

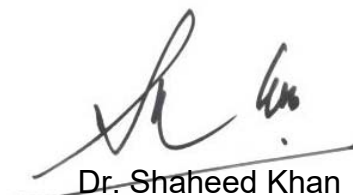
## PREFACE

The Advanced Materials XII is the compilation of selected peer reviewed papers from the 12<sup>th</sup> International Symposium on Advanced Materials held from September 26-30, 2011, Islamabad, Pakistan. As a Secretary of ISAM-2011, I feel immense pleasure that this symposium has ended up with a great success. The ultimate aim of this publication is to present latest information and new findings/innovations in the field of advanced materials. The ever-increasing changes and complexities that characterize present day needs of the industry have forced a growing demand for technical information on advanced materials. Such a demand presents a strong challenge to the researchers in this field to disseminate useful material information readily. It is hoped that the technical data available in this publication is likely to help young scientists and researchers working in the field of advanced materials. In the five-day deliberation of the symposium, nearly one hundred and eighty contributory and invited papers, comprising of seventeen (17) technical sessions and two (02) poster sessions, were presented. Renowned scientists and researchers from foreign and local institutes have shared their ideas with their counter parts on the topics of common interest.

I am personally thankful to the Symposium Chairman for his continuous guidance and assistance, without which it would not have been possible to make this event of international standard. I am also greatly indebted to the technical, secretariat and organizing committees of ISAM-2011 for putting all their efforts in composing the Advanced Materials XII. I am also thankful to the Trans. Tech. Publications (ttp), Ltd., Switzerland for accepting the papers of ISAM-2011 for publication in the journal.

I am also thankful to our distinguish participants, session chairpersons, co-chairpersons and reviewers of the papers for showing their keen interest and providing their assistance/cooperation which turned this event to be a brilliant success.

I owe a special thanks and appreciation to the entire organizing committee for playing their active role in every sector of this event, which has led to achieve the ultimate goal. Finally yet importantly, my gratitude goes to the sponsors of ISAM-2011 for providing financial support for this event.



Dr. Shaheed Khan  
Symposium Secretary

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