



Preface

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The present issue contains the selected papers based on the presentations from 4th International Conference on Materials Science and Nanotechnology (MSNANO-20) held at the Department of Physics, Government College University Faisalabad, Pakistan. The conference was organized by the Department of Physics, Government College University Faisalabad, with the financial support of Punjab Higher Education Commission and Higher Education Commission of Pakistan.

MSNANO-20 is the 4th annual conference of MSNANO series which was started in 2017. This annual conference brought together a community of more 1200 participants from 42 universities of Pakistan and 6 countries. The main focus of the scientific program of MSNANO-20 conference was on highlighting the current directions and challenges in the fields of materials and nanotechnology for improving magnetic, photovoltaic, thermoelectric, medicine, materials for energy storage, materials for fuel cell technology, energy harvesting, catalysis, photocatalysis, smart and nanomaterials for energy applications. The Conference was also aimed at inspiring both researchers and students to seek and pursue state-of-the-art research in the fields of materials science and nanotechnology. The platform provided by MSNANO-20

allowed all the participants to interact with national and international scientists so that they can identify and potentially take up collaborative research work related to material science and nanotechnology for the benefit of Pakistan in particular and the humanity at large.

The articles presented at the MSNANO-20 conference has been brought out as a special issue in various journals including *Physica B*, *Materials Today Proceedings* and *Journal of Superconductivity and Novel Magnetism*. In this special issue we have some selective articles from various themes. A committee consisting of experts from leading academic institutions was formed to shortlist and review the articles. The articles in this special issue have been peer reviewed as per the international standards. We are extremely happy to bring out this special issue and dedicate it to all those who have made their best efforts to contribute to this publication.

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