

# 7<sup>th</sup> International Conference on Advanced Nanoparticle Generation and Excitation by Lasers in Liquids (ANGEL)

Charlottesville, Virginia, USA, May 26-31, 2024

Premier international conference focused on laser-materials interaction in liquids First time in the USA (Switzerland in 2010, Italy in 2012, Japan in 2014, Germany in 2016, France in 2018, China in 2021)





We are looking forward to welcoming you in Charlottesville, home to the University of Virginia, which was founded by Thomas Jefferson in 1819 as one of the first public universities in the country.

Venue: Charlottesville Omni Hotel adjacent to the historic downtown pedestrian mall.

**Program:** The program will consist of four days

of oral and poster sessions. Best poster and oral presentations will be selected for awards.

# Research topics include

Fundamentals of laser-materials interaction in liquids
Experimental probing, computer simulations
Defect engineering, metastable phases & structures

Laser synthesis and processing of colloidal nanoparticles

Laser ablation in liquids
Laser fragmentation in liquids
Laser melting in liquids
Reactive laser ablation in liquids
Laser reductive particle synthesis in liquids

Applications of laser-generated particles

Catalysis, energy conversion, optics, plasmonics, biomedical applications, additive manufacturing





Best oral and poster student presentation awards

Fojtik Henglein Prize

Shafeev Award

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### **Invited Speakers:**

Yunyu Cai, Hefei Institute of Physical Sciences, Chinese Academy of Sciences, Institute of Solid State Physics, China Structure modulation of hydrous iron oxide nanodots by laser irradiation for application as MRI contrast agent

**Costas P. Grigoropoulos**, University of California, Berkeley, USA Fundamental studies of femtosecond laser ablation by single and GHz train of pulses

**Gregory Guisbiers**, School of Physical Sciences, University of Arkansas at Little Rock, USA Designing nano-drugs by pulsed laser ablation in liquids

**Kelly L. Nash**, University of Texas at San Antonio, USA Pulsed laser ablation in deep eutectic solvents

**Changyong Song**, Pohang University of Science and Technology (POSTECH), South Korea Ultrafast time-resolved X-ray imaging of nanoparticle melting and disintegration

**Emmanuel Stratakis**, Institute of Electronic Structure and Laser (IESL) at FORTH, Crete, Greece Ultrashort pulsed laser engineering of materials and related diagnostics

**Natalie Tarasenka**, National Academy of Sciences of Belarus, B. I. Stepanov Institute of Physics, Belarus Electric field assisted laser ablation in liquids: Main features and application for controlled synthesis of nanocomposites

**Hiroshi Yoshikawa**, Graduate School of Engineering, Osaka University, Japan Fabrication of single crystals by laser ablation in supersaturated solutions

Anna Ziefuß, University of Duisburg-Essen, Germany Mechanism of nanoparticle and microparticle laser fragmentation in liquids



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# For more information and updates please check conference website at

http://angel-conference.org/

#### **News/Deadlines:**

Abstract Submission: November 15, 2023

Abstract acceptance notification: January 15, 2024

Special Rate Hotel Reservation: April 25, 2024

Early Registration: February 15, 2024

# **Local Organizing Committee:**

James Fitz-Gerald, Materials Science and Engineering, UVA

David Green, Chemical Engineering, UVA

Mool Gupta, Electrical Engineering, UVA

Patrick Hopkins, Mechanical and Aerospace Engineering, UVA

Mo Jiang, Chemical and Life Science Engineering, VCU

Leah Spangler, Chemical and Life Science Engineering, VCU

Weining Wang, Mechanical and Nuclear Engineering, VCU

Sen Zhang, Chemistry, UVA

## **Organizers**

#### **Co-Chairs:**

Katharine Tibbetts, Virginia Commonwealth University Leonid Zhigilei, University of Virginia

### **Program Committee:**

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Tsuyoshi Asahi, Ehime University, Japan
Stephan Barcikowski, University of Duisburg-Essen, Germany
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