

Abstract submission

The abstract submission will be open from 1 December 2011 through 3 February 2012. Authors are requested to submit an abstract of ½ page plus one figure. Guidelines can be downloaded at www.myeos.org/system/files/events/angel2012/eosabstractguidelines_angel2012.pdf.

Contributions are accepted for oral and poster presentation. All accepted contributions are to be published in the digest CD-ROM which will be available at the beginning of the conference. All authors are requested to register separately from abstract submission.

Paper publication

Papers shall be submitted to the Journal of Physical Chemistry Chemical Physics (PCCP) by 31 July 2012. **PCCP** All submissions will be reviewed against PCCP's regular high standards for physical insight, quality and novelty.

For PCCP's author guidelines please see www.rsc.org/Publishing/Journals/guidelines/AuthorGuidelines/index.asp.

Accepted papers will be published in PCCP and linked together online.

Student Awards

The best student oral and the best student poster presentation will be awarded prizes sponsored by Particular GmbH.



Registration

The registration opens at the end of February 2012. Early-bird deadline: 6 April 2012. The fee includes full-time participation in the conference, coffee breaks, lunches, snacks & drinks during the poster session and copy of the conference digest. Early-bird fees range from 280 € net to 550 € net. For details see www.myeos.org/events/angel2012#Registration.

Deadlines

Opening of online submission	1 December 2011
Abstract submission deadline	3 February 2012
Notification to authors	17 February 2012
Publication of the Advance Programme	2 March 2012
Hotel booking deadline (special rate)	15 March 2012
Early-bird registration deadline	6 April 2012

Venue hotel

The Hotel Caparena is located in a tranquil alcove that gazes out on to the crystalline seas of Taormina Mare.

Free shuttle buses connect guests with the historical centre of Taormina. Just 15 minutes drive from the hotel lies the town of Taormina, where you can find one of the largest Greek theatres in the Mediterranean, dating back to the 3rd century.

The Hotel Caparena is also an ideal base for an excursion to the volcano of Etna or to the nearby Aeolian Islands with their natural springs and breath-taking landscapes.

The organizers have blocked rooms for the following special rates:

Double room for single use (incl. breakfast): 130 Euro

Double room for double use (incl. breakfast): 160 Euro

Double superior room (incl. breakfast): 180 Euro

Booking details will be given in due course. For more information see

www.hotelcaparena.com.

Contact

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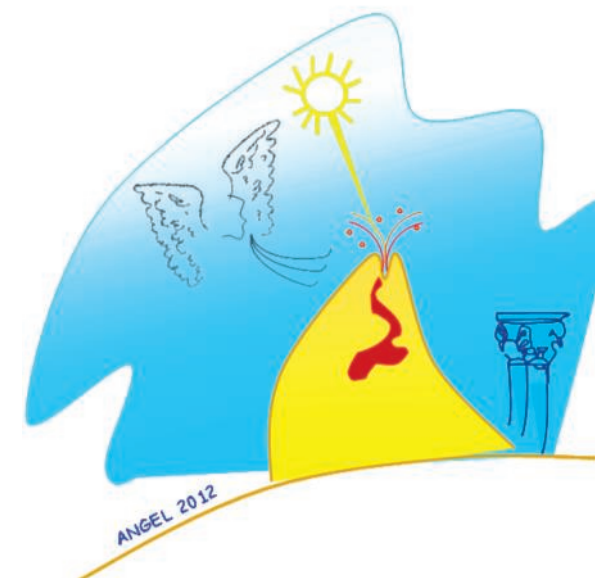
2nd EOS Conference

on Laser Ablation and Nanoparticle Generation in Liquids (ANGEL 2012)

22 - 24 May 2012

Hotel Caparena, Taormina (Sicily), Italy

Final Announcement & Call for Papers



Sponsors



Partners



Synopsis

Today, nanoparticles are widely implemented as functional elements on surfaces, into volumes and as nanohybrids, resulting for example in bioactive composites and nanobiomarkers. 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 often 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 and nanoparticle generation in liquids has proven to be a unique and efficient technique to generate, excite, fragment, and conjugate elemental, nano-alloy, semiconductor and ceramic nanoparticles. This exciting method bears strong advantages:

- Laser-generated (metal) nanoparticles are charged and thus have an extremely high colloidal stability.
- In contrary to dry nanopowders, nanoparticle colloids are not inhalable and thus lead to an improved occupational safety.
- Chemical precursors are not required and thus the colloids are 100% pure.
- This method can be applied universally with an almost unlimited variety of materials and solvents.

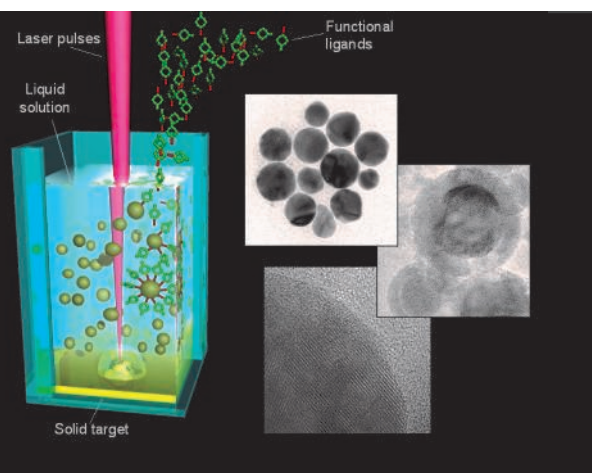


Photo: Vincenzo Amendola, University of Padua (IT).
1st Winner of the JPC-C/ANGEL 2010 picture competition.

It recently has been shown that these advantages are of value in comparison to conventional synthesis, in particular:

- A 3-5 times higher number of biomolecules may be conjugated to laser-generated, ligand-free gold nanoparticle surface.
- Higher yields of laser-generated gold nanoparticle aptamer conjugates are beneficial especially if costly functional biomolecules are conjugated.
- Lower noise during surface enhanced Raman scattering of laser-generated pure nanoparticles.
- Ablation in polymer solution allows embedding into polymer matrices for rapid nanomaterial prototyping.

The first edition of this conference, ANGEL 2010, welcomed 80 attendees from 25 countries. Following up on ANGEL 2010, aspects of the fundamentals of laser ablation in liquids as well as novel applications will be discussed at ANGEL 2012.

Topics

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

Chairs



Stephan Barcikowski
University of Duisburg-Essen (DE)



Giuseppe Compagnini
University of Catania (IT)

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Takeshi Tsuji, University of Kyushu (JP)
Haibo Zeng, Int. Center f. Materials Nanoarchitectonics (MANA) (CN)

Keynote Speaker

Fumitaka Mafune, University of Tokyo (JP)

Invited Speakers

Weiping Cai, Chinese Academy of Sciences (CN)
Douglas B. Chrisey, Rensselaer Polytechnic Institute (US)
Alexander Heisterkamp, Laser Zentrum Hannover (DE)
Tatiana Ilina, Hubert Curien Laboratory (FR)
Naoto Koshizaki, National Institute of Advanced Industrial Science and Technology (AIST) (JP)
Moreno Meneghetti, University of Padua (IT)
Philipp Wagener, University of Duisburg-Essen (DE)



Photo: Ana Menéndez-Manjón, Laser Zentrum Hannover (DE).
2nd Winner of the JPC-C/ANGEL 2010 picture competition.