Preface

**T. Venugopalan · Siddharth Misra ·
S. Srikant · Soumitra Tarafdar**

Published online: 2 July 2013
© Indian Institute of Metals 2013

The Golden Jubilee of any event is special and Jamshedpur had the privilege of hosting the 50th year of the National Metallurgist Day celebrations. It has been an eventful journey for Indian Institute of Metals since the first NMD celebration held at Bhilai. IIM has played a stellar role in bringing together metallurgists from various facets of the profession which include academia, industry, R&D labs and consultancy. The Transactions of the Indian Institute of Metals has served as a neural network of knowledge dissemination and it is a privilege to bring out this Special Issue on this occasion. The emphasis of Metallurgy in India has centred around Iron and Steel and remains so. However, the focus has shifted from producing pig iron and crude steel from naturally endowed high quality iron ores to use of low grade raw materials, minimizing fossil energy, minimum environmental footprints and the market demand for high end products. This transformation is beset with several technological, social and political challenges. However, therein lies the opportunities. It was therefore decided to have a special international symposium on the “*Opportunities and Challenges in Iron & Steel Industry*”.

Technological challenges in today’s context cannot be addressed at individual levels and requires the inputs from all stakeholders especially academia, industry, Research

institutions and technology providers. The success of the iron and steel industry today heavily relies on efficient utilization of raw materials, efficiency, productivity and energy conservation in iron and steel processes and innovation in product development. These were chosen as the themes for this international symposium. We invited more than fifty international experts in all of these areas spanning the academia, industry and research institutions and received an overwhelming response to our call. Experts from more than ten countries contributed to the symposium. We had a challenging task of getting all the full papers, having them peer reviewed and compiling them into a special issue. We wish to thank all the authors for their patient revisions of the manuscript based on the comments of the peer reviewers and the reviewers for not compromising on the standards of the publication and the organizing committee for the support. Last but not least, our gratefulness to the Indian Institute of Metals and the Transactions, especially the Managing Editor and the Publisher for agreeing to bring out this special issue and publishing it.

T. Venugopalan, Siddharth Misra (Tata Steel)
S. Srikant, Soumitra Tarafdar (NML Jamshedpur)

T. Venugopalan (✉) · S. Misra
Tata Steel, Jamshedpur, India
e-mail: tvenugopalan@tatasteel.com

S. Srikant · Soumitra. Tarafdar
NML Jamshedpur, Jamshedpur, India