

This workshop will provide an overview of the principle of operation, possibilities and limitations of a wide variety of analytical instruments intended for the characterization. During 25 min stops in the Stockholm laboratories you will get concise information from our specialists and see the instruments. At the end of the day you will have acquired a better understanding of how results from these techniques can be used by your company/organization in research, product and process development and troubleshooting.

10 Techniques

- Zeta potential of particles/drops - Dynamic Light Scattering (DLS)
- Interfacial tension and interfacial rheology - Pendant drop
- Wettability of fibers/powders/surfaces - Contact angle instrument
- Surface topography – Profilometer
- Adsorption/Desorption - Quartz Crystal Microbalance-Dissipative (QCM-D) Surface topography/imaging and interactions between surfaces - Atomic Force Microscopy (AFM)
- Chemical composition/Surface structure - Scanning Electron Microscopy (SEM) with Energy-dispersive X-ray analysis (EDX/EDS/EDAX). Environmental Scanning Electron Microscopy (ESEM)
- Chemical composition - X-ray Photoelectron Spectroscopy/ Electron Spectroscopy for Chemical Analysis (XPS/ESCA)
- Chemical composition and imaging - Confocal Raman Microscopy
- Tactile Friction – Force Board



Practical information

Time: 08:45-16:00. Registration and coffee from 08:15. There will be opportunities for separate face to face discussions with instrument specialists during lunch and afternoon coffee break (1 hr and 30 min, respectively). These can be agreed on with specialists at the end of each session.

Cost: SEK 5400+25% VAT. The fee includes coffees, lunch and documentation.

Documentation: Hand-out material with basics and application examples of the different techniques. Language: English. Depending on the number of people who sign up and their preferred language it may be possible to have a group which gets to hear most of the stations in Swedish. If this is important for you, indicate this under "Other" when registering.

Venue: RISE, Drottning Kristinas väg 45, Stockholm, Sweden. 500 m from the subway station Tekniska Högskolan.

Accommodation: We kindly ask participants to book their own hotel.

Registration: Final date to register: 14 November (See e-mail invitation)

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