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Foreword for the inaugural issue

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Editorial

Foreword for the inaugural issue

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The *International Journal of Extreme Manufacturing* is a leading, worldwide scientific journal focused on the fields of extreme manufacturing. Published within it are the latest scientific and engineering achievements in related fields, as well as pioneering scientific, technological, and engineering innovations and developments.

Extreme manufacturing mainly refers to the manufacturing of devices/systems at extreme scales (extra large or small), of extremely high performance, or under extreme conditions/environments. The most common examples include manufacturing with extremely high energy density, at extremely small scales, of extremely complex macrosystems, with extremely high precision, and with nearly zero defects. It is an emerging frontier of manufacturing technologies requiring unconventional scientific discovery and engineering innovation, and will serve as the critical foundation for a new generation of science and technology to meet the critical needs of emerging industries. Extreme manufacturing is supported by multiple fields, including mechanics, materials, optics, physics, chemistry, mechanics, and mathematics. Hence, extreme manufacturing is being led by visionary, exploratory innovation which will form a foundation integrated with fundamental science and engineering technologies.

The aim of the *International Journal of Extreme Manufacturing* is to create a platform for high-level international exchange in the fields of extreme manufacturing, to serve scientists and engineers engaged in the research of cutting-edge manufacturing technologies, and to facilitate the advancement of science and technology in relevant fields. This journal mainly covers topics on interactions of energy beam, energy field, and materials in extreme manufacturing; processing techniques and theories of extreme manufacturing; measurement and characterization in extreme manufacturing; extreme manufacturing equipment and systems; and conditions for extreme manufacturing.

Both Academician of Engineering Guo Dongming at the Dalian University of Technology, China, and Professor Yongfeng Lu at the University of Nebraska-Lincoln, the United States, will serve as the Editors-in-Chief of the *International Journal of Extreme Manufacturing*. The editorial board consists of world-renowned researchers in the fields of extreme manufacturing from China, the United States, Germany, Russia, Japan, the United Kingdom, France, Australia, Singapore, Canada, Sweden, South Korea, Ireland, and Lithuania. As the leading experts, the members of the editorial board will identify the scientific and technological bright spots and new frontiers of extreme manufacturing and maintain the highest standards through high quality control in manuscript collection and invitations, paper referees, and publishing.

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to a wide range of audiences to promote the development of extreme manufacturing.

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