

Preface ICMMPM 2021

Dear Distinguished Authors and Guests,

We are delighted to introduce the proceeding of the 2021 4th International Conference on Metal Material Processes and Manufacturing, held on September 25-26, 2021 (virtual). The objective of ICMMPM2021 is to provide a platform for professionals, academicians and researchers to exchange views, findings, ideas and experiences on metal material process and manufacturing.

We strongly hope the new ideas and results presented will stimulate and enhance the progress of research on conference theme. We are grateful to all the authors for their papers and presentations in ICMMPM2021. We also expect that ICMMPM conference will be as successful and simulating, as indicated by the contributions presented in this volume.

On behalf of the organizing committee, we would like to acknowledge the technical comments from the reviewers and thank all of the authors for their contributions to this proceeding book.

With our warmest regards,

Conference Organizing Chair
Prof. Dong-Won Jung
Jeju National University, Jeju Island, South Korea

Committees

Conference Chair

Prof. Dong-Won Jung, Jeju National University, South Korea

Technical Program Committee

Professor Marcin Barburski, Lodz University of Technology, Poland

Dr. Roya Darabi, Jeju National University, South Korea

Dr. Wu-Le Zhu, Kyoto University, Japan

Professor Hwang Yi, Ajou University, South Korea

Dr. Oscar Hui, University of East Anglia, UK

Professor Ing. Abdullah Al-Janabi, Sultan Qaboos University, German

Professor Fatma Yalcinkaya, Technical University of Liberec, Turkey

Professor Huan-Liang Tsai, Da-Yeh University, Taiwan

Dr. Kim Si jin, Samsung Display Company, South Korea

Dr. Brouri Adil, Moulay Ismail University, Morocco

Professor Ghorbel Elhem, University of Cergy-Pontoise, France

Dr. Abdeen Mustafa Omer, Energy Research Institute (ERI), Nottingham, UK

Dr. Hugo Miguel Andrade Lopes Figueiredo da Silva, University of Minho, Portugal

Professor Debili Mohamed Yacine, Badji-Mokhtar University, Algeria

Professor Mohamed Abdel Moneim Deyab, Egyptian Petroleum Research Institute (EPRI), Cairo, Egypt

Professor Ayssar Nahlé, University of Sharjah, Sharjah

Dr. Zh. Algazy, Satbayev University, Kazakhstan

Dr. Rajiv Kumar, Goswami Ganesh Dutt Sanatan Dharam College, India

Dr. Subhasis Roy, University of Calcutta, India

Dr. Siamak Hoseinzadeh, Islamic Azad University, Iran

Dr. Yasin Polat, Erciyes University, Turkey

Prof. Farid Abed-Meraim, Laboratory of Microstructure Analysis and Mechanics of Materials, French

Prof. Dr. Osman Adiguzel, Ankara University, Turkey

Assoc. Prof. Achanai Buasri, Silpakorn University, Thailand

Dr. Antonio Riveiro Rodríguez, University of Vigo, Spain

Professor Ji Shijun, Jilin University, China

Dr. Brahim Safi, University M'hamed Bougara of Boumerdes, Algeria

Professor Arnulfo Luévanos-Rojas, Autonomous University of Coahuila, México

Dr. Yanjun Li, Florida Atlantic University, USA

Assoc. Prof. Dr. Soumya Mukherjee, Amity University, India

Dr. Beddiah ZAIDI, University of Batna, Algeria

Professor Vineet Jain, Amity University Haryana, Gurgaon

Associate Prof. Jin-Young Kim, Ulsan National Institute of Science and Technology, South Korea

Assistant Prof. Ankit Gupta, School of Engineering, Shiv Nadar University, Gr. Noida, India

Ph.D. Grzegorz Woroniak, Bialystok University of Technology, Poland

Assistant Prof. Manjunath Shettar, Manipal Institute of Technology, India

Dr. T. Theivasanthi, Kalasalingam University, India

Dr. Aruri Devaraju, National Institute of Technology Warangal, India
Prof. Bappa Acherjee, Department of Production Engineering Birla Institute of Technology, India
Prof. Walid Tawfik Younes Mohamed, Cairo University, Egypt
Dr. R. Viswanathan, Swami Vivekananda Institute of Technology, Secunderabad, India
Dr. Samson Jerold Samuel Chelladurai, Mechanical Engineering, Sri Krishna College of Engineering and Technology, India
Dr. Anjanapura V. Raghu, JAIN University, India
Associate Prof. Mamoun Fellah, Mechanical Engineering department Abbes LAGHOUR, Khenchela University, Algeria
Associate Prof. Siti Ujila Masuri, Universiti Putra Malaysia, Malaysia
Dr. Iman Bagherpour, National Iranian Gas Company, Iran
Dr. Ghulam Hasnain Tariq, Khawaja Fareed University of Engineering & Information Technology, Pakistan
Associate Professor. Kazem reza kashy zadeh, Peoples'Friendship University of Russia, Russia
Professor Dr. Osman Adiguzel, Firat University, Turkey
Professor Pavlo Maruschak, Head of Industrial Automation Department, Ternopil Ivan Pul'uj National Technical University, Ukraine
Professor M. De Cesare, Italian Aerospace Research Centre, Italy
PhD. Ma Quanjin, Universiti Malaysia Pahang, Malaysia
Dr. Sarfraz Ahmed, NTPC-SAIL Corporation Ltd, India

Sponsor

SHANGHAI X ACADEMY Co., LTD (X-Academy)

X-academy dedicates to organize worldwide academic conference. X-academy cooperate with IEEE (Institute of Electrical and Electronics Engineers), IEEE Harbin (Dalian) Section CIS Chapter and top university from in and out China by arranging and holding slap-up conferences on electrical engineering and automation, computer science, information technology, mechanic, materials, manufacturing engineering etc.. It creates and offers opportunities for experts, researchers and scholars from all over the world to present their technological advances and research results.