

Preface

After the very successful previous issues ICAMMT 2015 (Changsha, China), ICAMMT 2016 (Guangzhou, China), ICAMMT 2017 (Changsha, China), the current ICAMMT2018 (2018 4th International Conference on Applied Materials and Manufacturing Technology) was held in Nanchang, China during May 25-27, 2018. ICAMMT 2018 is co-hosted by the National Defense Key Discipline Laboratory of Light Alloy Processing Science and Technology (Nanchang Hangkong University) and Wuhan University of Science. The idea of the conference is for the scientists, scholars, engineers and students from the Universities all around the world and the industry to present ongoing research activities, and hence to foster research relations between the Universities and the industry.

This volume of *IOP Conference Series: Materials Science and Engineering (MSE)* is a compilation of the accepted papers in ICAMMT 2018 and represents important results that were presented in the conference. The electronic submission and handling of the manuscripts via the conference website, including the selection of reviewers and evaluation of manuscripts, were identical to the procedures applied to manuscripts submitted as regular contributions for publication in peer reviewed journals.

The organization of this conference and the preparation of the proceedings volume would have been impossible without the tremendous efforts and dedication of many individuals. Our three conference chairs oversaw the organization of the Conference. We would like to acknowledge a large team of reviewers for their timely submission of quality reports. Without this support, the conference could not have been successful. We sincerely hope that ICAMMT 2018 will serve as an ideal forum for academia, industrial practitioners and government agents.

The Committee of ICAMMT 2018



Organizing Committees

Conference Chair

Prof.Hua Zhang, Dean of Green Manufacturing Engineering Institute, Wuhan University of Science and Technology, China

Prof. Francesca Tittarelli, Università Politecnica delle Marche, Italy

Dr.Mahendra Mallick, State University of New York, USA

International Technical Committee

Prof. Raju B S, REVA University, India

Dr.Yi Zhang, Chinese Academy of Sciences, China

Dr.M A GafurM A Gafur, Pilot Plant and Process Development Centre, Bangladesh

Mr. PALAKSHA P.A., National Institute of Technology Karnataka, India

Prof. Arnab Kundu, JIS College of Engineering, India

Prof. Francesca Giglio, Mediterranea University of Reggio Calabria, Italy

Prof. Rachana C R, Department of Studies in Computer Science, India

Mr. SANGAMESH RAJOLE, National institute of technology Surathkal, India

Dr. Amitkumar Patel, Charusat Space Research and Technology Center, India

Dr. Azher Jameel, Shri Mata Vaishno Devi University Katra, India

Dr. PAVAN KUMAR THIMMARAJU, Department of Mechanical Engineering, NNRG

Dr. A.Senthilrajan, Alagappa University, India

Prof. Nirban Laskar, National Institute of Technology Silchar, Assam, India

Prof.Tao Zhu, China University of Mining & Technology, China

Dr. Nirav Pravinchandra Maniar, V. V. P. Engineering College, India

A.Prof.Liu Kuo, Dalian University of Technology, China

Prof.Jin ying Chen, Beijing Polytechnic College, China

Prof.Henry Hu, University of Windsor, Canada

Prof.Yuan Lu, State Key Laboratory of Pulsed Power Laser Technology, China

Prof.Meilinda Nurbanasari, Institut Teknologi Nasional, Bandung, Indonesia

Prof.Binsheng Hu, North China University of Science and Technology, China

Dr. Parameshachari B D, Dept. of Telecommunication Engineering, GSSSIETW, Mysuru, India

A.Prof.Zaiyuzhang, Guizhou University, China

A.Prof.Lili Jiang, Lanzhou University of Technology, China

Dr.Yaohua Xu, GRINM Engineering Institute, China

Dr.Zhaowen Huang, Shunde Polytechnic, China

Prof.Yong Li, Jiangxi University of Science and Technology, China

Prof.A.Suresh babu, Anna University, India

Dr.Daohai Zhang, Guizhou University, China

Dr.Xiaofei Yao, Xi'an technological university, China

A.Prof.Baixiong Liu, Jiangxi University of Science and Technology, China

A.Prof.Feng Liang, Kunming University of Science and Technology, China

Dr.Ye Zhu, National Key Laboratory for Remanufacturing, China
A.Prof.Xiao Huang, Tongren University, China
Dr.Quanguo Jiang, Hohai University Hohai University, China
Dr.Liang Zhang, Shanghai Research Institute of Materials, China
A.Prof.Haitao Zhang, Qilu University of Technology, China
Prof.Ri Hanum Yahaya Subban, Universiti Teknologi MARA, Malaysia
Prof.Tianguo Zhou, Yangtze normal University, China
Dr.Xianming Meng, China Automotive Technology & Research Center Co., Ltd,
China
Ye Luo(Research Assistant), Wuhan Branch of Baosteel, Central Research Institute,
China
Dr.Lin Lu, Shanghai Research Institute of Materials, China
A.Prof.Shanlin Wang, Nanchang Hangkong University, China
Senior Eng.Haili Li, Sichuan international Studies University, China
A.Prof.Long Bai, Chongqing University, China
Dr.Qiaoli Lin, Lanzhou University of Technology, China
Prof.Jie Du, Hainan University, China
Prof.Zhiqiang Wei, Lanzhou University of Technology, China
A.Prof.Lifeng Fan, Inner Mongolia University of Technology, China
Prof.Ke Li, Nanchang University, China
Prof.Zhenshan Cui, Shanghai Jiaotong University, China
Dr.Hao Wang, China Tobacco Yunnan Industrial Co., Ltd, China
Prof.Ewa Skwarek, MCS University, Poland
Manager.Haixin Liu, Beijing Satellite Manufacturing Factory Co., Ltd