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The 7th International Conference on Advances in Machinery, Material Science and Engineering Application (MMSE 2021) is organized by the China University of Geosciences (Wuhan) and the Supmeca/Paris School of Mechanical and Manufacturing Engineering, co-organized by the Henan Polytechnic University and the the National University of Singapore, which is planned to be held in Hangzhou, China. However, due to current situation of COVID-19 in China, it is still difficult to take international travel for the attendees abroad. For the sake of protecting all the participants and conference staff from the current situation, the MMSE 2021 is changed to be held virtually through Zoom on July 24-25th 2021.

More than 85 participants from academic, high-education institutes and other organizations attend this online conference from home and abroad, such as Prof. E. Bayraktar from the Supmeca/Paris School of Mechanical and Manufacturing Engineering (France), Prof. Rezia Maria Molfino from the University of Genova (Italy), Prof. Mark J. Jackson from the Kansas State University (USA), Prof. Yiwei Dong from the Xiamen University (China) and Prof. Ahm Shamsuzzoha from the University of Vaasa (Finland). The conference program is divided into 4 parts: opening ceremony, keynote speech, oral presentation and poster presentation. Professor E. Bayraktar, as the host of the conference will lead the opening ceremony. Then, Professor Seeram Ramakrishna, the top 1% Highly Cited Researchers in materials science and cross-field categories, delivers his keynote speech with the title of "Reimagine Materials to Deal with the Existential Threats to the Humanity", lasting for 35 minutes. Then, professor Qiang Xu from the University of Huddersfield, UK, gives his keynote presentation with title "Modelling of Creep Rupture". 24 oral presentations are arranged in turn and each one lasts for 15 minutes with Q&A followed. And 36 poster presentations are displayed.

This year, MMSE has attracted 165 papers, 78 are accepted by our reviewers and editors after the peer review process, covering topics from mechanical engineering to mechatronics systems, material science, automation and control engineering, applied physics and engineering technologies.

Sincerest appreciation goes to the conference chairs, all members of conference committees, the keynote speakers, as well as all the participants for their support to MMSE. Many thanks go to the publisher--IOP Publishing for their work and support on publishing the proceedings. Finally, I sincerely hope that MMSE 2021 will be a forum for excellent discussions that will put forward new ideas and promote collaborative research in the future.

Prof. Seeram Ramakrishna
Conference Chair
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July 24, 2021