



# OPTICS & PHOTONICS International Congress 2013

## Plenary Special Sessions

Optics and laser technologies are becoming the key technology in all areas of science, and industry in the 21st century. In the plenary session of OPIC2013, introductory talk of "Past, Present and Future of the Lasers" and key notes lectures for advanced laser sources and applications will be presented. These presentations could be helpful for the different areas of science and industry in order to set up the common challenge and the opportunity of collaboration in the near future.

Please join us at the plenary session and find some of new technological solutions needed.

23 April 2013 (Tuesday) PACSIFICO Yokohama / Conference Center Room301-302

### Opening Remarks

9:30~10:00

Greetings Organizer OPIC2013 Organizing Chair **Sadao Nakai** (President of the Laser Society of Japan)  
 Greetings Guest  
 Introductory Talk 「Past, present and future of the lasers (Tentative)」  
 Congress Chairs **Kohichi Shimoda**(Professor Emeritus at the Univ. Tokyo)  
 Dr. Shimoda suggests the stage of the future laser society. He has been involving in the research and development of laser-creation stage.

### Keynote Lectures

10:00~11:55

- I 「Laser for Ignition and Future Energy Generation」 Congress Chairs **Robert L. Byer** (Prof. of Stanford Univ.)  
 Professor Byer has been developing unstable resonator Q-switch and variable visible parametric oscillator. He has several key positions at the Optical Society of America. He will introduce laser development situation in the United States and .talk about expectations for Japan.
- II 「Advanced laser source and applications to medicine and biology」  
 Dr. Midorikawa has been leading the research and development of new laser, such as femtosecond laser and attosecond pulse generation. Dr. Kikuchi has been studying the laser application such as Medical applications of laser and application to biological·bio. They will collaborate in this key note lecture and introduce some of the way to find the innovative medical applications which are strongly required as the need of society.
- Presenter I **Katsumi Midorikawa** (RIKEN)  
 Presenter II **Makoto Kikuchi** (Japan Association for the Advancement of Medical Equipment)

< Break >

11:55~13:20

### Joint Plenary Sessions

13:20~15:20

Each professional meeting representatives report on the research and development trends and future prospects of the optics and laser technologies. (30 minutes each)

#### Session A

- Sensing Technologies for Bio-material, Food and Agriculture  
*SeTBio'13, Chair Naoshi Kondo(Kyoto Univ.)*
- Laser Display  
*LDC'13, Chair Kazuo Kuroda (Utsunomiya Univ.)*
- LED and its industrial application  
*LEDIA'13, Chair Hiroshi Amano (Nagoya Univ.)*
- Laser Ignition  
*LIC'13, Chair Takunori Taira(IMS)*

#### Session B

- Laser and accelerator neutron sources and applications  
*LANSA'13, Chair Hiroshi Azechi(Osaka Univ.)*
- Laser Application to Nuclear Engineering  
*LANE'13, Advisor Shigeo Nomura (Japan Atomic Energy Agency)*
- High-Energy Density Science  
*HEDS2013, Chair Ryosuke Kodama (Osaka Univ.)*
- Laser Processing for CFRP and Composite Materials  
*LPCC2013, Advisor Muneharu Kutuna(GPI)*

Remarks : Each professional international meeting starts at the each venue from 15:45.