

2026 ICFG Plenary Meeting

20-23 September 2026

Darmstadt – Germany

Day 1 – 20.09.26 – Sunday			
15:00	18:00	Advisory Board Meeting	PLAZA Premium Darmstadt <i>Salon Fulda (1st floor)</i>
18:00	19:00	Registration	PLAZA Premium Darmstadt <i>Foyer (1st floor)</i>
19:00	21:00	Welcome Cocktail	
Day 2 – 21.09.2026 – Monday			
08:00		Bus transfer	
08:30	09:00	Registration	Jagdschloss Kranichstein <i>Schlosssaal</i>
09:00	10:00	Opening of 59 th ICFG Plenary Meeting & Presentations	
10:00	10:30	Coffee Break	
10:30	12:30	Subgroup Meeting: <i>Lubrication</i>	Jagdschloss Kranichstein <i>Schlosssaal</i>
		Subgroup Meeting: <i>Smart Data</i>	Jagdschloss Kranichstein <i>Blauer Salon</i>
12:30	13:30	Lunch Break & Group Photo	
13:30	15:30	Subgroup Meeting: <i>Computational Cold Forging</i>	Jagdschloss Kranichstein <i>Schlosssaal</i>
		Subgroup Meeting: <i>Tool Life and Tool Quality</i>	Jagdschloss Kranichstein <i>Blauer Salon</i>
15:30	16:00	Coffee Break	
16:00	17:00	Joined Session	Jagdschloss Kranichstein <i>Schlosssaal</i>
17:00		Bus transfer	
18:00	22:00	Smart FormING Event "OpenLab"	Smart FormING Center PtU

22:00	22:30	Bus Transfer back to the hotel (PLAZA Premium Darmstadt)	
Day 3 – 22.09.26 – Tuesday			
07:45		Bus transfer (from PLAZA Premium Darmstadt)	
10:00	11:30	Felss Rotaform GmbH (Tour A) or baier & michels GmbH & Co. KG (Tour B)	
11:30	13:00	Bus transfer	
13:00	14:00	Lunch (times can deviate depending on the tour)	
14:00	16:00	Mall + Herlan GmbH (Tour A) or Daimler Truck AG (Tour B)	
16:00	17:00	Bus transfer	
17:00	18:00	Break	
18:00	22:00	Wine tasting and Gala dinner	
22:00	22:30	Bus Transfer back to the hotel (PLAZA Premium Darmstadt)	
Day 4 – 23.09.26 – Wednesday			
08:30	09:00	<i>Keynote Talk</i> Adaptive tooling in high-volume metal forming Prof. Chris Valentin Nielsen – Technical University of Denmark – Denmark	PLAZA Premium Darmstadt Saal Bonn (1st floor)
09:00	09:30	<i>Keynote Talk</i> Introduction for current status of tooling industries and overview of DX in forging industries in Japan Mr. Masahito Yamanaka – Yamanaka Eng Co., Ltd. – Japan	
09:30	10:00	<i>Keynote Talk</i> Resource-efficient Process and Product Design Enabling Functional Cold Forged Components Johannes Wagner & Dr. Christian Hinsel – Hirschvogel Holding GmbH – Germany	
10:00	10:30	<i>Keynote Talk</i> Developments and Perspectives in International Cold Forging – A short review on activities of the Cold Forging community heading 2050 Prof. Mathias Liewald – Institute for Metal Forming Technology, University of Stuttgart – Germany	

10:30	11:00	<i>Coffee Break</i>	PLAZA Premium Darmstadt Foyer (1st floor)
11:00	12:00	<i>Panel discussion</i> Innovative Training Programmes in Cold Forging <i>Moderators:</i> Prof. Peter Groche – Institute for Production Engineering and Forming Machines, TU Darmstadt – Germany Prof. Andrea Ghiotti – University of Padova – Italy <i>Participants:</i> Mr. Unai Ziarsolo – MAI-M. Altuna Institutua – Spain Dr. Rainer Neher – Wezel GmbH – Germany Dr. Soo-Young Kim – Yamanaka Eng. Co, Ltd. – Japan Mr. Amit Shah – Fastenex Private Limited – India	PLAZA Premium Darmstadt Saal Bonn (1st floor)
12:00	12:30	<i>Roundtable discussion</i> Shaping the Future of Cold Forging Initiative <i>Moderators:</i> Mr. Amit Shah – Fastenex Private Limited – India Prof. Yoshinori Yoshida – Gifu University – Japan	
12:30	13:30	<i>Lunch</i>	PLAZA Premium Darmstadt Foyer (1st floor)
13:30	14:30	General Assembly & ICFG International Paper Prize	PLAZA Premium Darmstadt Saal Bonn (1st floor)
14:30	15:00	<i>Young Scientists Exchange Prize (YSEP) Presentation</i> Ms. Jiaqi Liu – Shanghai Jiao Tong University – China Ms. Fuka Minami – Gifu University & Futaba Industrial Co., Ltd. – Japan	
15:00	15:20	<i>Paper Presentation</i> Optimisation of extrusion forces and gear quality in the modified Samanta process via numerical data-driven surrogate models Mr. Tahsin Deliktas – Institute for Metal Forming Technology, University of Stuttgart – Germany	
15:20	15:40	<i>Paper Presentation</i> An experimental study on the effect of load reversal on damage and product performance of cold forged parts Mr. Niklas Bechler – Institute of Forming Technology and Lightweight Components, TU Dortmund University – Germany	
15:40	16:00	<i>Paper Presentation</i> Surface characterisation and tribological performance of oxalate conversion coatings in steel cold forming Ms. Tara Salal – Imperial College London – UK	
16:00	16:30	<i>Coffee Break</i>	PLAZA Premium Darmstadt Foyer (1st floor)

16:30	16:50	<i>Paper Presentation</i> Toward intelligent cold forging systems: A semantic dataspace approach for process chain data integration and automated knowledge discovery Dr. Maxim Zapara – Fraunhofer Institute for Mechanics of Materials IWM – Germany	PLAZA Premium Darmstadt <i>Saal Bonn (1st floor)</i>
16:50	17:10	<i>Paper Presentation</i> Identification of monotonic deformation models for determining forming limit diagrams in cold bulk metal forming Prof. Mladomir Milutinović – University of Novi Sad – Serbia	
17:10	17:30	<i>Paper Presentation</i> Predicting the Influence of 42CrMoS4 Variability on Cold Forging through Constitutive Modelling and Fracture Analysis Prof. Lander Galdos – Mondragon University – Spain	
17:30	17:50	<i>Paper Presentation</i> Quantification and analysis of material, process and geometry-related uncertainties in cold forward extrusion of EN AW-6082 aluminium Mr. Radu Matei – Institute for Metal Forming Technology, University of Stuttgart – Germany	
17:50	18:20	Closing of the 59 th ICFG Plenary Meeting & Outlook ICFG 2027	

Subgroups Agenda

Subgroup Meeting – Lubrication – 21.09.2026			
10:30	12:30	Welcome and Introduction	Jagdschloss Kranichstein <i>Schlosssaal</i> Prof. Groche & Prof. Kitamura
		Overview of Past Subgroup Activities	
		Origin of Force Peaks in Cold Forward Extrusion <i>Prof. Hu (SJTU), Jonas Launhardt (PtU)</i>	
		Tribology in Multi-Stage Processes 1. Background and Challenges – <i>Dr. Venzlaff (ZWEZ Chemie GmbH)</i> 2. Multi-Stage Tribology – Reference Process, Overview Tribometer, Results and Discussion 3. Joint Publication	
		Zinc-Phosphate-Free Multi-Stage Benchmark 1. Background and Motivation 2. Overview and Plan	
		Summary and Closing	

Subgroup Meeting – Smart Data – 21.09.2026			
10:30	12:30	Introduction, history of ICFG Subgroup SMART DATA	Jagdschloss Kranichstein <i>Blauer Salon</i> Prof. Herlan
		What do we understand by SMART DATA	
		Smart Data within the 3 other ICFG subgroups and who is the driver	
		Sensors and data are available, but are these data SMART?	
		Sensors Network, IOT, edge device — <i>Sep 2026 ICFG Subgroup's work</i>	
		Digitalization an AI Applications	
		Best Practice for SMART DATA in coldforging	
		ICFG Timeline for booklet end of 2027 and end of Subgroup	

Subgroup Meeting – Computational Cold Forging – 21.09.2026				
13:30	15:30	Opening Remarks		Jagdschloss Kranichstein Schlosssaal Prof. Hayakawa & Prof. Galdos
		Invited presentations: • Influence of Strain-Rate and Temperature-Dependent Material Modeling on Lubrication Performance Estimation in a Combined Forward-Can and Backward-Can Cold Extrusion Test <i>Prof. Kunio Hayakawa – Shizuoka University - Japan</i> • Characterization of ductile fracture near zero triaxialities under mixed shear and axial loading conditions <i>Diego R. Alba – Institute for Metal Forming Technology (IFU) – University of Stuttgart – Germany</i>		
		Summary of GIFU workshop		
		Future collaborative activities: • Review of the previous collaborative working group on the standardization of compression tests for material characterization for cold and hot forging simulations <i>Dr. Gerhard Arfmann - CPM GmbH – Germany</i> • Questionnaire about future joint activities and open discussion for the activation of a collaborative working group in 2026-2027 <i>Prof. Lander Galdos - Mondragon University – Spain</i> <i>Prof. Kunio Hayakawa – Shizuoka University – Japan</i>		
		Closing remarks		

Subgroup Meeting – Tool Life & Tool Quality – 21.09.20256				
13:30	15:30	Introduction and opening remarks		Jagdschloss Kranichstein <i>Blauer Salon</i> Mr. Truetsch & Dr. Kim
		Digital Twin-Driven Engineering Fabrizio Ghisoni – SACMA Limbiate S.p.A. – Italy		
		DX of forging tools (tool healthcare) <i>Dr. Soo-Young Kim - Yamanaka Eng. Co, Ltd. – Japan</i>		
		Possibilities for smart data for forging tools <i>Mr. Klaus Truetsch – Arnold Umformtechnik GmbH & Co.KG – Germany</i>		
		Closing		