

Preface

Dear Distinguished Authors and Guests,

The Organizing Committee warmly welcomes you to 2014 the 2nd International Conference on Applied Mechatronics and Android Robotics (ICAMAR2014) (TTP Conference ID: 1109), held on August 16-17, 2014 in Kuala Lumpur, Malaysia.

The aim of 2nd ICAMAR2014 is to present the latest research and results of scientists (professors, students, PhD Students, engineers, and post-doc scientist) related to Applied Mechatronics and Android Robotics topics. This conference provides opportunities for the different areas delegates to exchange new ideas and application experiences face to face, to establish business or research relations and to find global partners for future collaboration.

After the peer-review process, the submitted papers were selected on the basis of originality, significance, and clarity for the purpose of the conference. The selected papers and additional late-breaking contributions to be presented as lectures will make an exciting technical program. The conference program is extremely rich, featuring high-impact presentation. We hope that the conference results constituted significant contribution to the knowledge in these up to date scientific field.

The proceeding records the fully refereed papers presented at the conference. The main conference themes and tracks are Applied Mechatronics, Electromechanical Systems, and Electric Machines, Android Robotics Design and Application, Manufacturing Processing, Detection, and Control, Information System, Data Processing, and Network Application, Applied Mechanics and Other topics. Hopefully, all participants and other interested readers benefit scientifically from the proceedings and also find it stimulating in the process.

On behalf of the organizing committee, I would like to especially thank Saskia, Dorte, Sandra, Anne, Tanja and all the editors from Trans Tech Publications for their great support to 2nd ICAMAR2014. Without their excellent editorial work, 2nd ICAMAR2014 will not be published so timely and successfully.

Finally we wish all the authors and attendees of 2nd ICAMAR2014 a unique, rewarding and enjoyable memory at 2nd ICAMAR2014 in Malaysia. We look forward to your participation in the 3rd ICAMAR2015 in Shanghai.

With our warmest regards,

Ming-Hung Shu
Conference Organizing Chair

August 30, 2014

BOSI EDU

Committees and Sponsors

Committees

Advisory Committee Chairs

Paul P. Lin, Cleveland State University, U.S.A.

Okyay Kaynak, Bogazici University, Turkey

Katsuyuki KIDA, Kyushu University, Japan

Bruno SICILIANO, Università di Napoli Federico II, Italy

Conference Chairs

Joy Guo, Harbin (Dalian) Section CIS Chapter, China

Technical Program Committee Chairs

Kuang-Chyi Lee, National Formosa University, Taiwan

Jian Chien-Chen, Taipei College of Maritime Technology

Tsing-Tshih Tsung, Chinese Culture University, Taiwan

Yu-Cheng Chou, Chung Yuan Christian University, Taiwan

Po-Ting Lin, Chung Yuan Christian University, Taiwan

Wei- Fu Huang, Hwa Hsia Institute of Technology, Taiwan

Ravindras Goonetilleke, Hong Kong University of Science and Technology, Hong Kong

Long Wang, Peking University, China

Seung Han Yang, Kyungpook National University, Korea

Imre J. Rudas, Obuda University, Hungary

Program Committee Chairs

Sheng Chen, Hwa-Hsia Institute of Technology, Taiwan

Jia-Shing Sheu, National Taiwan University of Education, Taiwan

Zhigang Li, Hong Kong University of Science and Technology, Hong Kong

Digvijay Kulshreshtha, C. K. Pithawalla College of Engineering and Technology, India

Ping Zheng, Hong Kong University of Science and Technology, Hong Kong

Mohd. Zamri Bin Yusoff, Universiti Tenaga Nasional (UNITEN), Malaysia

Neville Ka-Shek LEE, Hong Kong University of Science and Technology, Hong Kong

Holger Voos, University of Luxembourg, Luxembourg

Mohammad Hadi Hafezi, Universiti Kebangsaan Malaysia (UKM), Malaysia

International Program Committee Chairs

Xavier Gandibleux, University of Nantes, France

Ashraf Ismail Yousef Saleem, Philadelphia University, Jordan

Albert Weckenmann, University Erlangen-Nuremberg, German

Alexander M. Korsunsky, University of Oxford, England

Tomonori Hashiyama, the University of Electro Communications, Japan

Karm Veer Arya, ABV-Indian Institute of Information Technology & Management, India

Marta Takacs, Obuda University, Hungary

Laszlo Horvath, Obuda University, Hungary

Jozsef Tar, Obuda University, Hungary

Raj Das, Department of Mechanical Engineering and Centre for Advanced Composite Materials University of Auckland, New Zealand