**Electron Microscopy Analysis of Fibre- and Polymer-based Materials**

FCK3109, 3 credits, HT 2025 KTH

Teacher: Anastasia Riazanova

Lectures

Location: Rånby Room, Teknikringen 56, 2nd Floor

Zoom link for participants online: https://kth-se.zoom.us/j/68452650904

| | **20251013** | **Monday** |
|---|---|---|
| 1 | 13:15 - 14:00 | Introduction to the Course |
| 2 | 14:15 - 15:00 | Introduction to Electron Microscopy |
| 3 | 15:15 - 16:00 | SEM basics |
| 4 | 16:15 - 17:00 | SEM-based microanalysis: EDS & WDS |
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| | **20251014** | **Tuesday** |
| 5 | 10:15 - 11:00 | SEM Sample Preparation |
| 6 | 11:15 - 12:00 | Cross-sectional sample preparation |
| 7 | 13:15 - 14:00 | Cryo-SEM |
| 8 | 14:15 - 15:00 | Environmental SEM |
| 9 | 15:15 - 16:00 | Environmental SEM Lab Visit |
| 10 | 16:15 - 17:00 | Environmental SEM Lab Visit |
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| | **20251015** | **Wednesday** |
| 11 | 10:15 - 11:00 | TEM Basics |
| 12 | 11:15 - 12:00 | TEM Diffraction & Spectroscopy |
| 13 | 13:15 - 14:00 | Ultramicrotomy Intro |
| 14 | 14:15 - 15:00 | Ultramicrotomy Protocols |
| 15 | 15:15 - 16:00 | Ultramicrotomy & TEM Lab Visit |
| 16 | 16:15 - 17:00 | Ultramicrotomy & TEM Lab Visit |
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| | **20251016** | **Thursday** |
| 17 | 10:15 - 11:00 | TEM Sample Preparation |
| 18 | 11:15 - 12:00 | Cryo TEM |
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| | **20251017** | **Friday** |
| 19 | 10:15 - 11:00 | FIB-SEM Intro |
| 20 | 11:15 - 12:00 | FIB-SEM Applications |
| 21 | 13:15 - 14:00 | Treesearch EM Infrastructure overview |
| 22 | 14:15 - 15:00 | Instructions for the proposal preparation |
| 23 | 15:15 - 16:00 | FE-SEM Lab Demo |
| 24 | 16:15 - 17:00 | FE-SEM Lab Demo |