Adapt to new Challenges, take advantage of new opportunities

CA COPPER ALLOYS 2026

Scientific conference on copper materials

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About

Copper Alloys 2026: International arena for scientific and technical development – forum for copper alloys industries, universities and research institutions.

Copper Alloys continues to act as the most important international arena for presenting and discussing newest research findings related to copper materials. Engineers from academia and industry actively contribute to increased knowledge and exchanges related to metallurgical processes, further development in control of mechanisms to steer and improve alloys´ properties as well as new innovative materials. In addition, stringent legislation and, increasingly, geopolitical developments against the backdrop of increased protectionism all over the world, directly impact the entire copper value chains, leading to both threats and new opportunities. To address these constantly changing conditions, scientists and industries are required to have new copper-based materials available as alternative to commonly used Cu-alloys. The emergence of interesting and still insufficiently understood alloys materials properties as well as new application ranges automatically follow this development.

Copper Alloys 2026 will, once again, help copper alloys producers and users, universities, and research institutions, to get new insights and to increase network.

Welcome to Düsseldorf!

General Information

Location
The conference will take place September, 29th to 30th, 2026 at the Clayton Hotel, Immermannnstraße 41, 40210 Düsseldorf, Germany

Language
The conference language will be English.

For more information see
www.copperalloys.eu

Conference Office
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Sponsoring
Bianca Schubert, Kupferverband e.V., Germany
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We gratefully acknowledge the support of our conference sponsors.

Brass-Sponsors:

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NMWN Niederrheinische Metallwerke

29.09.2026 // DAY 1

	Room 1	Room 2
10:00	**Registration** | **Coffee Break,** sponsored by Niederrheinische Metallwerke GmbH & Co. KG	
10:30	**Opening, Welcome**	
10:40	**New European System for Materials in Contact with Drinking Water** Dr. Thomas Rapp, Fachgebiet II 3.4 – Trinkwasserverteilung | Umweltbundesamt Bad Elster	
11:20	**Challenges and solutions with lead reduction – perspective of an assembled product manufacturer** Stefanie Facklam, Thorsten Lumpe | WILO SE	
12:00	**Lunch**	
	Material understanding & alloy development Charlotta Obitz	**Copper alloys for energy applications** Olivier Rod
13:00	**Microstructure and castabilitity of lead-free brass modiefied by REM** J. Hagström[1], P.-E. Persson[2], M. Nordin[3], T. Mangs[3] | [1]Swerim AB, [2]Nordic Brass Gusum AB, [3]FM Mattsson	**Influence of hydrogen-charging to copper-based materials for gas installation** C. Blecking[1], J. Jürgensen[2], T. Marte[2], K. Ockenfeld[1], L. Tikana[1], M. Pohl[2] | [1]Kupferverband e.V., [2]Ruhr-Universität Bochum
13:25	**Oscillating tribometer investigations of the lead-rich and lead-free VDM Aeterna® alloys** M. Sakaliyska[1], S. Reimus[1], R. Leisner[2], M. Weber[2], V. Bräutigam[3], F. Seuß[3] | [1]VDM Metals International GmbH, [2]IST Fraunhofer, [3]Diehl Brass Solutions	**Sophisticated copper materials for a greener future** B. Reetz, A. Frehn, W. Budweiser | Materion Brush GmbH
13:50	**Innovative lead-free machinable nickel silver alloy for use in the key industry** K. Lefor | Sundwiger Messingwerk	**A retrospective study and a designed experiment of the influence of phosphorous content and microstructure on copper strength and creep strength and ductility** J. Sarnet | The Swedish Nuclear Fuel and Waste Management Company
14:15	**Impact of Zr alloying on the tribological properties of Cu–Co–Be precipitation-hardened copper alloys** V. Karakurt | Saglam Metal	**Experimental estimations of diffusion rates of phosphorus in creep tested oxygen-free phosphorus doped copper (Cu-OFP)** S. Kylström[1], H. C. M. Andersson-Östling[1], C. Lilja[2], E. Bergendal[2] | [1]Swerim AB, [2]Svensk Kärnbränslehantering AB
14:40	**Coffee Break,** sponsored by ergolines lab s.r.l. S.U.	

29.09.2026 // DAY 1

	Room 1	Room 2
	Material understanding & alloy development Lorenzo Omodei	**Additive manufacturing: progress in process and products treatment** Christian Blecking
15:10	**Determination of the influence of composition and thermal history on the corrosion properties of brass alloys using computational thermodynamics** L. Francesia, M. Ottander, J. Hagström, Z. He, Olivier Rod | Swerim AB	**Comparative life cycle assessment of copper alloys produced by electron beam wire and laser wire DED additive manufacturing** N. Michael[1], B. Neumann[1], M. Biegler[1], M. Rethmeier[3,1,2] | [1]Fraunhofer Institute of Production Systems and Design Technology (IPK), [2]Federal Institute of Materials Research and Testing (BAM), [3]Institute for Machine Tools and Factory Management (IWF), TU Berlin
15:35	**Optimizing Copper Alloys for Electrical and Electronic Applications Using Machine Learning** A. Ksibi, M. Hubert | Le bronze Alloys	**Microstructure engineering of ultra-pure copper using electron beam powder bed fusion additive manufacturing** U. Ljungblad[1], A. Balachandramurthi[1], P. Tarafder[2], A. Wiberg[2], H. N. Najafabadi[2], K. Wennersten[2], J. Moverare[2] | [1]Freemelt AB, [2]Linköping University
16:00	**Analytical strength assessment for components made of copper materials** M. Hupka[1], R. Rennert[2], M. Giuri[1], M. Wächter[1], A. Esderts[1] | [1]Clausthal University of Technology, Institute for Plant Engineering and Fatigue Analysis, [2]Hochschule für Technik und Wirtschaft Dresden (HTWD)	**Influence of mechanical post treatment on additively manufactured CuCr1Zr** I. Nzenwata[1], S. Heikebrügge[1], S. Fliegener[2], J. Schubnell[2], C. Krämer[3], S. Dietrich[3] | [1]cunova GmbH, [2]Fraunhofer Institute for Mechanics of Materials (IWM), [3]Karlsruhe Institute of Technology (KIT)
16:25	**Colours and segregation of tin-bronzes, from the origins to the future** P. Piccardo, C. Criaco, C. Lupi, M. Pedemonte | METAL research group, Dept. of Chemistry and Industrial Chemistry, University of Genoa	**Additive manufacturing of pure copper by PBF-LB with a 445 nm blue laser** A. Langebeck, T. Siemonsen, A. Krämer | BIAS GmbH
16:50		**On feasibility of wire-arc directed energy deposition of high-performance copper alloys** K. Bharadwaj, F. Pixner | LKR Light Metals Technologies, AIT Austrian Institute of Technology (Austria)

18:00	**Beginning of the evening program** Guided city walk to the dinner venue
19:00	**Dinner & Networking** THE EIGHT Rathausufer 8 40213 Düsseldorf

30.09.2026 // DAY 2

	Room 1	Room 2
	Production & manufacturing Dr. Jens Jürgensen	**Sustainability – raw material sourcing & life cycle tools** Dr. Ladji Tikana
09:00	**Pushing forming limits: enabling new geometries for hollow stator conductors** K. Sommer, J. Schönfeld, A. Beel | cunova GmbH	**Anthropogenic mining-deposits as opportunities for new value chains** K. Hillrichs | Metalogie GmbH
09:25	**Influences of ECAE routes on filament-strengthening in Cu-Ag composites** R. Niu, R.G.Goddard, K. Han | National High Magnetic Field Laboratory, Florida State University	**A review of thermo-chemical and thermo-mechanical interactions of refractories in pyrometallurgical copper production** D. Shukla, S. Campbell, M. Lambert | Allied Mineral Products, Research & Technology Department, Columbus, Ohio (USA)
09:50	**The virtual twin of the forming process chain for copper products** H.-W. Raedt | prosimalys GmbH	**Copper recovery from pickling solutions on site with simultaneous acid treatment** J. Krümberg | Eilenburger Elektrolyse- und Umwelttechnik GmbH
10:15	**Coffee Break,** sponsored by cunova GmbH	
10:45	**Data-driven process modeling and optimization using machine learning methods and semantic technologies: a case study of the hot rolling of copper materials** M. Weber, L. Morand, A. Butz, D. Helm, K. Kumaraswamy, Y. Nahshon, G. Gräf, J. Riedle, K. Gubaev | Fraunhofer-Institut für Werkstoff-mechanik IWM	**The engineer design combination of high-performance copper alloys and the risk of downcycling when mixed** P. Wallat | DfACE Strategy Systems
11:10	**High-speed-friction stir welding of copper alloys** S. Fortmüller, P. Jaritz, L. Oppeneiger, J. F. dos Santos, T. Weinberger | Stirtec GmbH	**KupferDigital and KupferDigital2: material data space to increase efficiency and sustainability in the copper life cycle** M. Eisenbart[1], S. Brehm[2], S. Chintha[3], L.-P. Meyer[4], K. Junghanns[4], Thomas Freudenmann[5] | [1]fem Research Institute, [2]Wieland Electric GmbH, [3]MCS Data Labs GmbH, [4]Institut für angewandte Informatik (InfAI), [5]EDI GmbH
11:35	**Blue diode lasers for smooth and robust processing of copper and its alloys** M. Schlett, L.-M. Schäfer-Heine, D. Huhn, A. Arndt | Laserline GmbH	**Practical aspects of materials knowledge management for copper alloys** M. Diekmann[1], T. Marwitz[1], M. Poudat[1], C. Blecking[2] | [1]Matplus GmbH, [2]Kupferverband e.V.
12:00	**Lunch**	

30.09.2026 // DAY 2

	Room 1	Room 2
	Corrosion & surface properties Prof. Paolo Piccardo	**Electrification** Dr. Joacim Hagström
13:00	**Exploring new approaches to dezincification testing for lead-free brass alloys** C. Obitz, X. Wang, A. Wärnheim | RISE Research Institutes of Sweden	**Influence of the material production route on the machinability of lead-free copper-zinc alloys CW509L and CW510L in the production of electrical plug connectors** K. Brans[1], M. Meurer[1], T. Bergs[1,2] | [1]Manufacturing Technology Institute (MTI) at RWTH Aachen University, [2]Fraunhofer Institute for Production Technology IPT
13:25	**Non-invasive electrochemical diagnostics of corrosion in copper-based cultural heritage alloys** R. Spotorno, F. Boragina, M. Pedemonte, P. Piccardo | Università degli Studi di Genova	**Replacing leaded brass with lead-free alloys in the manufacturing of electrical circular connectors: effects on machining and crimping** M. Mauler[1], M. Meurer[1], T. Bergs[1,2] | [1]Manufacturing Technology Institute (MTI) at RWTH Aachen University, [2]Fraunhofer Institute for Production Technology IPT
13:50	**Influence of water quality and temperature on brass alloy corrosion: an AESEC study** E. Gåhlin, C. Obitz, K. Törne, X. Wang | RISE Research Institutes of Sweden	**Quality prediction of copper foil to tab connections – strategies & methods** J. Heine[1], E. Helfers[1], F. W. Müller[2], A. Schiebahn[1], Uu Reisgen[1] | [1]RWTH Aachen University, Welding and Joining Institute, [2]FEF Forschungs- und Entwicklungsgesellschaft Fügetechnik GmbH
14:15	**Surface modification of copper-based alloys for antibacterial applications** A. S. Ahmed[1,2], D. W. Mueller[1,3], J. F. Pierson[2], F. Muecklich[1] | [1]Functional Materials, Saarland University, [2]Université de Lorraine (CNRS), [3]SurFunction GmbH	
14:45	**Closing**	