



UNIVERSITÄT
BAYREUTH

FRIEDRICH-SCHILLER-
UNIVERSITÄT
JENA

Elitenetzwerk
Bayern



Elite Study Program - Macromolecular Science

Advanced Module M052

Innovative polymers for nanomedicine

Part I. Seminar

July 12, 2019, University of Bayreuth

Part II. "Innovative polymers for the nanomedicine of the 21st century"

July 15-17, 2019, University Jena

Part III. Visit research facilities at Jena Center of Soft Matter

July 17, 2019, University Jena

Module Coordination:

Prof. Hans-Werner Schmidt, Dr. Klaus Kreger

Prof. Ulrich S. Schubert, Dr. Johannes C. Brendel

Summer term 2019

"Innovative polymers for nanomedicine" is a conference module in SS 2019 within the Elite Study Program "Macromolecular Science". The module covers aspects in life science, chemistry and physics of polymer-drug conjugates to nanoparticulate systems encapsulating the active drugs. The general aim of nanomedicine is an improvement of efficacy compared to conventional treatments, which often suffer from systemic side effects or fast excretion of the drugs. Current research focuses on a directed delivery of drugs at the affected sites using specific targeting ligands combined with a controlled release to minimize side effects and circumvent frequent application. The module consists of three elements: (i) a seminar with students' contributions, (ii) the conference „Innovative polymers for the nanomedicine of the 21st century" and (iii) a visit of research facilities at Jena Center of Soft Matter.

Part I: Seminar with students' contributions

Friday, July 12, 2019, Room PNS, 5.1.00.001, University of Bayreuth

In order to prepare for the "Innovative polymers for the nanomedicine of the 21st century" conference, each participating student will select one conference speaker and will prepare a short presentation (15 minutes + 5 minutes discussion). The presentation should introduce the speaker in the following manner:

- 1) Curriculum vitae
- 2) University and department
- 3) Research activities
- 4) Presentation of one or two recent papers

Talks and discussions will be held in English.

The seminar also includes an introduction to the conference topic "Innovative polymers for the nanomedicine of the 21st century".

14:00 – 14:50	Nanomedicine at the University of Jena	Johannes Brendel
14:50 – 15:10	Prof. Dr. Krzysztof Matyjaszewski	Dennis Schröder
15:10 – 15:30	Prof. Dr. Dave Haddleton	Linus Hager
15:30 – 15:50	<i>Coffee Break</i>	
15:50 – 16:10	Prof. Dr. Béla Iván	Johannes von Szczepanski
16:10 – 16:30	Prof. Dr. Richard Hoogenboom	Eva Schaller
16:30 – 16:50	Dr. Remzi Becer	Hendrik Hessefort

Part II: Conference „ Innovative polymers for the nanomedicine of the 21st century”

July 15-17, 2019 University Jena

The students have to attend the “Innovative polymers for the nanomedicine of the 21st century” conference. Current topics from the field of life science, chemistry and physics with respect to polymers in nanomaterials for applications in biology and medicine are presented.

Part III. Visit research facilities at Jena Center of Soft Matter

July 17, 2019, University Jena

The students will have the opportunity to visit research facilities at Jena Center of Soft Matter on Tuesday, July 17, 9 a.m. or Wednesday, July 17, 9 a.m. (registration required).