

Preface

Materials science, also commonly known as materials engineering, is an interdisciplinary field applying the properties of matter to various areas of science and engineering. This relatively new scientific field investigates the relationship between the structure of materials at atomic or molecular scales and their macroscopic properties. It incorporates elements of applied physics and chemistry. With significant media attention focused on nanoscience and nanotechnology in recent years, materials science is becoming more widely known as a specific and unique field of science and engineering.

Aiming to the advances of Materials science and Engineering Technology, 2013 2nd International Symposium on Materials Science and Engineering Technology (ISMSET 2013) is an annual conference to call together researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Materials science and Engineering Technology.

ISMSET 2013 has received more than 520 submissions from 20 countries and regions. The papers come from both academia and industry reflecting the international flavor of this event in the topics of Materials science and Engineering Technology. About 30 PC members and 60 International reviewers worked hard in reviewing the submissions. Based on the review reports, about 190 papers were accepted to be presented in ISMSET 2013 by the chairs. The papers were grouped into six sessions viz., New Materials and Advanced Materials, Micro / Nano Materials, Manufacturing Processes and Systems, Applied Mechanics, Control and Automation, and Information technologies in Engineering.

All the accepted papers have been presented on the conference, mainly by oral presentations. During the conference, many novel research works caught the attentions of the participants. For example, the “Quantum Mechanical Data Mining Predictions for the Penn-Phillips Gap” by Da Gao, University of Minnesota, employed the data mining method to predict the Penn-Phillips Gap; the new achievements of Seismic Tests on RC Building Exterior Joints in Italy; “The Effects of Depositing Sn-Ag-Cu-S Systems at Different Temperatures on Silver Substrates” from Thailand by Pathra Srisukho were highly evaluated. The participants came to an agreement that they will participate in the ISMSET 2014 next year.

All the presented papers will be published by TTP Press in Advanced Materials Research which will be online available in full text via the platform www.scientific.net, and be indexed by Scopus, EI Compendex, ISI Proceedings, etc.

We express our thanks to all the members of the General Committee Chairs, Program Committee Chairs, Technical Program Committee and Volunteers who worked so hard to prepare the conference and chair the six sessions in ISMSET 2013 .

We hope that ISMSET 2013 will be successful and enjoyable to all participants. We look forward to seeing all of you next year at the ISMSET 2013.

Honghua Tan

ISMSET 2013 Organizing Committees

General Chair

Tianbiao Chang, American Applied Sciences Research Institute, USA

Andrew Hunter, Kuala Lumpur ACM Chapter, Malaysia

Program Chair

Wei Deng, American Applied Sciences Research Institute, USA

International Committee

Gerald Schaefer Gerald Schaefer, Loughborough University, U.K

Ankit R Patel, L C Institute of Technology, India

Mark Zhou, Hong Kong Education Society, Hong Kong

LouLuo Moucard, IEEE Gambia GRSS Chapter Chair

Khine Soe Thaung, Maldives College of Higher Education, Maldives

Dehuai Zeng , Shenzhen University, China

Yijin Wu , Huazhong Normal University, China

Sivaji Chakravorti, Jadavpur University, India

Riza Esa, Kuala Lumpur ACM Chapter, Malaysia

Wei Lee, Melbourne ACM Chapter, Australia

David Chan, Macao ACM Chapter, Macao