

Friday, May 20

10:00-12:00
LSSE8: Maintenance of Social Infrastructure 3
Room 316

Chair: Y. Shimada, Institute of Laser Technology, Japan

10:00
LSSE8-1 (Invited) Nondestructive Inspection of Infrastructures by Laser and Neutron Beam Technology

S. Wada¹, N. Saito¹, K. Kase¹, Y. Otake¹, Y. Ikeda¹, T. Kawachi², H. Daido³, Y. Shimada⁴, K. Midorikawa¹
¹RIKEN Center for Advanced Photonics, Japan
²Quantum Beam Science Center, Japan Atomic Energy Agency, Japan
³Applied Laser Technology Institute, Japan Atomic Energy Agency, Japan
⁴Institute for Laser Technology, Japan

Break (10:30-11:00)

11:00
LSSE8-2 (Invited) Development of Non-Destructive Inspection Method for Concrete Elements in Tunnel Linings Using Laser Remote Sensing
N. Misaki
West Japan Railway Company, Japan

11:30
SSE8-3 (Invited) Development of the High Speed Inspection System of Defects Inside Concrete
K. Mikami¹, S. Kurahashi², T. Kitamura², N. Hasegawa¹, H. Okada¹, S. Kondo¹, K. Oleg², Y. Shimada², T. Kawachi¹
¹Japan Atomic Energy Agency, Japan
²Institute for Laser Technology, Japan

Lunch (12:00-13:00)

13:00-14:50
LSSE9: Maintenance of Social Infrastructure 4
Room 316

Chair: H. Daido, Applied Laser Technology Institute, Japan Atomic Energy Agency, Japan

13:00
LSSE9-1 A Mobile Laser-Based System for Remote Inspection of Shinkansen Tunnels
O. Kotyaev¹, Y. Shimada¹, N. Misaki²
¹Institute for Laser Technology, Japan
²West Japan Railway Company, Japan

13:20
LSSE9-2 Performance of Material Removal in Pulsed Laser Irradiation on Concrete
N. P. Long¹, H. Daido¹, Y. Matsunaga¹, T. Yamada¹, A. Nishimura², T. Kawachi²
¹Applied Laser Technology Institute, Japan Atomic Energy Agency, Japan
²Kansai Photon Institute, Japan Atomic Energy Agency, Japan

13:40
LSSE9-3 (Invited) Development of Nuclear Emergency Response Robots at Naraha Remote Technology Center Relevant to the Laser Technology

S. Kawatsuma, K. Kawabata
Japan Atomic Energy Agency, Japan

14:10
LSSE9-4 Development of Laser Cutting for Thick Steels up to 300 mm for Nuclear Plant Decommissioning

S. Toyama¹, R. Ishigami¹, K. Tamura²
¹The Wakasa Wan Energy Res. Center, Japan
²Quantum Beam Science Center, Japan

14:30
LSSE9-5 Technologies of Laser Decontamination and Robotics for Nuclear Reactor Decommissioning

E. J. Minehara^{1,2}, R. Yamagishi¹
¹The Wakasa Wan Energy Res. Center, Japan
²LAND Corporation, Japan

14:50-15:00
Closing
Room 316

14:50
Closing Remarks
T. Ebisuzaki, Conference Chair of LSSE2016
Chief Scientist, Computational Astrophysics Laboratory, RIKEN, Japan

REGISTRATION

Registration Fees		On/Before Apr. 15, 2016	After Apr. 15, 2016 – 7 May, 2016 & On-Site
General	Member	40,000 JPY	45,000 JPY
	Non-member	45,000 JPY	50,000 JPY
Student, Retiree	Member	18,000 JPY	21,000 JPY
	Non-member	21,000 JPY	23,000 JPY

OBJECTIVE

The aim of "Laser Solution for Space and the Earth" is to discuss the application of emerging laser technologies to solve various problems for sustainable developments of space and the Earth. We consider "laser detection and remediation of orbiting space debris" as the featured topic of the year 2016.

CONFERENCE CHAIR

Toshikazu Ebisuzaki (RIKEN)

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TOPICS

- Space debris detection and remediation
- Laser propulsion
- Remote sensing
- Energy production and transmission
- Lasers for space development and earth sciences
- Maintenance of social infrastructure

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M. Vasile (University of Strathclyde)
S. Wada (RIKEN, Japan)
T. Yanagisawa (JAXA, Japan)

INVITED SPEAKERS

Claude Phipps
Photonic Associates, LLC, USA
Pulsed Lasers for Clearing Debris in LEO and GEO

Setsuko Aoki
Keio University, Japan
Legal Aspects of Laser in Space Activities

Yoshiyuki Takizawa
RIKEN, Japan
Concept of Space Debris Deorbit Mission for the 1-10 cm Size Space Debris

Gérard Mourou
IZEST, Ecole Polytechnique, France
A Novel Laser System Based on a Massive Coherent Amplifying Network (CAN) to Mitigate Orbital Debris

Jin Yu
Institut Lumière Matière, France
Laser-Induced Breakdown Spectroscopy for Detection and Analysis in the Environment

OPTICS & PHOTONICS International Congress

Laser Solutions for Space and the Earth 2016

May 17-20, 2016 at Pacifico Yokohama, Yokohama, Japan



