

Department of materials science and engineering - Laboratory equipment

Here you will find information about our labs and the equipment we have available for students, PhD, Post Doc and researchers. Booking of equipment is done [here](#). You can [register](#) an account and take contact with lab/equipment responsible for access. Our premises is located at [Alfred Getz veg 2 and K2](#). Here is a guide for contribution to our [wiki-space](#).

Material characterisation

- Optical microscope
- Spectroscopy
- Electron microscope
- Scanning probe microscope (AFM/STM)
- Transmission electron microscopy
- XRD
- Solar cell silicon characterisation
- Thermal analysis
- Surface and particle analysis

Sample preparation

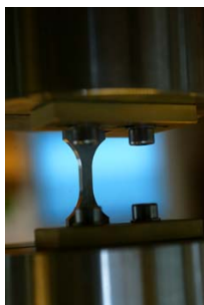
- Drying cabinets
- Cutting, drilling
- Etching
- Grinding, polishing, mounting
- Crushing, milling, sieving
- Coating
- Analytical balances
- Pressing tablets
- Sample cleaning

Process metallurgy and Casting

- Graphite tube furnaces
- Induction furnaces
- Alumina tube furnaces
- Melt spinners
- Induction furnaces
- Other furnaces

Health, safety and environment

- Use of gas
- Chemicals
- Access to laboratories and equipment





Heat treatment

- Oil baths
- Salt baths
- Sand baths
- Air circulation furnaces
- Muffle furnaces
- Pythagoras tube furnaces
- Alumina tube furnaces
- Sintering
- Spray pyrolysis

Mechanical testing

- Tensile testing
- Fatigue testing
- Compression tests
- Torsion tests
- Bend testing
- Hardness

Plastic deformation

- Extrusion
- Formability
- ECAP
- Rolling

Electrochemistry

- Potentiostats
- Test stations
- Misc. setups
- Electrodes and accessories
- Glove boxes

Wet chemical analysis

Instrumentation

- Thermometer
- Logger

- [Thermocouple controller](#)
- [MFC](#)

Recently Updated

[Data corrections \(DaVinci1 - the routine powder diffractometer\)](#)

25.02.2020 • updated by Kristin Høydalsvik Wells • [view change](#)

[peakshift_due_to_goniometer_error.pdf](#)

25.02.2020 • attached by Kristin Høydalsvik Wells

[Capture2.PNG](#)

25.02.2020 • attached by Kristin Høydalsvik Wells

[Routine Powder Diffraction \("Da Vinci 1"\)](#)

24.02.2020 • updated by Kristin Høydalsvik Wells • [view change](#)

[XRD-lab info](#)

13.02.2020 • updated by Kristin Høydalsvik Wells • [view change](#)

[Capture7.PNG](#)

10.01.2020 • attached by Kristin Høydalsvik Wells

[XRD-lab info](#)

19.12.2019 • updated by Viviann Hole • [view change](#)

[Bruker Vertex 80v - FTIR spectrometer](#)

25.11.2019 • updated by Johannes Ofstad • [view change](#)

[Material characterisation](#)

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[WITec Alpha300r \(Raman spectroscopy\)](#)

22.11.2019 • updated by Johannes Ofstad • [view change](#)

[where_to_find_info_XRD-lab.PNG](#)

21.11.2019 • attached by Kristin Høydalsvik Wells

[EMsoft](#)

18.11.2019 • updated by Håkon Wiik Ånes • [view change](#)

[DSC_0747.JPG](#)

07.11.2019 • attached by Kristin Høydalsvik Wells

[XRD](#)

05.11.2019 • updated by Håkon Wiik Ånes • [view change](#)