

Elite Network
of Bavaria



UMASS
AMHERST



UNIVERSITÄT
BAYREUTH

Advanced Module M040

Advances in Polymer Science

Coordination:

University of Massachusetts (UMASS)

Universität Bayreuth (UBT)

Amherst, Massachusetts, USA

December 7 - 8, 2015

This advanced module within the Elite Study Program "Macromolecular Science" is on "Advances in Polymer Science". The module covers Introduction to research activities by faculty members from the University of Massachusetts and from the University of Bayreuth and Scientific Contributions by PhD students (talks 25 minutes & 5 minutes discussion). All participants have to present a poster. A Laboratory visit is also included.

Monday, 07 December 2015

Introduction to Polymer Science at University of Massachusetts

James J. Watkins

Introduction to Polymer and Colloid Science at the University of Bayreuth

Hans-Werner Schmidt

Josef Breu, Inorganic Chemistry

Controlled Exfoliation of Synthetic Clays

Matthias Stöter

Ken Carter, Functional Materials

Semiconducting Polyionomers: Design and Synthesis of Tunable Materials

Jared Harris

Jürgen Senker, Inorganic Chemistry

Unraveling 1,3,5-Benzotrisamides: From Geometric Frustration to Electret Additives for iPP

Christoph Zehe

Bryan Coughlin, Functional Polymer Materials

Anion Exchange Membranes

S. Piril Ertem

Andreas Greiner, Macromolecular Chemistry

Nanocomposites by Electrospinning and Supramolecular Assembly – Top Down meets Bottom Up

Matthias Burghard

Sustained Spider Silk Nanoclay Composites as Barrier Coatings

Elena Doblhofer

Jim Watkins, Hybrid Nanomaterials

The Bottlebrush Copolymer Morphology Transition: Influence of Side Chain Length and Volume Fraction

Yue Gai

Fabrication of Periodic Nanostructures for Photonic Applications

Irene Howell

Hans-Werner Schmidt, Macromolecular Chemistry

Supramolecular Nanofiber-Microfiber Composites for Filtration Applications

Daniel Weiß

Polymer Gradient Materials

Andreas Schedl

Lab visit

Tuesday, 08 December 2015

Todd Emrick, Macromolecular Chemistry

Functional Polymer Zwitterions - Enabling Developments in Biology and Soft Materials

Rachel Letteri

Georg Papastavrou, Physical Chemistry

Probing and Manipulating Charged Interfaces by AFM

Sebastian Gödrich

Microfluidics für in situ investigations of reaction kinetics

Susanne Seibt

Greg Grason, Soft Matter Theory

Chirality transfer to block copolymer assembly

Greg Grason

