

## Call for Papers **LCS2018**



# 14th Laser Ceramics Symposium 2018

<http://lcs2018.jp>

Nov. 26 (Mon.) – 30 (Fri.), 2018, Okazaki Conference Center, Okazaki, Japan

<http://www.orion.ac.jp/occ-e/>

**Paper Deadline: Oct. 1 (Mon.) 2018**

**LCS** - International Symposium on Transparent Ceramics for Photonic Applications is an annual international conference since 2005. The aim of the symposium is to provide a forum for material scientists, chemists and physicists, to discuss the state of the art of optical transparent ceramics, including basic aspects and promising applications, and to give an insight into future advances and research possibilities in this field. The previous LCS events were held in Poland (2005), Japan (2006), France (2007), China (2008), Spain (2009), Germany (2010), Singapore (2011), Russia (2012 and 2017), South Korea (2013), Poland (2014), China (2015), and France (2016). It is our honor and pleasure to organize the 14th LCS in Japan in the city of Okazaki. The symposium program will include invited talks as well as contributed (oral and poster) presentations. We hope that the symposium will bring together leading experts from around the world, will stimulate active discussions and links between scholars and will give a brilliant opportunity for the participants to start further fruitful research collaborations.

### **SCOPE**

: Ceramics, crystals, microdomain controlled materials for advanced SSL and NLO  
(SSL: solid-state laser, NLO: nonlinear optics)

#### **A. Material and Fabrication**

- Synthesis of high purity powders and transparent ceramics
- Optical spectroscopy and characterization of physical properties
- Ceramic machining and polishing
- Surface activated low temperature bonding and coating
- Electric and magnetic field poling for polarization control
- High-field laser direct and its shockwave based material fabrication
- New materials, novel fabrication methods and microstructure control

#### **B. Device and Application**

- Ceramic lasers and amplifiers for high performance SSL and NLO
- High power SSL structures; rod, fiber, disk, and slab
- Breakthrough in tiny integrated lasers, includes giant-pulse microchip laser
- Novel power SSL structures
- High power diode lasers, VCSELs for SSL pumping
- Giant micro-photonics toward ubiquitous power lasers
- Applications of SSL and NLO: Ignition, LIBS, LiDAR, Mass spectroscopy, Material processing

Organized by *Institute for Molecular Science, Japan*