

Foreword



The 1st International Conference on Precision Machinery and Manufacturing Technology 2015 (ICPMMT) was held at Howard Beach Resort, Kenting, Taiwan on May 22-24, 2015. The papers submitted to ICPMMT 2015 were recommended to KEM (EI Compendex) through the peer reviewing process.

The 2nd ICPMMT 2017 was held at Howard Plaza Resort, Kenting, Taiwan on May 19-21, 2017. And the 3rd ICPMMT 2018 has been taken place in Auckland, New Zealand on 4-8 February, 2018. After conference, all papers submitted to ICPMMT 2017 and 2018 were recommended to MATEC Web of Conferences, Open-access Journal in Materials science, Engineering and Chemistry (Google Scholar, CAS, EI Compendex, Inspec, DOAJ, Web of Science, Scopus). All papers through the peer reviewing process can be published in MATEC Web of Conferences. The 4th ICPMMT 2019 was back to Howard Plaza Resort, Kenting, Taiwan on May 24-26, 2019. All papers through the peer reviewing process can be published Key Engineering Materials and IOP: Materials Science Engineering with EI Compendex. This year the 5th ICPMMT 2020 is back to Crowne Plaza, Auckland, New Zealand on 3-7 February 2020. Some papers through the peer reviewing process can be published in Solid State Phenomena with EI Compendex.

The 6th ICPMMT 2021 will be back to Howard Plaza Resort, Kenting, Taiwan on May 21-23, 2021. All papers through the peer reviewing process can be published in publication with EI Compendex or SCOPUS or INSPECT.

The topics are as follows:

1. Design & Manufacturing

Machinery, Aerospace, Fasteners, Electronics, Plant, Robot, EV, Hybrid Car, CAD, CAE, CAM, PLM, SCM, Optimization, Reverse Engineering

2. Processing Technology

Machining, Forming, Grinding, Casting, Forging, Molding, Welding, Joining, Micro· Nano, Laser, Energy-Beam, Printed Electronics, 3D Printing, RP&M, R2R, Electro-Chemical, Non-traditional, Re-manufacturing, Recycle, MQL, Smart Manufacturing

3. Green Manufacturing and Materials Application

Light·Eco-friendly Material & Structure, Natural, Bio-inspired, Light-weight, Flexible, Powder, Multifunctional, Metals, Ceramics, Polymers, Composites, FGM, Graphene, Smart Material & Structure, Photonic, Display

4. Automation and Intelligent Robot

5. Information Integration and Communication Technology
6. Industry 4.0 Related Technology
7. Energy and Nano, Micro Technology
8. Engineering Educations and Training
9. Related Topics to Precision Machinery and Manufacturing Technology
10. Other Topics

In ICPMMT 2020, Prof. Maziar Ramezani from Auckland University of Technology, New Zealand (The topic: Design and Manufacturing of Knee Implants for Osteoarthritis Patients), Prof. Zhengyi Jiang from Wollongong University, Australia (The topic: Micromanufacturing Technology and its Practice), and Prof. Cho-Pei Jiang from National Taipei University of Technology, Taiwan (The topic: Three-Dimensional Slurry Printing Technology in Ceramic and Metal Application) are invited as keynote speakers. They are very famous in innovation materials, manufactures and metal microforming research field, and once again to thank them for strong supports to ICPMMT 2020. I hope all of you can enjoy this lovely place, Auckland, New Zealand, and to absorb excellent knowledge and technologies from these wonderful speeches and oral presentations in ICPMMT 2020.

On behalf of organization committee, I would like to thank Cheng Shiu University, Chung Cheng University, and Changhua University to assist ICPMMT 2020 being successful by way of financial supports.

Thanks for many authors providing your excellent contributions to ICPMMT 2020. Next conference will be held on 21~23 May 2021, in Taiwan.

Gow-Yi Tzou

Conference Chair of ICPMMT

Chair Prof. Gow-Yi Tzou

Dean of Engineering College, Chung-Chou University of Science and Technology, Taiwan

Committee

Conference Chair

Chair Prof. Gow-Yi Tzou (Chung-Chou University of Science and Technology, Taiwan)

Steering Committee

- Chair Prof. Gow-Yi Tzou (Chung-Chou University of Science and Technology, Taiwan)
- Prof. Thomas Neitzert (Auckland University of Technology, New Zealand)
- Prof. Jeong-Whan Yoon (Deakin University, Australia; KAIST Korea)

Scientific Committee

Gow-Yi Tzou (Chung-Chou University of Science and Technology, Taiwan)
Ho-Chi Cheng (Chung-Chou University of Science and Technology, Taiwan)
Thomas Neitzert (Auckland University of Technology, New Zealand)
Timotius Pasang (Auckland University of Technology, New Zealand)
Guy Littlefair (Auckland University of Technology, New Zealand)
Maziar Ramezani (Auckland University of Technology, New Zealand)
Richard Lin (The University of Auckland, New Zealand)
Jeong-Whan Yoon (Deakin University, Australia; KAIST, Korea)
Mansoo Joun (Gyeongsang National University, Korea)
Ming Yang (Graduate School of System Design, Tokyo Metropolitan University, Japan)
Cheng Lu (Wollongong University, Australia)
Zengyi Jiang (Wollongong University, Australia)
Jing-Jing Li (Penn State University, USA)
Scott Miller (Hawaii University, USA)
Peter Groche (TU Darmstadt, Germany)
Ying-Hua Liu (Tsinghua University Beijing, China)
Fuh-Kuo Chen (Taiwan University, Taiwan)
Jen-Yuan Chang (Tsing Hua University, Taiwan)
De-Shin Liu (Chung-Cheng University, Taiwan)
Jong-Ning Aoh (Chung-Cheng University, Taiwan)
Yung-Chou Kao (Chung-Cheng University, Taiwan)
You-Min Huang (Taiwan University of Science & Technology, Taiwan)
Yeong-Maw Hwang (Sun Yat-Sen University, Taiwan)
Cheng-Tang Pan (Sun Yat-sen University, Taiwan)
Jinn-Jong Sheu (Kaohsiung University of Applied Science, Taiwan)
Chao-Cheng Chang (Kaohsiung University of Applied Science, Taiwan)
Cho-Pei Jiang (Taipei University of Technology, Taiwan)
Dyi-Cheng Chen (Changhua University of Education, Taiwan)
Yeong-Lin Lai (Changhua University of Education, Taiwan)
Shao-Yi Hsia (Kao-Yuan University of Science and Technology, Taiwan, Taiwan)
Chih-Liang Chu (Southern Taiwan University of Science and Technology, Taiwan)
Cheng-Chien Wang (Southern Taiwan University of Science and Technology, Taiwan)
Yen-Ming Tseng (Fuzhou Polytechnic, China)