

Special Issue

Symmetry Problems in Metal Forming

Message from the Guest Editors

Symmetry and asymmetry both have their own forms of beauty. Symmetry and asymmetry exist widely in natural science and engineering applications, and metal forming is no exception. Metal forming is the technology of producing metal artworks, which are widely used in the aerospace, automobile, construction, and hardware industries, including for use in daily necessities, etc. In the metal forming process, there are many symmetry problems concerning material properties, boundary conditions, load loading, multi-field coupling, part structures, equipment, etc., which may directly affect the forming quality, cause defects of formed parts, or even fail to form. For example, material anisotropy, axisymmetric and non-axisymmetric parts, uneven deformation, straightening process, etc. The aim of the present Special Issue is to emphasize the phenomenon of symmetry/asymmetry in metal forming. Manuscript types include original research papers, reviews, and letters. The Special Issue will cover all aspects of metal forming processes and must be related to symmetry, including the following:

- Manufacturing processes and equipment;
- Materials behavior and characterization...

Guest Editors

Dr. Gaochao Yu

1. Key Laboratory of Advanced Forging & Stamping Technology and Science, Ministry of Education of China, Yanshan University, Qinhuangdao 066004, China

2. Department of Mechanical Engineering, Imperial College London, London SW7 2AZ, UK

Prof. Dr. Rui Ma

Key Laboratory of Advanced Forging & Stamping Technology and Science, Yanshan University, Qinhuangdao 066004, China

Deadline for manuscript submissions

closed (31 July 2025)



Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



mdpi.com/si/223106

Symmetry
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
symmetry@mdpi.com

[mdpi.com/journal/
symmetry](https://mdpi.com/journal/symmetry)





Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



[mdpi.com/journal/
symmetry](https://mdpi.com/journal/symmetry)



About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

Prof. Dr. Sergei Odintsov

1. ICREA, 08010 Barcelona, Spain

2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)