

The 4th Laser Ignition Conference (LIC'16)



Takunori Taira

Conference Chair

Institute for Molecular Science

Welcome to the 4th Laser Ignition Conference 2016 (LIC'16). This is the international forum to discuss all aspects of laser induced ignition: advances in novel giant pulse micro-lasers, new insights into the phenomena of laser induced breakdown, and advanced combustion systems enabled by laser ignition. Since the invention of lasers, many researchers attempted “laser ignition” toward the ideal combustion engine. Recently, several kinds of laser ignition, from gas cogeneration to gasoline engine vehicle, have been demonstrated to solve for future energy crisis. The purpose of this meeting is to share information on laser ignition and related sciences and technologies. The conference will be held at Pacifico Yokohama, Yokohama, Japan, on May 18- 20, 2016 with the sponsorship from *Micro Solid-Sate Photonics Group* of the Laser Society of Japan (LSJ) in cooperation with several academic societies and associations.

A total of 52 papers will be presented during the conference, consisting of 1 OPIC/LIC plenary talk, 6 LIC/PLD/SLPC joint session invited talks, 4 LIC plenary talks, 16 invited papers, and 19 contributed papers, 6 poster papers including the joint session of laser damages. After an introduction of LIC'17 in Europe, the Award Ceremony will be held at which several papers will be commended for their outstanding achievement. Laser ignition systems promise better fuel efficiency and lower pollution than conventional systems. The door of “Laser Ignitions for Future Energy and New Science” should be opened by “*Giant Micro-photonics*”. The future may herald new photonics.

We would like to extend our thanks to all the presenters and participants of LIC '16 for their contribution to the success of the conference. We also express our thanks to the endorsement and sponsor groups.