

Preface

The Organizing Committee warmly welcomes all participants of the 4th International Conference on Composite Material, Polymer Science and Engineering (CMPSE2020), which was held on December 06-07, 2020 (virtual), South Korea.

The aim of CMPSE2020 was to bring together experts from the academia and industry to present and discuss their research results and development in the areas of composite materials and polymer science, superalloys, ceramics, and chemical technologies. It provided opportunities for delegates to exchange new ideas and application experiences, and to establish collaborations.

The collected papers are focused on research in the areas of polymers and composites, superalloys, nanomaterials and functional materials, materials for electronic engineering and ceramics environmental and chemical engineering.

We would like to thank acknowledge the technical comments from the reviewers and thank all of the authors for their contributions to this proceeding book.

Finally, we wish all the authors and attendees of CMPSE2020 productive and happy experience with this webinar conference.

With our warmest regards,

Editor

Katsuyuki Kida, Professor, the University of Toyama, Japan
December 10, 2020

Committees

General Chair

Professor Katsuyuki Kida, University of Toyama, Japan

Program Committee

Koshiro Mizobe, Faculty of Engineering, University of Toyama, Japan

Takahiro Ohashi, Department of Mechanical Engineering, Kokushikan University, Japan

Tetsuo Aida, Faculty of Sustainable Design, University of Toyama, Japan

Koichi Kasaba, Faculty of Engineering, University of Toyama, Japan

Kazuaki Nakane, Division of Health Sciences, Osaka University, Japan

Mohammed Alias Yusof, National Defense University of Malaysia, Malaysia

Alois K. Schlarb, Department Head “Chair of Composite Engineering”, Technische Universität Kaiserslautern, Germany

Hamed Mofidi Tabatabaei, Department of Mechanical Engineering, Kokushikan University, Japan

Hitonobu Koike, Faculty of Engineering, University of Miyazaki, Japan

Takahiro Matsueda, Faculty of Urban Liberal Arts, Tokyo Metropolitan University, Japan

Petre ANGHELESCU, University of Pitesti, ROMANIA

Claudia Canali, University of Modena and Reggio Emilia, Italy

Bhingole Pramod P., Institute of Infrastructure, Technology, Research and Management (IITRAM), India

Jaspal Singh, Punjab Agricultural University, India

Toby D. Young, Institute of Fundamental Technological Research of the Polish Academy of Sciencesul, Poland

Abdul Talib bin Din, Universiti Teknikal Malaysia Melaka (UTeM), Malaysia

Zakiah Ahmad, University Teknologi Mara, Malaysia

Mohd Yuhazri Bin Yaakob, Universiti Teknikal Malaysia Melaka (UTeM), Malaysia

Hariati Taib, Universiti Tun Hussein Onn Malaysia, Malaysia

Dmitry A. Chinakhov, Yurga Institute of Technology of National Research Tomsk Polytechnic University, Russia

Valentino Paradiso, University of Salerno – Faculty of Engineering, Italy

Muhammad Naufal Bin Mansor, University of Malaysia Perlis (UniMAP), Malaysia

Yasin Polat, Nevşehir Hacı Bektaş Veli University, Turkey

Seyed Saeid Rahimian Koloor, Universiti Teknologi Malaysia (UTM), Malaysia

Academic Members

Ernie Suzana Binti Ali, Universiti Sains Islam Malaysia, Malaysia

Mimi Azlina Abu Bakar, University Technology MARA, Malaysia

Mohd Rasidi Bin Ibrahim, Universiti Tun Hussein Onn Malaysia, Malaysia

Shahril Anuar Bin Bahari, Universiti Teknologi MARA (UiTM) Malaysia, Malaysia

Saraev Yu. N., Institute of Strength Physics and Materials Science of Siberian, Russia

Carlos Henrique Lemos Soares, University of Campinas, SP, Brazil

Lai Chin Wei, University of Malaya, Malaysia

Ervina Efzan Mhd Noor, Multimedia University, Malacca, Malaysia

Muhammad Iqbal Hussain, Universiti Malaysia Perlis (UniMAP), Malaysia

Mohd Zaidi Sidek, University Malaysia Pahang (UMP), Malaysia

Nazuhusna Binti Khalid, Universiti Malaysia Perlis (UniMAP), Malaysia

M.T. Prathap Kumar, RNS Institute of Technology, India

Hab. Artur Chrobak, University of Silesia, Institute of Physics, Poland
Mohamad Bin Awang, Universiti Malaysia Terengganu (UMT), Malaysia
Melchor J. Potestas, Mindanao State University – Iligan Institute of Technology, Philippines
Hugo Miguel Andrade Lopes Figueiredo da Silva, University of Minho, Portugal
Mahmoud OMARI, the University of Biskra, Algeria
Siamak Hoseinzadeh, University of Pretoria, South Africa
T.Theivasanthi, Kalasalingam University, Indian

Sponsor

X-Academy Co., LTD & Consultancy Co., Ltd

X-Academy Co., LTD & Consultancy Co., Ltd 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.