| Modulbezeichnung: | Molecular Nanoscience - Lab (Nano-Lab)<br>(Molecular Nanoscience - Lab) | 10 ECTS |
|---|---|---|
| Modulverantwortliche/r: | Rainer Fink | |
| Lehrende: | Dozenten der beteiligten Fachgebiete | |

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|---|---|---|
| Startsemester: SS 2022 | Dauer: 1 Semester | Turnus: halbjährlich (WS+SS) |
| Präsenzzeit: 225 Std. | Eigenstudium: 75 Std. | Sprache: Englisch |

**Lehrveranstaltungen:**

- Time and place upon individual assignments with contact persons (see list of experiments)
- A valid laboratory insurance is mandatory for participation in the lab course - see: www.laborversicherung.de

Molecular Nanoscience - Lab (SS 2022, Praktikum, 7 SWS, Rainer Fink et al.)

**Inhalt:**

Research practicals in selected modern fields of molecular nanoscience:

Topics according to an annually updated list of experiments, which includes molecule or nanoparticle synthesis, spectroscopic and microscopic analysis, thin-film and device preparation, characterization

**Lernziele und Kompetenzen:**

The students are capable ...

- to use their theoretical and practical background to plan and perform advanced research experiments under supervision of experienced scientists
- to synthesize nanoscaled materials
- to interprete spectroscopic or microscopic data taking advantage of modern research tools
- to provide a state-of-the-art documentation and discussion of their experimental results
- to present, communicate and discuss scientific results in scientific english.

**Literatur:**

Lecture notes from the various course lectures in „Molecular Nanoscience“ (see module descriptions "Molecular Nanoscience-I" and "Molecular Nanoscience-II")

**Studien-/Prüfungsleistungen:**

Molecular Nanoscience - Lab (Prüfungsnummer: 30731)

Prüfungsleistung, Praktikumsleistung
Anteil an der Berechnung der Modulnote: 100%
weitere Erläuterungen:
Graded Lab Protocol of 30 - 50 pages (plus raw data documentation)
Prüfungssprache: Englisch

Erstablegung: SS 2022, 1. Wdh.: WS 2022/2023
1. Prüfer: Rainer Fink

**Organisatorisches:**

**Please note:**

- Lab course is held as an in-class-course!
- Lab course can be choosen in winter or summer term
- Time and place by appointment (in one of the involved working groups of Inorganic chemistry)
- Students have to register for the module examination on MeinCampus (check registration periods)!
- Registration/docket/further information via StudOn!

**Bemerkungen:**

Module compatibility:

- Molecular Nanoscience-lab is within the **Core module "Molecular Nanoscience"** in the M.Sc. Molecular Nano Science