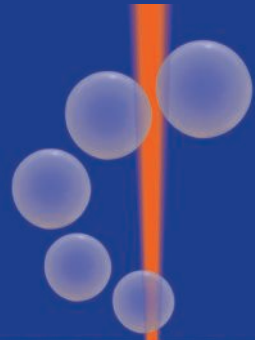


EDS Conference on
Laser Ablation
and **Nanoparticle**
Generation
in **Liquids 2010**



ANGEL 2010



Engelberg, Switzerland, 29 June - 1 July 2010

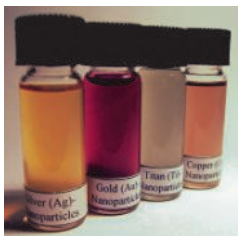
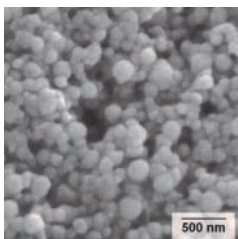
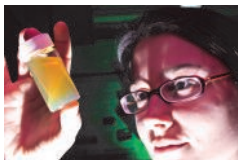
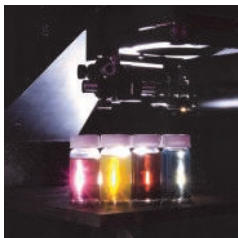
Final Announcement & Call-for-Papers

Cooperating Organizations



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Today, nanoparticles are widely implemented as functional elements in plastics, lacquers and ceramic products. Novel applications are targeted on nanomedicine, sensing, electronics, optics and biophotonics.

Nowadays, however, only a limited variety of materials that may be integrated into advanced functional materials are available: Nanoparticles synthesized by conventional gas phase processes are agglomerated to micro powders that are hardly redispersible into functional matrices, and chemical methods often lead to impurities of the nanoparticle colloids caused by additives and precursor reaction products.

In the last decade, laser ablation in liquids has proven to be a unique and efficient technique to generate, fragmentate, re-shape and conjugate nanoparticles. This exciting method bears strong advantages:

- Laser-generated (metal) nanoparticles are charged and thus have an extremely high stability
- Nanoparticle colloids are not inhalable and thus lead to an improved occupational safety
- Chemical precursors are not required and thus the colloids are 100 percent pure
- This method can be applied universally with an almost unlimited variety of materials and solvents

Aspects of the fundamental physics of laser ablation in liquids as well as novel applications, such as the fabrication of core-shell particles, nano-alloys or laser ablation of nanoparticles in biological surroundings will be addressed in this conference. Moreover, the processes of laser nanoparticle interaction within liquid environments provide a large spectrum of applications, especially in biophotonics.

The latest findings on appropriate focusing conditions, cross-effects with particle-laser interaction, flow conditions, kinetics etc. will be discussed on an international level with enough time for discussions and an informal exchange of ideas.

Young researchers are encouraged to participate in the meeting. A student award will be granted.

We would be very pleased to welcome you in Engelberg!

Stephan Barcikowski
(Laser Zentrum Hannover, DE)

Fumitaka Mafuné
(University of Tokyo, JP)

Topics, committees, invited speakers and deadlines

TOPICS

- Modeling and fundamentals of laser ablation and particle fragmentation in liquids
- Nano-alloys, core-shell particles
- Nano-hybrids, conjugation with organic molecules and biomolecules
- Laser-generated nanocomposites
- Laser nanoparticle heating / phototherapy
- Pulsed laser optoporation with nanoparticles
- Nanoparticle productivity / scale-up
- Semiconductor and dielectric nanoparticles

CHAIRS



Stephan Barcikowski
Laser Zentrum Hannover (LZH), DE
(Application & conjugation)



Fumitaka Mafuné
University of Tokyo, JP
(Fundamentals & fragmentation)

ORGANIZER



Silke Kramprich
European Optical Society (EOS), DE

PROGRAMME COMMITTEE

Giuseppe Compagnini
Università di Catania, IT

Moreno Meneghetti
University of Padua, IT

Michel Meunier
École Polytechnique Montréal, CA

Wei (David) Qian
Georgia Institute of Technology, US

Georgy Shafeev
Russian Academy of Science, RU

Nikolay Tarasenko
National Academy of Sciences of Belarus, BY

INVITED SPEAKERS

Vincenzo Amendola
University of Padua, IT

Douglas B. Chrisey
Rensselaer Polytechnic Institute

Giuseppe Compagnini
Università di Catania, IT

Karl Kleinermans
Heinrich Heine University of Duesseldorf, DE

Michel Meunier
École Polytechnique Montréal, CA

Georgy Shafeev
Russian Academy of Science, RU

Tsuyoshi Asahi
University of Osaka, JP

Vladimir Svrcek
National Institute of Advanced Industrial Science and Technology (AIST), JP

DEADLINES



Abstract submission, paper publication, venue and contact

ABSTRACT SUBMISSION

The **deadline** for submission of abstracts is **26 February 2010**. **Authors are requested to submit an abstract of ½ page (~ 2000 characters incl. spaces) plus one figure and references.**

The EOS guidelines for abstracts can be downloaded at www.myeos.org/system/files/events/ANGEL2010/EOSabstractguidelines_angel2010.pdf.

Contributions will be accepted for **oral** and **poster presentation**. Please indicate preference. All accepted contributions are to be published in the EOS Conference Digest which will be available at the beginning of the conference. All authors are requested to register separately from abstract submission. The **abstract submission will be open from 1 to 26 February 2010**. Abstracts can only be submitted online via www.myeos.org/angel2010.

If you would like to be alerted when the submission is opened, please send an email to angel2010@myeos.org.

PAPER PUBLICATION

Selected papers of this conference will be published in a special section of the Journal of Physical Chemistry B (<http://pubs.acs.org/journal/jpcb>/). Paper submission deadline: fall 2010 (exact date to be announced in spring 2010).



VENUE

Engelberg is a holiday paradise at 1050 m above sea level. The village radiates the special charm of the Benedictine monastery, the wonderfully fresh countryside and an impressive mountain panorama. The conference will be held at the Ramada-Treff Hotel Regina-Titlis, centrally located in Engelberg. The hotel has an indoor swimming pool and sauna. Ending on Wednesday afternoon, ANGEL 2010 presents a good opportunity to stay until the end of the week and to enjoy the attractive scenery, multiple outdoor-activities or a relaxing wellness programme (www.engelberg.ch).



TRAVEL & ACCOMODATION

Engelberg can easily be reached by car or by frequent trains from Lucerne in less than one hour, and from Zurich in about two hours. If you need assistance with your travel arrangements, please contact the Engelberg-Titlis Tourismus AG at welcome@engelberg.ch or by phone: +41 (0)41 639 77 77. Rooms at a special rate have been blocked at the venue hotel. For detailed booking information and a list of alternative hotels please see www.myeos.org/angel2010.



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