The Second Announcement and Call for Papers

## The 10th International Conference on Leading Edge Manufacturing in 21st Century (LEM21) November 14 - 18, 2021 Kitakyushu , Fukuoka, Japan

Venue | Kitakyushu International Conference Center

Sponsored by : The Japan Society of Mechanical Engineers (JSME) Organized by : Manufacturing and Machine Tool Division & Manufacturing Systems Division





We are pleased to announce that the International Conference on Leading Edge Manufacturing in 21st Century (LEM21) will be held in Kitakyushu, which is "SDGs Future City". For the next generation of humanity in unpredictable societies such as the high frequency of natural disasters and the spread of the Covid-19 virus, researchers and engineers will be able to discuss modern and future topics related to new production technologies and various manufacturing technologies. We offer the opportunity to discuss, exchange, publish and deepen ideas, methods and results.

#### **Organized Sessions:**

#### OS01: Advanced machine tool

- OS02: Evaluation of machine tool performance
- OS03: Digital manufacturing (CAD,CAM)
- OS04: Mechatronics and mechanical elements
- OS05: Cutting technology
- OS06: Gear manufacturing technology
- OS07: Grinding technology
- OS08: Finishing technology

## Conference Style:

LEM21 Kitakyushu is performed in the Hybrid-Flexible (HyFlex) style of virtual conference, inperson conference and on-line conference. However, the participation in a local conference hall will restrict the entrance number for Covid-19 countermeasure.

It will be held by virtual conference from the 2nd day till the 3rd day. The talks by the finalists elected as eminent papers are performed at the international conference hall (or on-line) on the 4th day of the conference. It is encouraged that finalists participate in the conference at the local conference hall.

Other participants are restricted to participation on line. Only those who are permitted will participate in the international conference hall.

The talks will become available at any time during the conference as on-demand videos.

OS09: Electro-physical and chemical processes

- OS10: Nano/Micro machining and structuring technologies
- OS11: Surface and tribology
- OS12: Nano/Micro measurement and intelligent instruments
- OS13: Additive manufacturing
- OS14: Digital manufacturing
- OS15: Manufacturing systems, supply chain and scheduling
- OS16: Smart Manufacturing (IoT, AI, CPPS)

# About Conference Awards:

Several awards are granted to eminent papers.

CONFERENCE BEST PAPER AWARDS: Awarded for outstanding papers of 4 pages or more contributed to LEM21.

YOUNG RESEARCHER AWARD: The first author of a prominent paper, awarded to young presenters up to the age of 26 as of April 2022.



YOUNG FELLOW AWARD: Among the candidate papers for the Young Researcher Award, the most prominent papers with 4 pages or more will be awarded.

These awards will be commended in the award ceremony of the 4th day of the Conference.

# Special Issue to International Journals:

As for the eminent paper in all the presented papers, contributing recommendation is performed to the special issue of JAMDSM. (Journal of Advanced Mechanical Design, Systems, published by JSME). We also recommend contributions to the IJAT special issue. (International Journal of Automation Technology, published by Fuji Technology Press).

## Important dates:

Deadline of paper application with abstract:	March 31, 2021
Notification of tentative acceptance based on abstract:	April 20, 2021
Deadline of camera - ready manuscript submission:	May 31, 2021
Notification of paper acceptance:	June 30, 2021
Deadline of final camera - ready manuscript:	July 31, 2021

## Abstract submission:

An abstract of about 400 words in English in one page of A4 size is required for every paper. Please download the abstract submission form (in Microsoft Excel format) from the conference website. Fill it out and submit it by e - mail to:

lem21\_mmt@jsme.or.jp (LEM21 Program Committee) The submission deadline is: March 31, 2021.

# Conference registration fee:

#### Regular:

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Early registration (before Sept. 20)		
JSME member:	50,000 JPY	
non-member:	60,000 JPY	
Late registration		
JSME member:	60,000 JPY	
non-member:	65,000 JPY	
Student:		
JSME student member:	25,000 JPY	
non-member:	35,000 JPY	
Popaulat		

Banquet: All participants: 10,000 JPY

The registration fee includes one copy of the conference proceedings. For multiple presentation by the same participant, 10,000 JPY is charged per one additional presentation. Additional copy of the conference proceedings is 10,000 JPY for JSME members (15,000 JPY for non-members).

### Venue:

Kitakyushu Convention Center Located 2-minute walk from JR Kokura station. <u>https://convention-a.jp/kokusai-kaigi/</u>

## General contact:

Email: lem21\_mmt@jsme.or.jp

### Conference webpage:

http://www.jsme.or.jp/mmt/lem21Kitakyushu/



### **Conference Committee:**

General Chair:	Hiroyuki Narahara, Professor, Kyushu Institute of Technology
Conference Co - chairs	: Atsushi Matsubara, Professor, Kyoto University
	Yasushi Umeda, The University of Tokyo
	Makoto Fujishima, DMG Mori Co., Ltd.
	Keisuke Suzuki, Professor, Kyushu Institute of Technology
Program Chairs:	Gao Feng, Professor, Nishinippon Institute of Technology
J	Terutake Hayashi, Assoc. Prof., Kyushu University
	Hiroshi Koresawa, Assoc. Prof., Kyushu Institute of Technology
Secretariats:	Naoki Mori, Professor, Kyushu Institute of Technology
	Koichi Kikkawa, Assoc. Prof., Kyushu Institute of Technology
Executing Committee:	Teruyuki ASAO, Professor, National Institute of Technology, Kitakyushu College
	Yoshifumi AMAMOTO, Assoc. Prof., Fukuoka Institute of Technology
	Akihisa KUBOTA, Assoc. Prof., Kumamoto University
	Hiroshi MURAKAMI, Assoc. Prof., The University of Kitakyushu
	Sunao MURAKAMI, Assoc. Prof., Kyushu Institute of Technology
	Khajorurungruang PANART, Assoc. Prof., Kyushu Institute of Technology
	Hiroki SHIMIZU, Assoc. Prof., Kyushu Institute of Technology

#### OS and Organizers:

OS01: Advanced machine tool \*Yoshitaka MORIMOTO, \*Hayato YOSHIOKA Yohichi NAKAO, Keiichi SHIRASE

OS02: Evaluation of machine tool performance \*Yukitoshi IHARA, Soichi IBARAKI Akinori SAITO

OS03: Digital manufacturing (CAD, CAM) \* Koichi MORISHIGE, Jun'ichi KANEKO Hideki AOYAMA, Fumiki TANAKA Koji TERAMOTO, Keiichi NAKAMOTO

OS04: Mechatronics and mechanical elements \*Yasuhiro KAKINUMA, Atsushi MATSUBARA Tadahiko SHINSHI, Ryuta SATO Toshiki HIROGAKI, Alan HASE

OS05: Cutting technology \*Takashi MATSUMURA, Hideharu KATO Ryutaro TANAKA, Hirohisa NARITA Norikazu SUZUKI, Jun'ichi KANEKO Katsuhiko SAKAI, Masahiko JIN Hiromi ISOBE, Masato OKADA Yoshio MIZUGAKI, Shigehiko SAKAMOTO

OS06: Gear manufacturing technology \*Naohiko SUGITA, Jiwan YAN Shuhei KUROKAWA, Yukihisa NISHIMURA

OS07: Grinding technology \*Kazuhito OHASHI, Libo ZHOU Takazo YAMADA, Takayuki KITAJIMA Masakazu Fujimoto, Akinori YUI Nobuhito YOSHIHARA, Weimin LIN

OS08: Finishing technology \*Toshiyuki ENOMOTO, Hitomi YAMAGUCHI Yanhua ZOU, Kenichiro YOSHITOMI Osamu ONISHI, Keisuke SUZUKI Akihisa KUBOTA, Hideo TAKINO

OS09: Electro-physical and chemical processes \*Akira OKADA, \*Hirofumi HIDAI Shinya HAYAKAWA, Tohru ISHIDA Keiji YAMADA, Yasuhiro OKAMOTO Keiji OGAWA, Akiteru HAYASHI OS10: Nano/Micro machining and structuring technologies \*Masayoshi MIZUTANI, \*Hirofumi SUZUKI Mitsuyoshi NOMURA, Noboru TAKANO Jiwang YAN

OS11: Surface and tribology \*Masahiko YOSHINO, Noritsugu UMEHARA Jun TANIGUCHI, Arata KANEKO Fumihiro ITOIGAWA, Takanori YAZAWA Sunao MURAKAMI, Motoki TERANO

OS12: Nano/Micro measurement and intelligent instruments \*Yasuhiro TAKAYA, Satoru TAKAHASHI Wei GAO, Kazuhide KAMIYA Terutake HAYASHI, Shinya MORITA Yasuhiro MIZUTANI, Hiroki SHIMIZU Hiroshi MURAKAMI, So Ito

OS13: Additive manufacturing \*Hiroyuki NARAHARA, \*Hiroyuki SASAHARA Tatsuaki FURUMOTO, Takeyuki ABE Ryo KOIKE, \*Toshitake TATENO <u>Tomohisa T</u>ANAKA, Hirohisa NARITA

OS14: Digital manufacturing \*Hironori HIBINO, Hajime MIZUYAMA Taiki OGATA

OS15: Manufacturing systems, supply chain and scheduling \*Rei HINO, Yoo JAEKYU Keisuke MURAKAMI, Eiji MORINAGA

OS16: Smart Manufacturing (IoT, AI, CPPS) \*Sharif ULLAH, Hiroyuki SAWADA Koji IWAMURA, Nobutada FUJII Kazunori MARUYAMA, Yasushi UMEDA