Modulbezeichnung:	**Research Module Quantum Chemistry (QC-R-Lab)** (Research Module Quantum Chemistry)	**15 ECTS**
Modulverantwortliche/r:	Andreas Görling	
Lehrende:	Dozenten, Andreas Görling, Dirk Zahn	

Startsemester: SS 2022	Dauer: 1 Semester	Turnus: halbjährlich (WS+SS)
Präsenzzeit: 345 Std.	Eigenstudium: 105 Std.	Sprache: Englisch

Lehrveranstaltungen:

Research lab course (23 SWS) in one of the work groups of Quantum 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

Research Module QC (SS 2022, Praktikum, 23 SWS, Anwesenheitspflicht, Andreas Görling et al.)

Inhalt:

- Practical introduction to current and state- of- the- art research topics in the field of quantum and computer chemistry
- Integration into a research group
- Guided work on a current research project using the methods of quantum and computer chemistry
- Attempts to solve independently a scientific problem

Lernziele und Kompetenzen:

Students

- apply and transfer knowledge acquired during their studies to handle and solve open questions in research projects in quantum and computer chemistry
- put their own research results in relation to current literature and research papers in the field, and record their results in appropriate scientific writing and documentation style
- present their own results and acquired knowledge in an appropriate scientific style in English language

Verwendbarkeit des Moduls / Einpassung in den Musterstudienplan:

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

[1] **Chemistry (Master of Science)**
(Po-Vers. 2020w | NatFak | Chemistry (Master of Science) | Forschungsmodul | Forschungsmodul Quantum Chemistry)

Studien-/Prüfungsleistungen:

Forschungsmodul Quantum Chemistry (Prüfungsnummer: 65541)
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

Erstablegung: SS 2022, 1. Wdh.: WS 2022/2023
1. Prüfer: QC-R-Lab (N70014)

Organisatorisches:

- Students have to register for the module (check registration periods)!
- 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 Quantum chemistry), please contact the supervisor directly

Bemerkungen:

Please note:

- Research lab project (ca. 8 weeks: 21SWS LAB/2SWS Seminar) full time in a work group of the student's choice in Quantum Chemistry