

SFB 1066 Sommerschule

Resort Stromberg
Kiefernweg 33, 55442 Stromberg

22. – 26. September 2014

Topic 1: Conjugation of natural and synthetic structures

Montag, 22.9.2014

Ab 13.00 Ankunft

14.00 - 15.15 **Prof. Dr. Horst Kunz, Organische Chemie, Mainz**
Selective processes for bioconjugation: a chemical perspective

15.15 - 15.45 Discussion

15.45 - 16.15 Kaffeepause

16.15 - 17.15 **Kristina Klinker (AG Barz) + Simone Beck (AG Zentel)**
Chemical Ligation Techniques - And their application to the synthesis of biohybrids

17.15 - 18.00 Lockere Diskussion

Ab 18.00 Abendessen und freie Abendgestaltung

Dienstag, 23.9.2014

9.00 - 16.00 **Vorträge von Doktoranden aus den "Chemie-Laboren"**

9.00 - 10.00 **Mark Steinmann and Katharina Landfester**
Nanocapsules and bioorthogonal reactions

10.00-10.30 **Svenja Winzen (AG Landfester)**
Isothermal titration calorimetry and its (new) possibilities

10.30 - 11.00 Kaffeepause

11.00 - 11.35 **Meike Schinnerer (AG Schmidt)**
Polymer-Antibody-Antigen-Oligonucleotide Conjugates: Successes and Problems

11.35 - 12.10 **Anna Schilmann (AG Tremel)**
Silica Nanoparticles for Cancer? Immune Therapy

12.10 - 12.45 **Denise Bamberger (AG Wich)**
Bioconjugation Methods for Polysaccharide-based Carrier Systems

12.45 - 14.10 Mittagspause

14.10 - 14.45 **Thomas Fritz (AG Helm)**
Preparation, stability, uptake, and surface conjugation of liposomes

14.45 - 15.20. **Leonard Kaps (AG Schuppan)**
In vivo gene silencing in the liver using novel siRNA-loaded nanohydrogel particles

15.20 - 15.55 **Stefanie Pektor (AG Miederer)**
Quantification of glucose metabolism by PET as a stimulation - marker of the immune system

16.00 - 16,30 Kaffeepause

16.30 - 18.00 Posterpräsentation und Begehung

Ab 18.00 **Abendessen und freie Abendgestaltung**

Topic 2: Nanoparticles and the immune system

Mittwoch, 24.9.2014

9.00 - 12.30 Vorträge von Doktoranden aus den "Medizin-Labors"

9.00 - 9.20 **Friedrich Foerster (AG Schuppan)**

Dextran-based nanoparticles for therapy of murine metastatic melanoma

9.20 - 9.30 Diskussion

9.30 - 9.50 **Heinrich Haas (AG Sahin)**

Targeting nanoparticulate RNA formulations to antigen presenting cells in the spleen for tumor immunotherapy'

9.50 - 10.00 Diskussion

10.00 - 10.20 **Cinja Kappel (AG Grabbe/Bros) , Sabine Gietzen (AG Schmidt)**

Suitability of poly(2-Oxazoline) brush polymers for antibody-mediated targeting of CD205⁺ dendritic cells to induce CD8⁺ T cell responses.“

10.20 - 10.30 Diskussion

10.30-11.00 Kaffeepause

11.00 - 11.20 **Janine Schlöder (AG Jonuleit)**

Dendritic cell-targeting nanovaccines: mRNA-encapsulated multifunctional nanoparticles for treatment of melanoma

11.20 - 11.30 Diskussion

11.30 - 11.50 **Martin Weilbacher (AG Tüttenberg)**

The role of Macrophages in the tumor milieu and generation and subsequent polarization of human monocyte-derived Macrophages"

11.50 - 12.00 Diskussion

12.00 - 12.20 **S. Frick (AG Steinbrink)**

IL-2-Functionalized Hydroxyethyl Starch Nanocapsules for a Drug Delivery System in Cancer Immunotherapy”

12.20 - 12.30 Diskussion

Ab 12.30 Mittagessen

14.00 Weinwanderung

Donnerstag, 25.9.2014

9.00 - 10.00 **Stefan Tenzer (AG Schild)**

Interactions of nanoparticles and polymers with serum components“

10.00 - 10.15 Diskussion

10.15 - 11.15 **Matthias Bros**

Effects of NP and Polymers on antigen presenting cells

11.15 - 11.30 Diskussion

11.30 - 11.45 Kaffeepause

11.45 - 12.45 **Volker Mailänder**

Cellular uptake and intracellular degradation of NP and Polymers

12.45 - 13.00 Diskussion

12.45 - 14.15 Mittagspause

14.15 - 15.15 **Christian Becker**

Engaging T-cells with nanovaccines: principles, opportunities, challenges

15.15 - 15.30 Diskussion

15.30 - 16.30 **Bruno de Geest**

Structure-function relationship of nanoparticles and polymers as vaccine carriers

16.30 - 16.45 Diskussion

16.45 - 17.00 Kaffeepause

17.00 - 18.30 PI-Treffen SFB 1066

Ab 19.00 gemeinsames Abendessen

Freitag, 26.9.2014

9.00 - 10.30 Posterpräsentation und Begehung

10.30 - 11.00 Kaffeepause

11.00 - 12.15 **Prof. Dr. W.E. Hennink** (Pharmac. Polymer Technology, Utrecht):
Crosslinked nanoparticles for drug and gene delivery

12.15 - 12.30 Diskussion

12.30 - 14.00 Mittagspause

13.30 Busabfahrt

14.00 Abreise