

Summer school fees:

Standard (until September 30, 2015): 100 EUR

Late (after September 30, 2015): 120 EUR

The summer school fee includes: Access to all lectures and lab works, lunch and coffee breaks.

For registration please complete and submit the registration form by e-mail to internano@uni-landau.de

Registration form can be downloaded from the summer school web site (see Further Information)

Deadlines

September 30, 2015 ⇒ Regular registration ends

October 12, 2015 ⇒ Summer school starts

Further Information

Further information (registration form, registration fees) is available on summer school web site:

<https://www.uni-koblenz-landau.de/de/landau/fb7/umweltwissenschaften/forschung/internano/summer-school>

The summer school is organized by INTERNANO project. The overall aim of INTERNANO is to generate systematic understanding of the relevant environmental processes controlling aging and biological functioning of engineered inorganic nanoparticles with respect to aquatic biofilms, invertebrates and transport through soil.

For further details please visit the web page:

www.uni-koblenz-landau.de/de/landau/fb7/umweltwissenschaften/forschung/internano



Local Organizing Committee:

Gabriele E. Schaumann, George Metreveli

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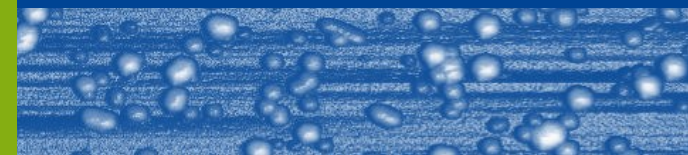
Summer School

Experimental Analytical Techniques for Characterization of Nanoparticles and their Effects



12th - 16th October, 2015

Landau in der Pfalz, Germany



Background Information

The summer school will give a general overview in the field of modern methods for nanoparticle characterization and determination covering advanced microscopic, chromatographic and spectroscopic techniques. Furthermore, the experimental methods for the characterization of transport, aging and biological effects of engineered nanoparticles (ENP) will be addressed. The summer school will offer the opportunity for young researchers to gain multidisciplinary knowledge on analytical characterization of nanoparticles and on their interaction, toxicity, aging and transport mechanisms in complex environmental media. The theoretical sessions will be complemented by lab works in which selected methods will be applied.

Topics

Analytical techniques

- DLS, NTA, Zeta potential
- HDC-ICP-MS
- Atomic force microscopy
- Electron microscopy
- Single particle ICP-MS
- Raman spectroscopy

Assessing the fate and transport of nanoparticles in soils and waters

- Colloidal stability of nanoparticles
- Fate of nanoparticles in soils
- Nanoparticle - NOM interactions
- Transport of nanoparticles in soils

Assessing biological effects

- Interactions between nanoparticles and bacteria
- Impact of nanoparticles on aquatic invertebrates

Confirmed Speakers

- Gabriele E. Schaumann
University of Koblenz-Landau, Landau, Germany
- Thomas Baumann
Technical University of Munich, Munich, Germany
- Hans-Jörg Vogel
Helmholtz Centre for Environmental Research - UFZ, Halle-Saale, Germany
- Geert Cornelis
University of Gothenburg, Gothenburg, Sweden
- Claire Coutris
Norwegian Institute of Bioeconomy Research, Ås, Norway
- George Metreveli
University of Koblenz-Landau, Landau, Germany
- Allan Phillipe
University of Koblenz-Landau, Landau, Germany
- Sondra Klitzke
Federal Environment Agency, Berlin, Germany
- Martin Kaupenjohann
Berlin University of Technology, Berlin, Germany
- Natalia P. Ivleva
Technical University of Munich, Munich, Germany
- Ricki R. Rosenfeldt
University of Koblenz-Landau, Landau, Germany
- Frank Seitz
University of Koblenz-Landau, Landau, Germany

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Summer school Venue

The city of Landau is located in the district of southern Rhineland-Palatinate and is characterised by the culinary delights of viticulture and the cuisine of Palatinate and nearby France. The beautiful town centre with an ample pedestrian area, neat parks, a lively market and friendly people tells a turbulent history.

Landau is surrounded by vineyards and villages of the scenic German Wine Route and the Palatinate Forest offers recreation.

Summer school host is the University of Koblenz-Landau with the campus on the remains of the French star fort.

