



Editorial: message from the editor-in-chief

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Published online: 29 March 2023
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1 Dear Colleagues

Greetings from your Associate Editors and your Editor-in-Chief. We take this opportunity to thank our devoted readers, highly innovative and talented authors, expert reviewers and distinguished editorial board for being a part of this highly sought after archived mechanics of materials journal.

Decidedly, 2022 could be characterised as being a year of optimism and discovery. Truly, I enjoyed the remarkable optimism that is marked by return to normalcy of our daily routine and the opening of shopping malls, restaurant and more importantly our schools and higher learning institutions. In passing, I strongly believe that online teaching was a spectacular failure. I welcomed in-person teaching with open arms. The optimism was also manifested by the community's participation in scientific events; including, meetings, forums and symposia. For example, I participated in-person in the International Conference on Mechanics and Materials in Design held in Funchal, Madeira, Portugal, June 2022. This conference was attended by 200 participants from over 18 countries. Let us continue and do our part to encourage and support the normalcy of our community in support of the training of our research students and staff.

As regards 2022's discoveries, despite our slow recovery from a devastating global pandemic, we enjoyed discoveries in space, physics biology, ecosystem, among others. Let me begin by citing but a few examples. The first is the spectacular photographs from the Hubble Space Telescope. The photographs depict newly born stars spiralling a glowing galaxy. The galaxy, called NGC 284, lies in the assemblage of the Ursa Major about 46 million light-years from us on earth. As another example, let us credit the researchers from the University of Alberta with the identification of two new minerals from a meteorite found in Somalia and a third proclaimed by researchers at CalTech; see Fig. 1. The two new minerals are phosphates of iron. The findings were presented in the Space Exploration Symposium held at the University of Alberta, Canada, in November 2022. As a third and final example, let us mention the new discovery of a rainbow fish, it is found in the mesophotic zone and was named by scientists "Rose-Veiled Fairy Wrasse". As explained by Dr. Yi-Kai Tea, Postdoctoral Fellow at the Australian Museum Research Institute in Sydney to the Guardian Newspaper, "The mesophotic zone is one of the least explored regions in coral reefs". He continued, "This area is generally situated at an awkward depth – not deep enough to survey with submarines, too complex to trawl and dredge, and too deep to dive with traditional scuba techniques."

You would be pleased to know that the **International Journal of Mechanics and Materials in Design (MAMD)** continues its mission at the forefront of Mechanics of Materials Journals. MAMD

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Fig. 1 A slice of El Ali meteorite that fell in Somalia in 2020 contains two new minerals. (Credit: Nick Gessler, Duke University). A meteorite that fell in Somalia in 2020 is home to at least two mineral

is a peer-reviewed journal that publishes high-impact research contributions that are innovative in nature and transformative in focus in the rapidly changing fields of mechanics and materials and their implementation in engineering design. MAMD provides a forum for the dissemination of cutting-edge research in all fields of applied mechanics and engineered multifunctional materials, and strives to report the most recent advances in these important fields. Specifically, MAMD covers the following topics:

- Multifunctional nanocomposites,
- Composite materials,
- Smart materials and adaptive structures,
- Semiconducting and conducting polymers,
- Optimisation techniques concerned with mechanics of materials,
- Experimental techniques at varied length scales,
- Multiphysics modeling at varied length and time scales,
- Nano and micromechanics of solids,
- Elastostatic and dynamic response of engineering systems to impulsive loads,
- Atomistic and continuum damage and fracture mechanics of solids, and
- Substantial reviews of any of the above topics.

You would be pleased to know that in spite of the challenges of COVID-19 and its varied strands, we continue to receive a substantial number of very high quality articles that either have been published already, accepted or are currently being peer reviewed.

MAMD features a distinguished Editorial Board, which brings together a team of highly experienced specialists in all aspects of mechanics of materials. In addition to the advice and support provided by them, I'm ably assisted by three Associate Editors: Professor Chuanzeng Zhang of the University of Siegen (Germany), Professor Xiong Zhang of Tsinghua University (China) and Professor Timon Rabczuk, Institute of Structural Mechanics, Bauhaus University Weimar, (Germany). I take this opportunity to thank them most sincerely for their unlimited support, timely processing of the manuscripts and for guiding the journal to greater heights. Undoubtedly, the success of MAMD is attributed to our talented authors and their scholarly contributions, our expert reviewers for devoting valuable time to review manuscripts, your Associate Editors for the care taken in the timely processing of your articles and the guidance of our distinguished Editorial Board. I also wish to acknowledge the continued support of our colleagues in Springer. Specifically, I wish to thank Ms. Silvia Schilgerius, Senior Editor Applied Sciences, Mr. Senthil Kumar, Journals Production Editor and Ms. Aishwarya Kamalakannan, Assistant Journals Editorial Office.

It is truly an honor to be the Editor-in-Chief of MAMD, and with my team of highly qualified and dedicated Associate Editors, we look forward to serving you and making MAMD your journal of choice. We wish all of you a New Year full of discoveries and exciting innovations.

Happy New Year to one and all. Please remain safe and healthy,

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