











Preface

On behalf of the editorial board and the host institution, Central Metallurgical Research & Development Institute (CMRDI), we are delighted to launch the first issue of the International Journal of Materials Technology and Innovation (IJMTI). The journal seeks to publish original research in the field of materials science and technology. The journal scope covers extractive metallurgy, surface science, minerals technology, and materials processing. Moreover, submissions in the fields of environmental issues, nanoscience & technology, and additive manufacturing are welcome.

IJMTI serves as an innovative and professional platform that provides a progressing international forum, where materials scientists, physicists, and chemists can present their outcomes to researchers in their fields. Fortunately, the editor in chief; Prof. Emad Ewais (President of CMRDI, Egypt) has a group of highly valuable scholars who agreed to serve as editors, including Prof. Detlef Bahnemann (Photocatalysis and Nanotechnology - Gottfried Wilhelm Leibniz Universität, Germany), Prof. Adel A. Ismail (Photocatalysis and Nanotechnology - CMRDI, Egypt), Prof. Thomas W. Eagar (Massachusetts Institute of Technology, USA), Prof. Hailei Zhao (Material Science - University of Science and Technology, China), Prof. Fathi Habashi (Extractive Metallurgy-University of Laval, Canada), Prof. Adel Nofal (Metal Casting - CMRDI), and Prof. Yong-Cheng Lin (Materials Engineering and Manufacturing - Central South University, China), etc. Besides, the international editorial board consists of scholars from different countries worldwide, and actively serves the field in their disciplines. With our editorial board's cumulative experience and the volunteer work of our reviewers, this journal brings a substantial representation of the field of materials science and engineering. The inaugural volume comprises 8 manuscripts that cover different topics and includes both theoretical and technical results and discussions.

The journal community members are acknowledged for their idea to establish the new IJMTI journal and their support to bring the first issue to light. This issue would not have been possible without the great efforts of the editorial board members, and we would like to express our sincere thanks to all of them. We would also like to express our deep gratitude to the staff of the Egyptian Knowledge Bank (EKB) who supported us at every stage of the project. The editors are also indebted to many others who made this work possible.

Finally, we hope that this collection of articles will be a valuable resource for the scientific community and will stimulate new research ideas into the area of materials science.

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Emad M. Ewais