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**Modulbezeichnung:** Theoretical chemistry (CS-TC) **15 ECTS**  
(Theoretical chemistry)

Modulverantwortliche/r: Andreas Görling

Lehrende: Dozenten, Andreas Bayer, u.a.

Startsemester: SS 2020

Dauer: 1 Semester

Turnus: halbjährlich (WS+SS)

Präsenzzeit: 195 Std.

Eigenstudium: 255 Std.

Sprache: Englisch

### Lehrveranstaltungen:

Research project in Theoretical Chemistry, lasting 6 weeks (ca. 15 SWS/LAB) full time in a work group of the student's choice at a research group in Theoretical and Computer Chemistry as well as Computer Chemistry Centre at the Department of Chemistry and Pharmacy

(Attendance in lab course is compulsory!)

Specialisation module TC (SS 2020, Praktikum, Dozenten der Theoretischen Chemie)

**Es wird empfohlen, folgende Module zu absolvieren, bevor dieses Modul belegt wird:**

Quantum Chemistry

### 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] **Chemie (Master of Science): ab 3. Semester**

(Po-Vers. 2009 | NatFak | Chemie (Master of Science) | Vertiefungsmodul | Theoretische Chemie)

### Studien-/Prüfungsleistungen:

Protokoll Theoretische Chemie (Prüfungsnummer: 67001)

(englische Bezeichnung: Notes: Theoretical Chemistry)

Prüfungsleistung, Protokollheft

Anteil an der Berechnung der Modulnote: 100%

weitere Erläuterungen:

Assessment and examinations: LAB (PL)

Calculation of the grade for the module: 100% Final grade of the written report

Prüfungssprache: Englisch

Erstablesung: SS 2020, 1. Wdh.: keine Angabe

1. Prüfer: Andreas Görling

### Organisatorisches:

**Frequency of offer:** continuously,

**intended stage in the degree course:** Semester 2 - 3