

Institute of Laser Engineering

Osaka University

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October 6th, 2012

Dear Professor Mourou

By this letter we would like to express our enthusiasm to join the International Zetta-Exawatt Science and Technology IZEST, which was created a year ago (November 29th, 2011) under the initiative of the Ecole Polytechnique and the Commissariat à l'énergie Atomique (CEA). This letter of support will be replaced within six months by a Memorandum of Understanding between the Osaka University's Institute of Laser Engineering (ILE), and IZEST.

The ILE subscribes fully to IZEST mission that is:

1. To definite novel laser architectures and road map of the next generation of ultra high peak power/intensity and also the high average power lasers.
2. To facilitate the scientific and technical coordination among members of the international scientific community eager to discover new paradigms under pinned by extreme high intensity lasers. Particular attention will be devoted to:
 - Prompt acceleration
 - High energy fundamental physics, physics beyond the Standard Model
 - Vacuum structure
 - Dark matter search
 - TeV Astrophysics and to the development of very high intensity lasers.
 - Societal application like proton therapy, nuclear transmutation.

ILE's contribution to IZEST will be in the areas of:

- Ultra high peak power and high average power lasers.
- Laser-based High Field Fundamental Physics

The ILE will actively seek State and National funding in the IZEST's relevant area of interest.

The ILE is expected to be an active member of the participant council formed by the heads of the IZEST supporting laboratories. By meeting twice a year the participating council will help to define IZEST's strategy before it is submitted for approval by the steering committee composed of the Ecole Polytechnique and the CEA. The participant council provides also constant scientific and technical guidance to its management.

Sincerely yours,

Hiroshi AZECHI

Director

Institute of Laser Engineering, Osaka University