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Tapas Kumar Roy · Basudev Bhattacharya
Chiradeep Ghosh · S. K. Ajmani
Editors

Advanced High Strength Steel

Processing and Applications

 Springer

Editors

Tapas Kumar Roy
R&D Division
Tata Steel Limited
Jamshedpur, Jharkhand
India

Chiradeep Ghosh
R&D Division
Tata Steel Limited
Jamshedpur, Jharkhand
India

Basudev Bhattacharya
R&D Division
Tata Steel Limited
Jamshedpur, Jharkhand
India

S. K. Ajmani
R&D Division
Tata Steel Limited
Jamshedpur, Jharkhand
India

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Preface

Developments in Advanced High Strength Steel, Processing and Application (AHSS 2017) is a compendium of selected papers which were presented at a two-day-long international conference held in Jamshedpur during 22–23 February 2017. This was organized by Tata Steel Limited in association with the Jamshedpur Chapter of Indian Institute of Metals.

With the increasing energy crisis and stringent environmental norms, energy saving and safety coupled with CO₂ emission have become the burning issues for many industries, particularly for automakers. Reduction in weight is turning out to be the most effective way in reducing the fuel consumption and thus subsequent emission. At this stage, the family of advanced high-strength steels (AHSS) continues to evolve and grow in different applications such as automotive industry, lifting and excavation, line pipe. New steel grades are already being used for improved performance. Looking at the market trend, it may be envisaged that the emerging steel grades will be popular day by day. Accordingly, improved steel-making practices, inclusion engineering at different stages of steelmaking and casting as well as subsequent heat treatment and rolling practices play important roles in achieving this goal.

In recent years, India has emerged as a very strong and potential country for advanced steel research. At this juncture, it was a very unique conference where not only were the physical and mechanical metallurgy issues related to the production of AHSS discussed, but also the process metallurgy topics were covered.

The contributors of this special volume encompass national and international academic institutes, leading steel industries, steel research laboratories and technology suppliers.

Our sincere thanks to the review committee for doing a splendid job in reviewing the articles and approving them to be published in this special volume. The editors would also like to thank Springer for preparing this volume.

We sincerely hope that the present proceeding will be instrumental in expanding the horizon of our knowledge on advanced high-strength steels.

Jamshedpur, India

Dr. Tapas Kumar Roy
Dr. Basudev Bhattacharya
Dr. Chiradeep Ghosh
Dr. S. K. Ajmani

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About the Editors

Dr. Tapas Kumar Roy is a Principal Scientist in the Research and Development (R&D) Division of Tata Steel Limited in Jamshedpur, India. He holds M.Tech. and Ph.D. degrees from the Indian Institute of Technology Kanpur, India. He has been associated with Tata Steel for over 20 years, and during this period, he has worked in various functions such as Scientific Services, Long Product Technology, Flat Product Technology before being moved to R&D from 2016. His areas of interest include steelmaking, secondary refining, continuous casting, inclusion engineering, ferro-alloys, defectology, mould powder, process design and improvement. He has authored more than 40 scientific research papers in national and international journals and conferences.

Dr. Basudev Bhattacharya is working as Principal Scientist in the Research and Development (R&D) Division of Tata Steel Limited in Jamshedpur, India. He holds M.Tech. and Ph.D. degrees from the Indian Institute of Technology in Kanpur, India. From 1997 to 2007, he has worked in the Cold Rolling Mill and Flat Product Technology Group in Tata Steel. From 2007 onwards, he has been in the R&D Division at Tata Steel. His areas of interest include physical metallurgy and materials science, phase transformation, designing of steel chemistry, X-ray diffraction, electron microscopy. He has been granted 4 patents, and he has authored more than 30 scientific research papers.

Dr. Chiradeep Ghosh is a Principal Researcher in the Research and Development (R&D) Division of Tata Steel Limited in Jamshedpur, India, where he has been working since 2003. He holds a M.Tech. degree from the Indian Institute of Technology Kanpur, India, and a Ph.D. degree from McGill University, Montreal, Canada. His areas of interest include thermomechanical controlled processes, phase transformation and related phenomenon, characterization of materials and electron microscopy. He has been granted 6 patents and has authored more than 35 scientific research papers and served as an editor for 2 conference proceedings. In addition,

he has also authored a book titled “The Dynamic Transformation of Deformed Austenite”. He serves as a reviewer for multiple high-impact journals and is an editorial board member of *Current Smart Materials*.

Dr. S. K. Ajmani is Chief Researcher in the Steelmaking & Casting Research Group in Research and Development (R&D) of Tata Steel Limited in Jamshedpur, India. He holds M.Tech. and Ph.D. degrees from the Indian Institute of Technology Kanpur and Kharagpur, India, respectively. His areas of interest include steel-making, physical and numerical modelling, continuous casting, inclusion engineering, product—process design and optimization, and mould powder development. He has worked at Tata Steel for more than 30 years and has been the chief researcher for the last 2 years. He has authored more than 100 scientific research papers in national and international journals and conferences.