Conference on Laser Energy Science（CLES 2016）

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We are delighted that you have joined us in Yokohama to share your latest research results.

This is the Conference on Laser Energy Science (CLES2016) within the framework of the OPTICS & PHOTONICS International Congress (OPIC 2016), which consists of eleven laser-, and photonics-related scientific conferences.

The title of this conference, "Laser Energy Science" stands for the high energy-density plasma physics and intrinsically the development of high power lasers. While the laser energy science is aiming at laser fusion, its research area covers high-field physics with high-power lasers. Based on the themes in the preceded conference (laser inertial fusion, laser and accelerator neutron sources and applications, laser and synchrotron radiation, and laser astrophysics), we set "Laser fusion, particularly on Fast Ignition" as the main theme this year. For this reason, CLES 2016 will be jointly held with "the 14th International Workshop on High-Field Physics with High-Power Lasers", which has a long history for discussions on laser fusion by Fast Ignition scheme.

Recently there have many activities related to laser fusion research. NIF (National Ignition Facility) in the US is working very well aiming to demonstrate the laser-driven fusion ignition and burn. Laser Mega Joule (LMJ) in France is under construction and a part of the system, PETAL, is being activated for experiment. Also in Rochester, US, OMEGA-EP is used for Fast Ignition. In Osaka, Japan, GEKKO-XII laser has long been used for laser fusion and many kinds of plasma experiments. Recently, a new ultra-intense short-pulse laser, LFEX, has been activated and performed 2 kJ output in a 1 ps pulse with a very high-pulse contrast of more than 10^{10}. The both lasers have been used for Fast Ignition experiment as the FIREX-1 project, as well as for high-intensity laser-plasma interaction experiments.

In this conference, we intend to discuss the recent topics of progress in laser fusion research. Particularly, we expect latest research works in the field of fast ignition and high field science with high power lasers.

We hope that you enjoy your time at the CLES2016, and that you will also take this opportunity to explore the rest of Yokohama.