

# The 19<sup>th</sup> International Conference on Metal Forming 2022



China Society for Technology of Plasticity, CMES

September 11-14, 2022  
Taiyuan, Shanxi, P.R.China

[www.metalforming2022.aconf.org](http://www.metalforming2022.aconf.org)

## Important Dates

- **Deadline for submission of abstracts:**  
30<sup>th</sup> November 2021
- **Notification of abstracts acceptance:**  
15<sup>th</sup> December 2021
- **Deadline for submission of papers:**  
1<sup>st</sup> March 2022
- **Full paper acceptance date:**  
20<sup>th</sup> May 2022
- **Deadline for early payment:**  
1<sup>st</sup> July 2022

**M**etal Forming 2022 is the 19th in a series of International Conferences organized since 1974 by AGH University of Science and Technology in Kraków, Poland. From 1994 to 2010, the Conference was organized biannually, jointly with the University of Birmingham, UK. The latter was replaced by the University of Toyohashi in 2010, when the Conference went, for the first time, to Japan. Metal Forming 2012 was organized in Kraków, Poland by AGH University of Science and Technology, together with the University of Toyohashi and, for the first time, by the University of Palermo, Italy, which had joined the Organization team, and hosted the Conference in 2014.

**I**n 2022, Metal Forming 2022 will be held in **Taiyuan, Shanxi, P.R. China** on **Sept. 11-14**. Approximately 200 regular papers and 6 specially invited keynote lectures are expected.

## Topics

### Process

Sheet Forming  
Deep Drawing  
Spinning  
Flow Turning  
Stretch Forming  
Fluid and Hydro-Forming  
Cutting  
Forging, Rotary Forging  
Rolling  
Tube Forming  
Extrusion  
Wire and Tube Drawing  
High Energy & Explosive Forming  
Powder Forming  
Mushy State Forming  
Hot, Warm and Cold Processes  
Super-Plastic Forming  
Micro- and Nano- Forming  
Multi-Material Forming  
Incremental Forming

### Process and System Modelling

Analytical techniques  
Thermomechanical modelling  
Finite-Element methods  
Boundary-Element methods  
Finite-Difference methods  
Implicit  
Explicit formulations  
Multiscale modelling/Inverse problems  
CAD/CAM/CAE systems  
Neural Network modelling  
Knowledge-Based systems  
Cellular Automata modelling  
Optimisation systems

### Manufacturing Methods

Control of forming processes  
Industrial case studies  
Environmental issues

### Deformation Mechanics

Plasticity theory  
Constitutive models  
Defects and damage  
Formability  
Anisotropy  
Microstructural models  
Friction and lubrication  
Heat transfer

### Materials

Ferrous and Non-Ferrous metals  
High performance metals  
Porous metals  
Composites  
Semi-Solid metals  
Nano materials

Conference Secretariat: China Society for Technology of Plasticity, CMES  
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## Contact us

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**Metal Forming 2022**



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### Objective

To provide a forum for academics and industrialists to discuss and disseminate recent developments, innovations and advances in metal forming processes. The conference will be an opportunity for those working in physical and numerical modelling, as well as those involved in industrial applications of the results of theoretical research.

### Chairs of International Organizing Committee

#### Qingxue HUANG

Chinese Society for Technology of Plasticity, CMES  
Taiyuan University of Technology, P.R. China

#### Danuta Szeliga

#### Krzysztof Muszka

AGH University of Science and Technology, Poland

#### Yohei Abe

Toyohashi University of Technology, Japan

#### Guoqun ZHAO

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Shandong University, P.R.China

#### Livan Fratini

#### Fabrizio Micari

University of Palermo, Italy

#### Tomoyoshi Maeno

Yokohama National University, Japan

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#### Maciej Pietrzyk

#### Jan Kusiak

#### Janusz Majta

AGH University of Science and Technology, Poland

#### Jianguo Lin

Imperial College London, UK

#### Ken-ichiro Mori

Toyohashi University of Technology, Japan

### China Society for Technology of Plasticity, CMES

CSTP was founded in 1963, which is a Chinese national academic mass organization and the center of the professionals in the field of plasticity technology such as rolling, extruding, forging, stamping, die-making and so on, and the society is one of the constituent parts of the Chinese Mechanical Engineering Society. At present, there are 17 academic divisions under the CSTP, including plasticity theory, precision forging technology, forging equipment, etc., and 3 working groups. At the same time, there are branches in provinces and cities around China.



CHINA SOCIETY  
FOR TECHNOLOGY OF  
PLASTICITY, CMES



AGH



UNIVERSITÀ  
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DI PALERMO



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UNIVERSITY OF TECHNOLOGY



YOKOHAMA National University

Find Scientific Committee, Keynotes and More Information on  
[www.metalforming2022.aconf.org](http://www.metalforming2022.aconf.org)

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## Taiyuan

Taiyuan, capital of Shanxi province, is located in the central part of the province, covering a total area of 6,989 square kilometers, of which the urban area is 1,500 sq km. There are six districts, three counties and one city under the administration of the provincial capital which had a population of 4.46 million in 2019.

It is a land abundant in minerals, especially coal and iron. The coal-bearing area in Taiyuan is 1,282 sq km, accounting for about one-fifth of the city's total area, and the proven reserves are 18.5 billion tons. The initial proven reserves of iron ore are 170 million tons.

Taiyuan is also an ancient city with a history dating back over 2,500 years. Throughout its long history, Taiyuan was the capital or provisional capital of many dynasties in China, hence the name "Dragon City".

## Venue



Jinci Temple

Jinci Temple, 25km away from downtown Taiyuan City located at the foot of Hanging Jar Mountain, is a place of interest famous for its long history and rich cultural relics, which is surrounded by mountains and trees and infused with a pleasant air and birds' wings.



Mengshan Mountain Buddha

In AD 551, the king of the North Qi Dynasty, Gao Yang ordered people to chisel a Buddha in the rocks, and its construction lasted for 24 years. According to North Qi Book, when the Grand Buddha was being built, its construction site was extremely wonderful. Therefore, when the king of Tang Dynasty, Li Zhi and the queen, Wu Zetian worshiped this Grand Buddha, they all highly appreciated it.



Shanxi Museum

Shanxi Museum has an exhibition area of 13000 square meters and a cultural relic reservoir area of 12000 square meters. It has a total collection of more than 500000 pieces, which are characterized by bronze, porcelain, stone carvings, Buddhist statues, murals, calligraphy and painting. Among them, there are 40282 precious cultural relics (groups), including 2129 first-class cultural relics (groups), and more than 110000

ancient books. Five art topics, including civil works, mountains and rivers, calligraphy, Dangling, Fangyuan world, and porcelain garden.

## Specialty Snacks



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