PREFACE

With an extended gratification, we happily welcome you to the proceedings of 2021 3rd International Conference on Trends in Material Science and Inventive Materials (ICTMIM 2020) at Coimbatore, India. The main objective and feature of the conference is to bring together academicians, researchers and industrialists to share and exchange their research experiences and results in different aspects of material science, computational mechanics and innovative materials.

The editorial team of 3rd ICTMIM 2021 has mainly preferred the state-of-the-art discussions on the practical challenges encountered in the emerging innovative material science paradigm and solutions adopted to it. The 3rd ICTMIM 2021 proceedings has been committed to remain both informative and research stimulating to cope up with the current issues present in innovative materials and general material science domain. Delegates from different countries have made the conference to be truly international in scope. Totally, 3rd ICTMIM 2021 has received 292 papers out of which 86 papers were selected for the conference. It has been strictly followed that, each contributed paper has refereed by at least 2-3 international reviewers before being accepted for publication.

3rd ICTMIM 2021 conference program consists of technical sessions and discussions on most of the recent material science research topics with eminent session chairs, program chairs, plenary lectures, and keynote speakers by covering a wide range of topics. The conference totally had 86 oral presentations, which are delivered by the conference participants by leveraging a great opportunity for the academicians, scholars ad industrialists to gain a wider knowledge on the state-of-the-art progress in material science research. Also, we are pleased to extend our gratitude to the review committee members, who have delivered their professional and technical expertise to the fullest to improve the publication quality of the research papers submitted to 3rd ICTMIM 2021. Furthermore, we would like to thank the conference organizers, local organizing committee members, faculty and non-faculty members, and volunteers for making this technical gathering to be a more enjoyable and informative event.

At last, we would like to extend our gratitude to the publication support delivered by the IOP team in this entire journey from conference to publication and our institution JCT College of Engineering and Technology for their continual support in successfully organizing this conference event.

Virtual Conference Disclaimer

We are happy to introduce you the 2021 3rd International Conference on Trends in Material Science and Inventive Materials (ICTMIM 2021), which was successfully held on March 12-13, 2021. By introducing a vast difference from the previous times of ICTMIM conference, 3rd ICTMIM 2021 was carried out in the form of virtual conference due to the adverse impact of COVID-19. Due to the travel restriction across the globe, the conference has been hosted online in very flexible way to gather
the research scholars and experts all around the world with an aim to continue disseminating the recent and advanced research in the field of material science and also develops academic and research exchange among material science researchers even during the unprecedented times. Prior to the conference day, authors are provided with the detailed instructions to join their corresponding meeting link according to the conference presentation schedule. Furthermore, in order to avoid the technical delay from the conference participants during presentation, participants are also instructed to submit their pre-recorded presentation. Amidst the existing unprecedented pandemic situation, 3rd ICTMIM 2021 has provided the conference participants to share and exchange their innovative knowledge with the other attendees and make this event more successful and informative as like the previous conferences.

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