

Preface

Dear Distinguished Delegates and Guests,

The Organizing Committee of ICAMR 2013 warmly welcomes you to the 2013 3rd International Conference on Advanced Materials Research (ICAMR 2013), held on January 19-20, 2013 in Dubai, UAE. ICAMR 2010 is co-sponsored by Motilal Nehru National Institute of Technology and Science and Engineering Institute.

The conference is aimed at providing a platform for all of you to present leading-edge work in the fields of Advanced Materials Research. More than 230 papers were submitted to ICAMR 2013 and around 60 papers are accepted for the conference after peer reviewed by reviewers drawn from the scientific committee, external reviewers and editorial board depending on the subject matter of the paper. Reviewing and initial selection were undertaken electronically. 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 presentations. .

The proceeding records the fully refereed papers presented at the conference. The main conference themes and tracks are Material Sciences and Engineering. The main goal of ICAMR 2013 is also to provide international scientific forums for exchange of new ideas focus on Material Sciences and Engineering.

We would like to thank the program chairs, organization staff, and the members of the program committees for their work. Thanks also go to all those who have contributed to the success of ICAMR 2013.

Hopefully, all participants and other interested readers benefit scientifically from the proceedings and also find it stimulating in the process.

We hope all of you have a unique, rewarding and enjoyable week at ICAMR 2013 in Dubai.

With our warmest regards,

Prof. K.M.Gupta, Motilal Nehru National Institute of Technology, India

January 19-20, 2013

Dubai, UAE

Committees

Honorary Chairs

IEEE Fellow, Professor Wang Jun, The Chinese University of Hong Kong, Hong Kong

Conference Co-Chairs

Prof. K.M.Gupta, Motilal Nehru National Institute of Technology, India

Program Co-Chairs

Prof. Arbin Ebrahim, Tuskegee University, USA

Prof. Zhihua Guo, South West Jiaotong University, China

Prof. Agarwal Ankur, Florida Atlantic University, USA

Dr.Karmouch Rachid, Jazan University, Saudi Arabia

Prof. Nazir Ahmad Zafar, University of Central Punjab, India

Prof. Shobha G, R.V College of Engineering, India

Le Hoang Son, Hanoi University of Science, Viet Nam National University, Vietnam

Dr. Ahmad Fairuz Bin Omar, School of Physics, University Science Malaysia, Malaysia

Technological Committees

Dr. Manish Kewalramani, Abu Dhabi University, Abu Dhabi, UAE

Prof. Dr. Osman Adiguzel, Firat University, Department of Physics, Turkey

Dr. BELAL F. YOUSIF, The University of Southern Queensland, Australia

Dr. Zainudin Kornain, Universiti Kuala Lumpur British Malaysian Institute, Malaysia

Prof. Muhamad Mat Noor, Mechanical Engineering, Malaysia

Prof. Dong-Chul Park, Myong Ji University, Korea

Prof. K. Balasubramanian, European University of Lefke, Turkey

Prof. Anjaiah Devineni, Manipal University, India

Dr. Ing. Kay Smarsly, Ruhr-University Bochum Institute for Computational Engineering, Germany

Andrej Trnka, Faculty of Mass Media Communication, University of SS Cyril and Methodius in Trnava, Slovakia

C. Nagarajan, Muthayammal Engineering College, Anna University, India

Dr. Chomtip Pornpanomchai, Mahidol University, Thailand

Prof. D.S. Arumuga perumal, Computer Science, India

Prof. Dong-Chul Park, Myong Ji University, Korea

Dr. Ghanshyam Singh, Jaypee University of Information Technology, India

Haibing Mu, School of Electronics and Information Engineering, Beijing Jiaotong University, China

Hamed Rahimi Nohooji, Iran University of Science and Technology, Iran

Ing. Kay Smarsly, Ruhr-University Bochum Institute for Computational Engineering,

Germany

Le Hoang Son, Hanoi University of Science, Viet Nam National University, Vietnam

Mahdi Jampour, Dept of Computer Engineering at Kerman Institute of Higher Education, Iran

Dr. Mahmoud Ibrahim Mahmoud Moussa, Benha University, Egypt

Md. Hasanuzzaman, Department of Mechanical Engineering University of Malaya, Malaysia

Mdm Norliana Binti Mohd Abbas, Universiti Teknologi MARA, Malaysia

Mohammad Abdul Matin, North South University, Bangladesh

Dr. Muhammad Younus, National Engineering and Scientific Commission Pakistan, Pakistan

Prof. R.Sudhakar, Dr.Mahalingam College of engineering and Technology, India

Dr.Mahalingam College of Engineering and technology, Anna University, India

Dr. Reza Eslami Farsani, Toosi University of Technology, Tehran, Iran

Dr. Ridwan Sanjaya Soegijapranata Catholic University, Semarang, Indonesia

Ruzinoor Che Mat, Universiti Utara Malaysia, Malaysia

Dr. S.Hariharan, J.J.College of Engineering and Technology, Tamilnadu, India

Seyed Ebrahim Esmaeili Concordia University, Iran

Suhansa Rodchua, University of Central Missouri, Warrensburg, India

Dr. WeiFeng Liu, China University of Petroleum, China

Dr. Yi Cao, School of Electrical Engineering, Henan University of Technology, China

Zhijun Zhang, School of Mechanical Engineering and Automation ortheastern University, China

Sponsors

Motilal Nehru National Institute of Technology, India

Science and Engineering Institute, USA