



UNIVERSITÄT  
BAYREUTH

Elite Network  
of Bavaria



# **Advanced Module M045**

## **German-Russian Travelling Seminar**

### **Part I. Summer school**

10<sup>th</sup> – 22<sup>nd</sup> September 2017

Ekaterinburg, Kazan, Dubna, Moscow

### **Part II. Seminar**

tba

Room PNS, 5.1.00.001, University of Bayreuth

### **Module Coordination:**

Prof. Dr. Mirijam Zobel

**summer term 2017**

The 7<sup>th</sup> “**German-Russian Travelling Seminar**” is a summer school module in SS 2017 within the Elite Study Program “Macromolecular Science”. The Travelling Seminar is a series of German-Russian summers schools, alternately taking part in Russia and Germany/Europe, along the topical outline of nanoparticles, scattering methods and large-scale research facilities. The module as embedded in the Elite Study Program consists of 2 parts, i.e. the participation in the summer school and a seminar afterwards.

## I. The Travelling Seminar

10<sup>th</sup> – 22<sup>nd</sup> September 2017

The Travelling Seminar 2017 brings together ca. 12 German and 12 Russian students, who travel to different Russian cities and research institutes accompanied by 2 Russian and 2 German professors. The preliminary program is outlined in the table below.

Day 1	Arrival of participants to Ekaterinburg
Day 2 & 3	Ekaterinburg <ul style="list-style-type: none"> <li>• Ural Federal University</li> <li>• Ural Branch of the Russian Academy of Sciences</li> <li>• Eurasian Border</li> </ul>
Day 4	Transsiberian Railway experience from Ekaterinburg to Kazan
Day 5	Kazan <ul style="list-style-type: none"> <li>• German-Russian Institute of Advanced Technology</li> <li>• Arbusov Institut Russian Academy of Sciences</li> <li>• Kazan Kremlin</li> </ul>
Day 6	Travel to Moscow
Day 7 & 8	Dubna <ul style="list-style-type: none"> <li>• Joint Institute for Nuclear Research</li> <li>• Monastery Sergiev Posad</li> </ul>
Day 9 - 12	Moscow <ul style="list-style-type: none"> <li>• Moscow State University</li> <li>• Skoltech</li> <li>• Red square and Kremlin</li> </ul>
Day 13	Departure of participants

At each institution, leading scientists from different fields will give lectures. Talks will, amongst others, cover the synthesis of nanoparticles, the characterization of their physico-chemical properties to possible applications, touching aspects such as nanotoxicology. The accompanying professors will give insight into different scattering techniques, covering small angle X-ray scattering, pair distribution function analysis, dynamic light scattering, transmission electron microscopy and others. The use of large-scale research facilities to extend research possibilities and results beyond laboratory analytical tools will be discussed.

Every participant of the Travelling Seminar has to contribute a talk (20 min talk + 10 min discussion) which suits the topic of the Travelling Seminar. The language of the seminar is English.

The accommodation and transportation of all participants is covered by funding through the BMBF (Bundesministerium für Bildung und Forschung), the Elitenetwork Bavaria, the Ural Branch of the Russian Academy of Sciences (UB-RAS) and UrFU (Ural Federal University, Russia). The organization is carried out by Prof. M. Zobel (Inorganic Chemistry, University Bayreuth), Prof. A. Magerl (Institute of Biophysics, Friedrich-Alexander-University Erlangen-Nürnberg) and Prof. A. A. Rempel (Institute of Solid State Chemistry/UB-RAS, Ekaterinburg, Russia).

The Travelling Seminar is open to 3<sup>rd</sup> year BSc, MSc and 1<sup>st</sup> year PhD students from chemistry, physics, material science, nanotechnology, engineering, or similar.

The application includes a motivation letter for the participation and a CV. German applicants shall address their application to Prof. M. Zobel, [mirijam.zobel@uni-bayreuth.de](mailto:mirijam.zobel@uni-bayreuth.de). The participants will be chosen from all German applications by a committee of German professors. Up to 2 ENB students can participate, whereas the applications from ENB students underlie the general selection process.

The website of the Travelling Seminar is [www.travellingseminar.uni-bayreuth.de](http://www.travellingseminar.uni-bayreuth.de).

## **II. Seminar**

Date to be fixed, Room PNS, 5.1.00.001, University of Bayreuth

The ENB students participating in the Travelling Seminar shall give a seminar on the summer school back in Bayreuth. The seminar of about 30 minutes shall cover a wrap-up of the program and the shared experiences. Additionally, each student shall pick one scientific highlight, i.e. a measurement technique or a synthesis route, which he/she presents in greater depths.

*For further information, please consult Prof. M. Zobel, Tel. 4355,*

*E-Mail: [mirijam.zobel@uni-bayreuth.de](mailto:mirijam.zobel@uni-bayreuth.de)*