

Symposium Chair

Prof. Dr. Rainer Haag (Symposium Chair)

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Venue & Location

Freie Universität Berlin, Institute of Chemistry and Biochemistry, Gr. Hörsaal, Arnimallee 22, 14195 Berlin, Germany

Accommodation

Seminaris CampusHotel
Science & Conference Center
Takustr. 39, 14195 Berlin, Germany
Phone ++49 30 557797-0
Email berlin@seminaris.de
<http://www.seminaris.de/berlin>

Conference Dinner

Eierschale
Podbielskiallee 50
14195 Berlin
<https://www.berliner-eierschale.de>
How to get there:

Walk to the metro station at Dahlem-Dorf (U3) and take the train (direction to Nollendorferplatz) to Podbielskiallee station (1 stop only) or walk 1 km along the Archivstraße to the restaurant.

Local Organization

Dr. Wiebke Fischer (SFB765 Coordinator)

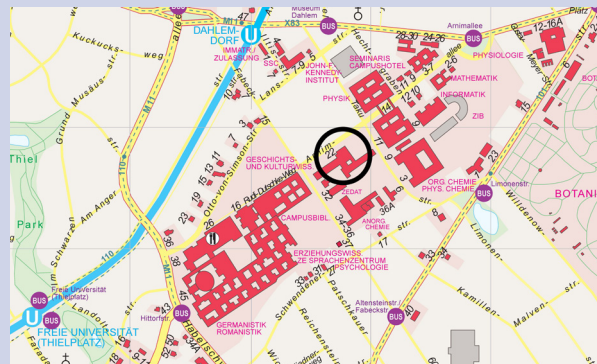
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Katharina Tebel (SFB765 Administrator)

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Symposium WLAN:

Participants should connect to the wireless network with the SSID „conference“ and should enter the following key: pj5z4wss



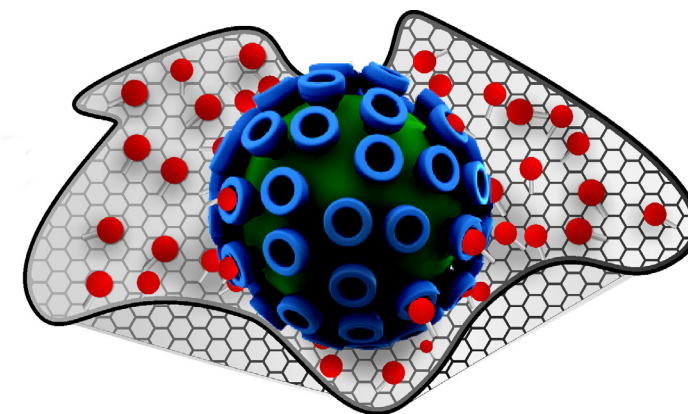
Flyer: Dr. Wiebke Fischer, FUB

5. International Symposium

of the Collaborative Research
Center SFB 765

“Multivalency in Chemistry and Biology”

PROGRAM | September 30-October 2, 2019



5th International Symposium on Multivalency

“Multivalency in Chemistry and Biology”

It is a great pleasure to invite you to our 5th International Symposium on “Multivalency in Chemistry and Biology” which will take place from September 30 until October 2, 2019 at the Freie Universität Berlin to meet with our scientists and students in the collaborative research center SFB 765 to discuss and develop new interactions and strengthen existing ones.

This symposium is part of our Collaborative Research Center SFB 765 „Multivalency as chemical organization and action principle: new architectures, functions and applications“ (www.sfb765.de) with a major focus on multivalent interactions with biological surfaces. We offer several exciting invited lectures on multivalency-driven architectures, functions and action principles from different research fields for inspiration and discussion of future projects. Additionally, the SFB will present its collaborative projects, and review the results from the last three funding periods (2008-2019).

The symposium will serve as a platform to discuss ideas and concepts in the presented lectures and poster contributions. Our particular aim is to foster a critical evaluation and discussion and to promote new concepts and applications for multivalent interactions.

The Freie Universität Berlin as one of the German Excellence Universities will serve as a prominent historical location on the campus in Dahlem with a high density of scientific activities and industrial collaborations in various research areas.

In detail, the symposium covers three major research topics from biophysics, chemical biology, supramolecular chemistry and nanoscience including:

1. Supramolecular Nanosystems
2. Multivalent Biosystems
3. Mucus Hydrogels

We are looking forward to welcome you in Berlin.



Prof. Dr. Rainer Haag,
Spokesperson of the SFB 765

Program

MONDAY, SEPTEMBER 30, 2019

- 13:00 REGISTRATION
- 14:00 Welcome and Highlights of the SFB765
Rainer Haag | Freie Universität Berlin
- Session: Supramolecular Nanosystems**
- 14:15 Multivalent Supramolecular Nanosystems
Takuza Aida | University of Tokyo, JP
- 15:00 Multivalent Crown Ethers: From Fundamental Studies of Multivalency to Supramolecular Polymers and Gels
Christoph Schalley | Freie Universität Berlin
- 15:30 Self-Assembly of Functional Nanosystems Using Multivalent Interactions
Leonard Prins | University of Padova, IT
- 16:00 Multivalency and Multiplexing in Polymersomes
Design: Toward the Design of Precision Nanomedicines
Giuseppe Battaglia | University College London, UK
- 16:30 COFFEE BREAK
- 17:00 **Honorary Doctorate Ceremony**
Welcome
Günter M. Ziegler | President of Freie Universität Berlin
Laudatio
Frank Würthner | University of Würzburg
Award of the Honorary Doctorate Certificate to Prof. Egbert W. Meijer | University of Eindhoven, NL
by Matthias Rillig | Dean of the Faculty Biology, Chemistry, Pharmacy
Award Lecture
Functional Supramolecular Materials and Systems
- 18:15 Welcome Reception in the Foyer

TUESDAY, OCTOBER 01, 2019

- Session: Multivalent Biosystems**
- 08:30 Multivalent Polymer Micelles
Kazunori Kataoka | University of Tokyo, JP
- 09:15 Multivalent Polyanions as Protein Inhibitors
Jens Dernedde | Charité-Universitätsmedizin Berlin
- 09:45 Multivalent Glyco Mimetics
Kamil Godulda | University of California San Diego, USA
- 10:15 COFFEE BREAK
- 10:45 Multivalent Membrane-Interaction of SV40
Helge Ewers | Freie Universität Berlin
- 11:15 Multivalent Supramolecular Irreversible Interactions with Viruses
Francesco Stellacci | EPFL, CH
- 11:45 Elucidating Ligand Recognition and Allostery in Multivalent Systems
Bettina Keller | Freie Universität Berlin
- 12:15 LUNCH BUFFET & POSTER SESSION

Session: Multivalent Biosystems

- 13:30 Multivalent Interactions with Modified Nucleic Acids
Jesper Wengel | Syddansk Universitet, DK
- 14:15 Multivalent Ligands Based on DNA-Scaffolds
Oliver Seitz | Humboldt-Universität zu Berlin
- 14:45 10 SPEED LECTURES from selected posters
- 15:45 COFFEE BREAK & POSTER SESSION
- 17:30 Multivalency in Polyanion-Protein Interactions
Matthias Ballauff | Helmholtz-Zentrum Berlin
- 18:00 Polyanion Inhibitors Against Heparins, Polyphosphate and Nucleic Acids
Jayachandran Kizhakkedathu | University of British Columbia, CA
- 19:00 CONFERENCE DINNER

WEDNESDAY, OCTOBER 02, 2019

Session: Mucus Hydrogels

- 08:30 Finding a Niche: Microbial Colonization of Host Mucosal Barriers
Katharina Ribbeck | Massachusetts Institute of Technology, USA
- 09:15 Probing Virus-Receptor Interactions at Interfaces and within Hydrogels
Stephan Block | Freie Universität Berlin
- 09:45 Mysteries of Mucus Physical Properties
Michael C. Rubinstein | Duke University, Durham, USA
- 10:30 COFFEE BREAK
- 11:00 Development and Characterization of Mucolytic Polymer Systems for Treatment of Severe Obstructive Lung Disease
Daniel Lauster | Freie Universität Berlin
- 11:30 Modelling and Overcoming Cellular and Non-Cellular Elements of Mucosal Barriers
Claus-Michael Lehr | HIPS and Saarland University, Saarbrücken
- 12:00 LUNCH BUFFET & POSTER SESSION
- 13:30 Penetration of Mucin Gels by Molecules
Oliver Lieleg | Technische Universität München
- 14:00 Mucus Hydrogel Barriers
David Thornton | University of Manchester, UK
- 14:30 COFFEE BREAK
- Georg-Manecke-Award 2019**
- 15:00 *Welcome and Introduction* by Brigitte Voit | Leibnitz-Institut für Polymerforschung Dresden, Board of the Georg-Manecke-Preis Committee
- 15:15 *Laudatio and Award Ceremony* by Prof. Andreas Fery | Leibnitz-Institut für Polymerforschung Dresden
- 15:20 *Lecture of the Awardee*
Dr. Julian Thiele | Leibnitz-Institut für Polymerforschung Dresden
Polymer Microgels as Tailored Platform for Cell-Free Biosynthesis
- 15:40 POSTER PRIZES & CLOSING REMARKS
Rainer Haag | Freie Universität Berlin
- 15:45 End of Symposium