

The 8th International Congress on Laser Advanced Materials Processing LPM2019 - The 20th International Symposium on Laser Precision Microfabrication HPL2019 – The 8th International Symposium on High Power Laser Processing

Date:	May 21-24, 2019
Venue:	International Conference Center Hiroshima
Organizer:	Japan Laser Processing Society (JLPS)
Website:	http://www.jlps.gr.jp/lamp/lamp2019/
General Chair:	Koji Sugioka, RIKEN, Japan
Co-Chairs:	Hiroyuki Niino, AIST, Japan (LPM2019 Program Committee Chair)
	Seiji Katayama, NADEX, Japan (HPL2019 Program Committee Chair)
	Takashi Ishide, Mitsubishi Heavy Industries, Japan (JLPS President)
	Yongfeng Lu, University of Nebraska-Lincoln, USA
	Michael Schmidt, Friedrich- Alexander Universität Erlangen-Nürnberg,
	Germany

Steering Committee Chair: Kenji Shinozaki, Hiroshima University, Japan

Aim and Scope

The International Congress on Laser Advanced Materials Processing (LAMP) deals with science and technology of advanced laser materials processing covering precision microfabrication and high power laser processing. LAMP2019 is held during MAY 21-24, 2019 in Hiroshima, Japan.

LAMP2019 consists of International Symposia on Laser Precision Microfabrication (LPM) and High Power Laser Processing (HPL) and covers hardware as well as software for fundamental research and industrial applications in both micro and macro processing.

LAMP2019 is planned as a four-day event with a Plenary Session, LPM 20th Year Anniversary Session, Oral and Poster Sessions, Special Sessions dealing with topical issues, and the exhibition with inviting most important world authorities in this field. The aim of this congress is to provide a forum for discussion of fundamental aspects of laser-matter interaction, the stateof-the-art of laser materials processing, and topics for the next generation with fundamental scientists, end users and laser manufactures.

We expect that LAMP2019 would play an important role not only for understanding fundamental knowledge of laser materials processing but also forecasting future technologies to be developed and the future laser market.

Contact: Japan Laser Processing Society (JLPS) c/o JWRI, Osaka University, Japan E-mail: lamp2019@jlps.gr.jp

LPM Topics

- 1. Fundamental aspects (Dynamics, modeling, simulation, etc.)
- 2. Process monitoring and control
- 3. Laser and photochemistry
- 4. Nanotechnology
- 5. Laser-based direct-write techniques
- 6. Ultra-short pulse laser processing
- 7. VUV laser and X-ray processing
- 8. Surface treatment (Texturing, cleaning, annealing, modification, etc.)
- 9. Advanced laser processing (Fiber laser, disc laser, FEL, etc.)
- 10. Micro-patterning and micro-structuring
- 11. Nano ripple formation
- 12. Micro-machining
- 13. 3-D micro- and nano-fabrication
- 14. Drilling and cutting
- 15. Micro-welding and micro-bonding
- 16. Micro-forming
- 17. Wafer dicing
- 18. Marking and trimming
- 19. Glass/Ceramic processing
- 20. Packaging and mounting process
- 21. Lithography (including EUV source and application)
- 22. Manufacture of micro devices and systems
- 23. Film deposition and synthesis of advanced materials (PLD, CVD, etc.)
- 24. Nano- and micro-particles
- 25. Medical and biological applications
- 26. Optics and systems for laser microprocessing
- 27. Laser devices
- 28. Beam shaping
- 29. Industrial applications
- 30. Others
- 31. LPM Special Session (L1) TBA
- 32. LPM Special Session (L2) TBA
- 33. LPM Special Session (L3) TBA

HPL Topics

- 1. Fundamentals of laser-materials interactions
- 2. Laser-induced plasma/plume
- 3. Gas laser
- 4. Solid-state laser (YAG, Fiber, Disk, etc.)
- 5. Diode laser
- 6. Green or blue laser
- 7. Optics
- 8. Beam delivery system
- 9. Monitoring and control (including OCT)
- 10. Metallurgical and mechanical aspects
- 11. Modeling and simulation
- 12. Cleaning
- 13. Surface modification
 - (Hardening, quenching, alloying, etc.)
- 14. Cladding and rapid prototyping
- 15. Additive manufacturing (3D Printer)
- 16. Welding
- 17. Welding of thick plate
- 18. Welding of high strength steel
- 19. Welding of light metals and alloys
- 20. Joining of plastics, glasses or ceramics
- 21. Joining of dissimilar materials (plastic to metal)
- 22. Joining of battery or fuel cell
- 23. Remote welding
- 24. Hybrid welding
- 25. Brazing and soldering
- 26. Drilling (High speed and high quality)
- 27. Cutting (of CFRP, etc.)
- 28. Thick plate cutting and dismantling
- 29. Industrial applications
- 30. Innovative applications (Sandwich panel, etc.)
- 31. Present status and future prospects
- 32. Others



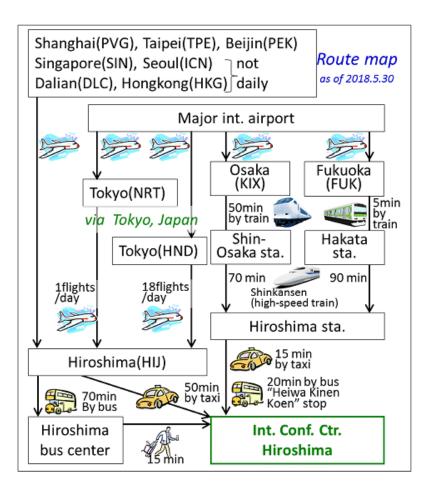
About VENUE

LAMP2019 Venue, "International Conference Center Hiroshima (ICCH) " is located right next to Hiroshima Peace Memorial Museum in the hallowed ground of Hiroshima Peace Memorial Park. Address: 1-5 Nakajima-cho, Naka-ku, Hiroshima, Japan

Access to HIROSHIMA

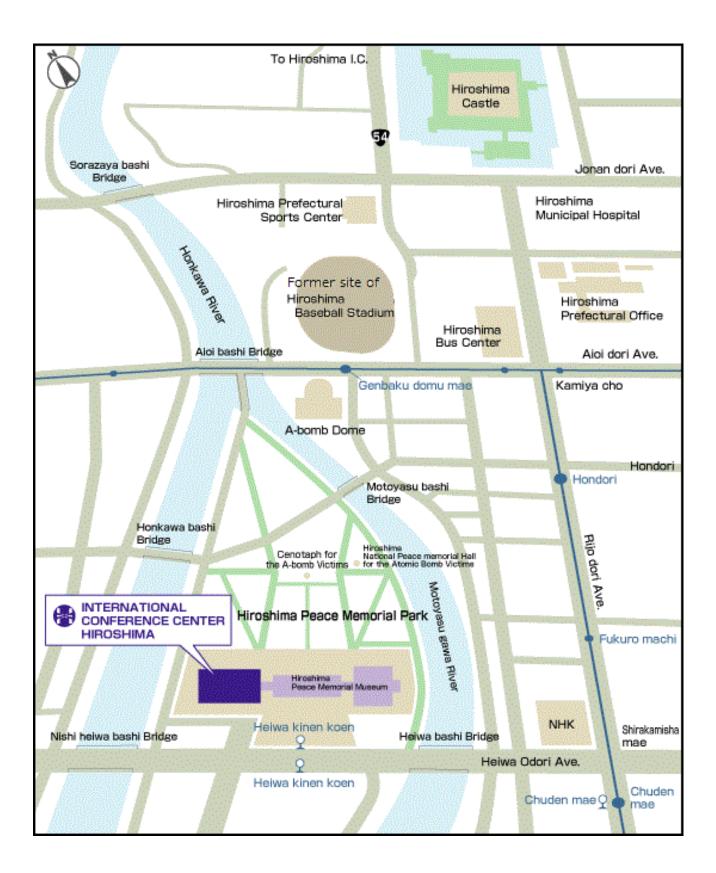
http://visithiroshima.net/plan_your_trip/directions_and_maps.html





Area Map of International Conference Center HIROSHIMA

http://www.pcf.city.hiroshima.jp/icch/e_access.html



About HIROSHIMA

Hiroshima's origins can be traced to the end of the 6th century and beginning of the 7th century when the area began to prosper. At the time, Hiroshima was divided into two regions, Aki and Bingo. Towns prospered along transportation routes through the mountains and on the inland sea. In 1589 Mori Terumoto, a regional warlord during the warring states period, gave Hiroshima its name and built a castle in what is now Hiroshima City. During the Edo period (1603-1867), modern-day Hiroshima Prefecture was divided into two domains, the Fukuyama Fiefdom to the east and Hiroshima Fiefdom to the west. Under the abolition of Fiefs, the two regions were united into a single Hiroshima Prefecture and the current borders were established by 1876. In August 1945, Hiroshima City was destroyed in an instant with the dropping of the atomic bomb. Neighboring cities also suffered damage as a result of the war. Through the efforts and prayer of Hiroshima's citizens, the region made an impressive recovery and continues to develop as a center of government, economics, and culture in the Chugoku-Shikoku Region. There are two World Heritage sites in Hiroshima; "A-bomb Dome" and "Itsukushima Shrine" in Miya-Jima.





The World Heritage, A-bomb Dome



Hiroshima Castle

