2025 ICFG Plenary Meeting

14-17 September 2025

at the **Royal Hainaut Spa and Resort Hotel – Valenciennes - France**

Day 1 – 14.09.25 – Sunday			
16:00	17:00	Registration	Royal Hainaut Hotel
16:00	18:00	Advisory Board Meeting	Room LA RHONELLE
19:00	22:00	Welcome Cocktail	AGORA

Day 2 – 15.09.2025 – Monday			
08:00	09:00	Registration	Royal Hainaut Hotel
09:00	10:00	Opening of 58th ICFG Plenary Meeting & Presentations	Room HAUTCLOCQ
10:00	10:30	*Coffee Break*	AGORA
10:30	12:30	Subgroup Meeting: *Lubrication*	Room LE XV
		Subgroup Meeting: *Smart Data*	Room HAUTCLOCQ
12:30	13:30	*Lunch Break*	AGORA
13:30	15:30	Subgroup Meeting: *Computational Cold Forging*	Room LE XV
		Subgroup Meeting*: Tool Life and Tool Quality*	Room HAUTCLOCQ
15:30	16:00	*Coffee Break*	AGORA
16:00	17:00	Joined Session	Room HAUTCLOCQ
19:00	22:00	Gala Dinner	La Chapelle

Day 3 (Tour A) – 16.09.25 – Tuesday			
09:00		Meeting at Royal Hainaut Hotel lobby	**Pink Sticker Group**
09:00	12:30	Vallourec	
12:30	13:30	Lunch Break	Toyota Motor Manufacturing France
13:30	16:30	*Agrati*	
17:00	19:30	Social Event – Brewery visit	
19:30	22:30	Dinner	
Day 3 (Tour B) – 16.09.25 – Tuesday			
08:30		Meeting at Royal Hainaut Hotel lobby	**Green Sticker Group**
08:30	12:30	Hydro	
12:30	13:30	Lunch Break	Toyota Motor Manufacturing France
13:30	16:30	Toyota Motor Manufacturing France	
17:00	19:30	Social Event – Brewery visit	
19:30	22:30	Dinner	
Day 3 (Tour C) – 16.09.25 – Tuesday			
08:30		Meeting at Royal Hainaut Hotel lobby	**Yellow Sticker Group**
08:30	12:30	Toyota Motor Manufacturing France	
12:30	13:30	Lunch Break	Toyota Motor Manufacturing France
13:30	16:30	Hydro	
17:00	19:30	Social Event – Brewery visit	
19:30	22:30	Dinner	

Day 4 – 17.09.25 – Wednesday			
08:30	09:10	*Keynote Talk* **Galling of aluminium - from the characterization to the numerical prediction** Prof. Andre Dubois - LAMIH UMR CNRS 8201 – UPHF – France	Room HAUTCLOCQ Session Chairman: Prof. Dubar
09:10	09:50	*Keynote Talk* **Smart Forming: How AI can shape the future of cold forming** Prof. Marion Merklein - Institute of Manufacturing Technology - Friedrich-Alexander-Universität - Germany	
09:50	10:30	*Keynote Talk* **Status and technical and environmental perspectives of cold forging** Mr Frédéric Perdriset – Setforge - France	
10:30	11:00	*Coffee Break*	AGORA
11:00	11:40	*Keynote Talk* **From AI-based Hybrid Twins in engineering operation to Generative AI empowering optimal design of materials, structures, processes and systems.** Prof. Francisco Chinesta - Arts et Métiers & CNRS@CREATE - France & Singapore	Room HAUTCLOCQ Session Chairman: Prof. Dubar
11:40	12:20	*Keynote Talk* **Tribological Effect of Billet Pretreatment with Wet Blasting before Lubrication for Cold Forging** Prof. Kazuhiko Kitamura - Nagoya Institute of Technology – Japan	
12:20	13:30	*Lunch*	AGORA
13:00	14:40	**General Assembly & ICFG Prizes**	Room HAUTCLOCQ Session Chairman: Prof. Yoshida
14:40	15:00	*Paper Presentation* **Fatigue performance of Ti6Al4V bolts improved by fillet rolling based on finite element analysis** M. K. Razali - MFRC, Research and Development Center - Republic of Korea	
15:20	15:40	*Coffee Break*	AGORA
15:40	16:00	*Paper Presentation* **Autonomous optimization of processing conditions for lubricants in hot forging via strongly-connected cyber physical system,** Takumi Nakane - G-CADET, Gifu University - Japan	Room HAUTCLOCQ Session Chairman: Prof. Yoshida
16:00	16:20	*Paper Presentation* **Innovative process chain for cold forging: Developing and validating a material model for deformation-induced martensite in metastable austenitic casted steel** Nadine Lehnert - Fraunhofer Institute for Machine Tools and Forming Technology IWU - Germany	
16:20	16:40	*Coffee Break*	AGORA
16:40	17:00	*Paper Presentation* **Data-driven acceleration of tool motion computation for continuous tube forming toward adaptive control** Eiichi Ota - Toyota Central R&D Labs. - Japan	Room HAUTCLOCQ Session Chairman: Prof. Herlan
17:00	17:20	*Paper Presentation* **Study on the use of AI methods for inline quality monitoring of threaded screws** Robert Meißner - fischerwerke GmbH & Co. KG - Germany	
17:20	17:40	*Paper Presentation* **Comparison of Alternative Manufacturing Routes of Aluminium Bosses Used in Pressure Vessels** Tanmoy Rakshit - TU Dortmund - Germany	
17:40	18:00	Closing of the 58th ICFG Plenary Meeting & Outlook ICFG 2026	

Subgroups Agenda – Morning sessions

Subgroup Meeting – Smart Data – 14.09.2025			
11:00	13:00	Historical lookback: from Industry of the future going towards AI Application	Room HAUTCLOCQ Prof. Herlan
		Sensors for Smart Data in Cold Forging	
		Beatiful Data in Cold Forging (J. Stahlmann)	
		Smart Data in Japan (Dr. Yamanaka)	
		Degree of Smart Data in Companies: Asia vs. Europe vs. America	
		Discussion : The need of Smart Data in Cold Forging within companies	
		Extension of Smart data towards Sustainability	
		Conclusion remarks - booklet Smart Data in Cold Forging	

Subgroup Meeting – Lubrication – 14.09.2025			
11:00	13:00	Welcome and Introduction	Room LE XV Prof. Groche & Prof. Kitamura
		Overview of Past Subgroup Activities	
		Tribological Systems and Their Challenges (Dr. Hollmann - Chemetall)	
		Tribology in Multi-Stage Processes 1. Background and Challenges 2. Multi-Stage Reference Process 3. Lubricant Behaviour with Surface Expansion or Reduction (Prof. Bay and Prof. Nielsen) 4. Results of Preliminary Investigations 5. Multi-Stage Tribometers - Overview, Results and Discussion 6. Next Steps and Funding Options - Discussion	
		Summary and Closing	

Subgroups Agenda – Afternoon sessions

Subgroup Meeting – Computational Cold Forging – 14.09.2025			
14:00	16:00	Opening Remarks Paper presentations i. Finite element modeling study for perpendicular-to-weldline crack prediction of tailor-welded blanks, Ms. Fuka Minami (Futaba Industrial Co., LTD.) ii. to de defined Collaborative activity – shearing simulation Future activities i. Inter-laboratory material characterization for cold forging - with the objective to detect the scatter between different participants and the effects of this scatter in numerical results ii. Cold Forging Defects Encyclopedia - with the objective to classify the different defects that we observe in cold forging and by numerical simulation, detect when these defects appear (triaxiality and Lode parameter states that cause cracks) Discussion and closing remarks	Room LE XV Prof. Hayakawa & Prof. Galdos

Subgroup Meeting – Tool Life & Tool Quality – 14.09.2025			
14:00	16:00	Welcome and Introduction by Mr. Klaus Truetsch & Dr. Soo-Young Kim Aims and review of the subgroup activities and status of current documentation Summary of the last Subgroup Meeting held in Busan Current topic: Optimisation of tool life and tool failure 1. How to use prestressing as a design parameter (Dr. Martin Killmann - STRECON) 2. Punch tool life improvement (Mr. Klaus Truetsch) 3. Recent progress in tool health care system for cold forging (Dr. Soo-Young Kim) Summary and discussion (colaboration with SG Smart Data)	Room HAUTCLOCQ Mr. Truetsch & Dr. Yamanaka