

Series Editors' Preface

The Indian Institute of Metals Series is an institutional partnership series focusing on metallurgy and materials sciences.

About the Indian Institute of Metals

The Indian Institute of Metals (IIM) is a premier professional body (since 1947) representing an eminent and dynamic group of metallurgists and materials scientists from R&D institutions, academia and industry mostly from India. It is a registered professional institute with the primary objective of promoting and advancing the study and practice of the science and technology of metals, alloys and novel materials. The institute is actively engaged in promoting academia–research and institute–industry interactions.

Genesis and History of the Series

The study of metallurgy and materials science is vital for developing advanced materials for diverse applications. In the last decade, the progress in this field has been rapid and extensive, giving us a new array of materials, with a wide range of applications and a variety of possibilities for processing and characterizing the materials. In order to make this growing volume of knowledge available, an initiative to publish a series of books in metallurgy and materials science was taken during the Diamond Jubilee year of the Indian Institute of Metals (IIM) in the year 2006. IIM entered into a partnership with Universities Press, Hyderabad, and as part of the IIM Book series, 11 books were published, and a number of these have been co-published by CRC Press, USA. The books were authored by eminent professionals in academia, industry and R&D with outstanding background in their

respective domains, thus generating unique resources of validated expertise of interest in metallurgy. The international character of the authors and editors has enabled the books to command national and global readership. This book series includes different categories of publications: textbooks to satisfy the requirements of undergraduates and beginners in the field, monographs on select topics by experts in the field and proceedings of select international conferences organized by IIM after a mandatory peer review. An eminent panel of international and national experts constitutes the advisory body in overseeing the selection of topics important areas to be covered in the books and the selection of contributing authors.

Current Series Information

To increase the readership and to ensure wide dissemination among global readers, this new chapter of the Series has been initiated with Springer. The goal is to continue publishing high-value content on metallurgy and materials science, focusing on current trends and applications. Readers interested in writing for the series may contact the undersigned series editor or the Springer publishing editor, Swati Meherishi.

About This Book

The current source book on “Aerospace Materials and Technologies—2 Volumes” with comprehensive coverage in aerospace, materials, technologies is the first and latest book to be published with Springer. This book comprises 2 volumes, with first volume dedicated to aerospace materials elaborately in three parts, a total of 26 chapters covering all types of materials including metallic, composites and special materials. The Volume 2, in 25 chapters, is fully dedicated to the recent and advanced material technologies, which have emerged in the aerospace industry. This volume consists of four parts covering processing technologies, characterization and testing, structural design and special technologies. As a whole, this source book on “Aerospace Materials and Technologies” fully covers the important aspects of the materials development and their technologies in aerospace industry and is an update and unique knowledge base. I am confident that the book would help the readers to develop the basic and advanced understanding of the materials and their recent developments which are essential to address significant growth in the aerospace industry. The authors and editors are of the conviction that the book would be a treasure to all those pursuing advanced materials and technologies in aerospace sectors. The students, young faculties, research scholars in academic and R&D institutions, in addition to a place in libraries and knowledge parks, are the

beneficiaries of the dedicated work and efforts put by Dr. N. Eswara Prasad and Dr. R.J.H. Wanhill, as editors, and a large number of eminent authors of the 2 volumes of this important book.

We wish you enrichment in knowledge and motivation. Also, we await your feedbacks for improving the book when it goes to second edition.

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