

### MAXIM RYADNOV

TAR Leader and Principal Research Scientist National Physical Laboratory, UK Lecturer in Chemical Physics University of Edinburgh

**Research Focus Areas:** 

- advanced materials
- biotechnology



# Μιτςυμικό Shionoya

Professor of Bioinorganic Chemistry The University of Tokyo

Research Focus Areas:

- programming metal arrays
  synthesis and functionalization of molecular machines
- design and construction of dynamic nano-space



## FRANK WÜRTHNER

Professor of Organic Chemistry Universität Würzburg

Research Focus Areas:

- photofunctional dye assemblies
- organic electronics and photovoltaics
- nanosystems for biomedicine

# LOCATIONS

Talks

Takustraße 6, 14195 Berlin Lecture Hall

**Poster Session** Takustraße 6, 14195 Berlin

**Dinner** Seminaris – CampusHotel Takustraße 39, 14195 Berlin

**Lunch** Takustraße 3, 14195 Berlin Room 12.12

# CONTACT

Center for Supramolecular Interactions (CSI) Institute for Chemistry and Biochemistry Freie Universität Berlin Takustraße 3, 14195 Berlin http://www.fu-berlin.de/sites/en/csi/index.html

### Speaker

Prof. Dr. Beate Koksch e-mail: koksch@chemie.fu-berlin.de telephone: +49 (0)30 838 55344

### Scientific Coordinators

Dr. Allison A. Berger / Dr. Jessica A. Falenski e-mail: allison@zedat.fu-berlin.de telephone: +49 (0)30 838 55472 Room 32.03

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# Second General Meeting

# March 10-11, 2011

### **RESEARCH STATUS CONFERENCE**





Center for Supramolecular Interactions The **Center for Supramolecular Interactions (CSI)** is a research collective based at the Freie Universität Berlin (FU Berlin) that unifies scientific expertise from chemistry, physics, and mathematics for the purpose of contributing to our basic understanding and goal-oriented application of supramolecular interactions. It was established in July of 2009 with funds from the Excellence Initiative (ExIn) of the German federal and state governments. These funds currently support a small staff and 16 highly interdisciplinary projects at the cutting edge of supramolecular science. The principle investigators of the CSI come from the FU Berlin, the Humboldt Universität zu Berlin, the Max Planck Institute for Colloids and Interfaces, the Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, and the Helmholtz-Zentrum Geesthacht - Teltow .

In addition to continuing and expanding its research activities, it is the goal of the CSI to establish an internationally networked educational program with a focus on supramolecular systems. To this end, the CSI has outlined a doctoral training concept and reached agreements with the Hebrew University of Jerusalem, the CSIRO (Australia), and the National University of Singapore.

The CSI is an integral part of the FU Berlin Focus Area Nanoscale Functional Materials (NanoScale), which was established in 2008 and encompasses the four research areas Biomembranes, Hybrid Systems, Nanomedicine, and Supramolecular Interactions.

#### Focus Area NanoScale **Center for Supramolecular** Center for Nanoscale Interactions (CSI) Systems (CNS) Supramolecular Hybrid Systems Biomembranes Nanomedicine Interactions - Supramolecular - Riomembrane - Electronics and Nanoscale Systems Functions and Photonics in Systems for Interfacial Hybrid Systems Medical Noncovalent Properties Applications Interactions - Conjugated - Scaffolding of Multifunctional Carbon Membranes Materials **Biomaterials**

## Program

# **THURSDAY, MARCH 10TH**

14:15	Opening Remarks Beate Koksch	
14:30	Functional Nanosystems Based on Dye Aggregates Frank Würthner	
15:30	The Good Vibrations of Membrane Protein Action Joachim Heberle	
16:00	COFFEE BREAK	
16:30	Theoretical Description of Secondary Interactions in Crystals <i>Beate Paulus</i>	
17:00	Multidentate Benzoylthioureas as Building Blocks for Supramolecular Assemblies <i>Ulrich Abram</i>	
17:30	Supramolecular Polymer Macro- and Microgels Sebastian Seiffert	
18:00	Gas-Phase H/D-Exchange Reactions for the Investiga- tion of Supramolecular Structure and Reactivity <i>Christoph Schalley</i>	
19:00	DINNER	
Friday, March 11th		
8:30	Prescriptive Peptide Design and Self-Assembly Maxim Ryadnov	
9:30	Synthesis of New Functionalized Bi- and Terpyridine Derivatives Hans-Ulrich Reißig	
10:00	COFFEE BREAK	

10:30 Charge Transfer in Self-Assembled Donor-Acceptor Complexes at Surfaces *Katharina Franke* 

	Dieter Lentz
11:30	Polymers for Control Freaks -
	Sequence-Defined Poly(amidoamines) and

Of Bowls and Balls

- Their Biomedical Applications Laura Hartmann
- 12:00 Controlling Neurotransmitter Molecules at Liquid / Solid Interfaces by Voltage Neelima Paul
- 12:30 LUNCH

11.00

- 14:00 Design-Based Nano- to Submicron-Sized Supramolecular Assemblies *Mitsuhiko Shionoya*
- 15:00 Dynamics and Function of Supramolecular Transporter Molecules *Ulrike Alexiev*
- 15:30 Functionalization of Crystalline Surfaces by Adhesive Polymer-Peptide Conjugates Hans Börner
- 16:00 COFFEE BREAK
- 16:30 Structure Determination of Supramolecular Architectures by Electron Microscopy *Christoph Böttcher*
- 17:00 Metal Complexes as Stimuli-Responsive Linkers for Supramolecular Aggregates *Christoph Tzschucke*
- 17:30 Transient Conformational Dynamics During the Pr Photoisomerization Process Karsten Heyne

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18:00 POSTER SESSION
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