

57th ICFG2024 Plenary Meeting

Westin Chosun Hotel in Busan, R.O. Korea
22(Sun.) - 25(Wed.) September 2024

Chairman : Young-Seon Lee
(Korea Institute of Materials Science, KIMS)

Organization



KIMS 한국재료연구원
Korea Institute of Materials Science

사단법인 한국소성가공학회
The Korean Society for Technology of Plasticity and materials processing

Sponsor

To Be Determined

General Information

The ICFG is represented worldwide by members from industry and academia.



Objectives of ICFG

According to the preamble of the ICFG constitution, the objective of the group is to promulgate the economic advancement of cold forging

- by encouraging and co-ordinating national and international co-operation,
- by stimulating research,
- by disseminating knowledge of relevant processes and sciences.

Therefore the major part of activity concentrates on subgroup work with the aim of preparing and presenting information to the public, e.g. data sheets and guidelines.

Background

In 1961-1967, an OECD Group of Experts in Cold Forging promoted and established international contacts and co-operations in the field of cold forging. The group consisted of Dr. H. L. David Pugh, Scotland, Prof. Dr. Otto Kienzle, Germany, Prof. Dr. Olof Svahn, Sweden, and other distinguished members of the Institution for Production Engineering Research (CIRP). Supported by the Organization for Economic Cooperation and Development (OECD), the Group of Experts established an international cooperative research program and prepared a survey of literature on cold forging and a dictionary. At the same time national cold forging groups had been formed in Belgium, Western Germany, the Netherlands and Sweden in addition to the already existing group. As the financial support by OECD ended, the Group decided to be able to stand on its own two feet and founded the International Cold Forging Group (ICFG) on 15 November 1967.

Introduction to Cold Forging

Cold forging is a common industrial process in which metal workpieces are plastically shaped by suitably contoured dies to form a final desired shape. The process itself is a predominantly compressive one in which the workpiece is squeezed between the dies. Cold forging is an important process being used in many industries, for example the automotive industry in which a huge annual tonnage of cold forged components are used. Important aspects in cold forging are: the die material and shape, the lubricant, the workpiece material, and the temperature. Cold forging is generally understood to mean forging at room temperature or a temperature at which no microstructural changes occur as a result of the process. Warm forging is now gaining in popularity because ambient temperatures are elevated a little to decrease the required loads whilst maintaining good tolerances for the products. Numerical analyses and simulations are now used commonly in the cold forging industry to optimize the processes and to decrease overall costs. For example in multi-step processes the number and nature of each step are very important in the cost of the finished component. It is the objective of the ICFG to further the use of cold forging, therefore the organization is concerned with all the above variables as well as numerical analyses and simulations.

ICFG Subgroup

- President of the ICFG : Prof. Dr-ING Thomas HERLAN
- Vice-President of the ICFG : Prof. Laurent DUBAR
- Treasurer of the ICFG : Prof. Mathias LIEWALD
- Member of the Advisory Board
Prof. Katia MOCELLIN
Prof. Chengliang HU
Prof. Yoshinori YOSHIDA

Program schedule of ICFG 2024

- 22/09/2024, Sun. : Registration and welcome party.
- 23/09/2024, Mon. : Plenary & Subgroup meetings, including banquet.
- 24/09/2024, Tue. : Technical Tours.
- 25/09/2024, Wed. : Plenary & Subgroup meetings.

Committee members of ICFG 2024

- ❖ Young-Seon Lee (KIMS), Seong-Hoon Kang (KIMS), Eun-Yoo Yoon (KIMS), Young-Yun Woo (KIMS), Jong-Hwa Hong (KIMS), Young-Seok Oh (KIMS), Yong-Nam Kwon (KIMS), Sang-Woo Kim (KIMS), Ho-Won Lee (KIMS)
- ❖ Sang-Gon Lee (KITECH), Ki-Ho Jeong (KITECH), Jeong-Han Song (KITECH), Tae-Kyung Lee (PNU), Jeong-Gi Kim (GNU)

Registration fee of ICFG 2024

Classification	For Early Birds	Late Registrations	Online Participants
ICFG Member	EUR € 600	EUR € 700	EUR € 260
Guest	EUR € 650	EUR € 750	EUR € 360
Accompanying Person	EUR € 240	EUR € 285	