

## Preface

Dear Distinguished Delegates and Guests,

The Organizing Committee of ICKEM 2014 warmly welcomes you to the 2014 4th International Conference on Key Engineering Materials (ICKEM 2014), held on March 22-23, 2014 in Bali, Indonesia. ICKEM 2014 is sponsored by IACSIT of Singapore.

The conference is aimed at providing a platform for all of you to present leading-edge work in the fields of Key Engineering Materials. More than 200 papers were submitted to ICKEM 2013 and only 94 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 ICKEM 2014 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 ICKEM 2014.

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 ICKEM 2014 in Bali, Indonesia.

With our warmest regards,

Prof. Haider F. Abdul Amir, Universiti Malaysia Sabah, Malaysia

Prof. Maria Mucha, Technical University of Lodz, Poland

Ms. Xu Jie, International Association of Computer Science and Information Technology, Singapore

March 22-23, 2014

Bali, Indonesia

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