

**Modulbezeichnung:** Research Module Physical chemistry (PC-R-Lab) **15 ECTS**  
(Research Module Physical chemistry)

Modulverantwortliche/r: Hans-Peter Steinrück

Lehrende: Dirk Guldi, Hans-Peter Steinrück, u. a. Hochschullehrer

Startsemester: WS 2020/2021      Dauer: 1 Semester      Turnus: halbjährlich (WS+SS)  
Präsenzzeit: 225 Std.      Eigenstudium: 225 Std.      Sprache: Englisch

### Lehrveranstaltungen:

Research project in Physical Chemistry, lasting 6 weeks (ca. 15 SWS/LAB) full time in a work group of the student's choice at a research group in Physical Chemistry

- Attendance at lab course is compulsory!
  - Attendance at safety instructions is compulsory!
  - Attendance in winter or summer term possible!
  - A valid laboratory insurance is mandatory for participation in the lab course - see: [www.laborversicherung.de](http://www.laborversicherung.de)
- Specialisation module PC (WS 2020/2021, Praktikum, 15 SWS, Anwesenheitspflicht, Hans-Peter Steinrück et al.)

### Inhalt:

- introduction to the current issues of research in the field of Physical Chemistry
- integration in research group and instruction in scientific work
- familiarisation in fundamental concepts within a special subject of Physical Chemistry - to the limits of science
- finding answers to open questions in research project by means of experimental work

### Lernziele und Kompetenzen:

Students

- apply and transfer knowledge acquired during their studies to handle and solve open questions in research project
- interpret experimental data independently
- compare and evaluate results with literature data
- illustrate data in meaningful graphs
- present and discuss scientific results referring to literature in verbal and written form

### Verwendbarkeit des Moduls / Einpassung in den Musterstudienplan:

Das Modul ist im Kontext der folgenden Studienfächer/Vertiefungsrichtungen verwendbar:

[1] **Chemie (Master of Science): 3. Semester**

(Po-Vers. 2020w | NatFak | Chemie (Master of Science) | Forschungsmodul | Forschungsmodul Physical Chemistry)

### Studien-/Prüfungsleistungen:

Forschungsmodul Physical Chemistry (Prüfungsnummer: 65531)

Prüfungsleistung, Praktikumsleistung

Anteil an der Berechnung der Modulnote: 100%

weitere Erläuterungen:

LAB (PL): graded lab protocol of approx. 20 pages plus raw data documentation

Prüfungssprache: Englisch

Erstablingung: WS 2020/2021, 1. Wdh.: SS 2021

1. Prüfer: Hans-Peter Steinrück

### Organisatorisches:

Please note:

- Students have to register for the module on MeinCampus (check registration periods)
- Lab course is held as an in-class-course
- Lab Course can be chosen in winter or summer term

- Time and place by appointment (in one of the involved working groups of Physical chemistry), please contact the supervisor directly

**Bemerkungen:**

Please note:

- Research lab project (ca. 6 weeks: 21SWS LAB/2SWS Seminar) full time in a work group of the student's choice in Physical Chemistry