# Special Issue

# Metal Forming: Processes and Analyses

# Message from the Guest Editor

Finite element analysis of bulk metal forming processes has created significant innovations in the forging industry in particular. However, this technology is still being advanced. First, we are going to introduce some success stories of this technology with our own application examples with an emphasis on its contribution to innovating the procedures of process development to reduce the cost and development time. Then, we are going to present the latest issues as well as the state-of-the-art technologies in bulk metal forming simulation, the typical examples of intelligent metal forming simulation, and several challenging examples of process optimal design based on some quantified indices. Newly developing applications of bulk metal forming simulation to sheet materials are also given together with some material or microstructural and tribological characterizations using optimization techniques. We will also emphasize some major points or factors affecting the solution accuracy of the finite element predictions with an emphasis on remeshing as well as material and tribology.

#### **Guest Editor**

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# Deadline for manuscript submissions

closed (20 April 2022)



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# Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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