Meeting: 202607 Annual Assembly **Tags:** Agenda, Proceedings

C-VII: Microjoining and Nanojoining

Draft Agenda (Update: July 09, 2026)

79th Annual Assembly 2026, Salzburg, Austria

VII-0304-26

Authors: Jolanta JANCZAK-RUSCH

Comments: In-person Meeting

Agenda for 79th Annual Assembly and International Conference Meeting

Program Summary

Time	Meetings	Venue
July 13 (Monday) 14:00-17:35	C-VII Workshop	Mozart 1
July 14 (Tuesday) 8:30-12:25	C-VII & C-XVII Joint Meeting	Paracelsus
July 14 (Tuesday) 14:00-17:40		
July 15 (Wednesday) 14:00-15:40	C-VII Workshop	Mozart 1

Remarks:

The presentation time of 20 minutes includes 15 min presentation and 5 min discussion.

Monday July 13th, 14:00-18:00, Room: Mozart 1

Session I-1, Chair: Jolanta Janczak-Rusch, Tomokazu Sano

Time	Agenda Item/Presentation Title)	Presenter	Document
14:00-14:20	Opening: welcome and introduction Approval of Minutes 2025	Jolanta Janczak-Rusch	 VII-0303-25
14:20-14:40	AI for Nanojoining: Microstructure-based Prediction of Materials and Joints	Jinpeng Huo, Hang Yu, Guisheng Zou, Lei Liu	VII-0305-26
14:40-15:00	Overcoming Barriers in Micro-Joining of Dissimilar and Similar Metal Foils	Aniruddha Kumar	VII-0306-26
15:00-15:20	Ultrashort pulsed laser processing enabled nanojoining of metal oxide nanowires	Peng Peng, Maryam Soleimani, Norman Zhou	VII-0307-26
15:20-15:40	Femtosecond Laser Tailoring of PVDF-Based Solid Polymer Electrolytes with Enhanced β-Phase and Amorphization	Ting Huang , Rongshi Xiao	VII-0308-26
15:45-16:15	Coffee Break		

Session I-2, Chair: Guisheng Zou, Benjamin Sattler

Time	Agenda Item/Presentation Title	Presenter	Document
16:15-16:35	Effects of Post-Heat Treatment on Joint Properties and Deformation Behavior in Friction-Welded Dissimilar Joints between 7000 Series Aluminum Alloy and Low-Carbon Steel	Tomo OGURA, Yotaro Aoki	VII-0309-26
16:35-16:55	High Performance Al Vapor Chamber Fabrication via Laser Processing	Hang Yu, Guisheng Zou, Jinpeng Huo, Lei Liu	VII-0310-26
16:55-17:15	Laser Welding of Ultra-thin Titanium Alloy Corrugated Sheet Based on Adjustable-Ring Mode Beam	Han Yu, Cheng Liu, Ming Lou	VII-0311-26
17:15-17:35	C-VII sub-commissions: terminology in NMJ	Lei Liu, Yanhong Tian, Susann Hausner	

Tuesday July 14th, 8:30-12:30, Room: Paracelsus

Joint meeting of C-VII Microjoining and Nanojoining and C-XVII on Brazing, Soldering and Diffusion Bonding with Nanomaterials

Session II-1 (Brazing Filler and Micro-Nano Joining), Chair: Huaping Xiong, Jolanta Janczak-Rusch

Time	Agenda Item/Presentation Title	Presenter	Document
8:30-8:35	Opening of Joint C-VII and C-XVIII Meeting Welcome and Introduction to the Commissions	Jolanta Janczak-Rusch and Huaping Xiong	
8:35-8:55	WitW Introduction	Prof. Majid Farajian (Editor-in-Chief)	
8:55-9:15	Quantitative linking of microstructural parameters to fatigue strength in vacuum-brazed AISI 304L joints using Ni-based filler metals	Johannes L. Otto TU Dortmund University, Germany	XVIIA-0381-26 VII-0312-26
9:15-9:35	Strengthening effects of different elements on superalloy brazed joints in CoNiCr-based fillers	Xinyu Ren, Bo Chen Beijing Institute of Aeronautical Materials, China	XVIIA-0382-26 VII-0313-26
9:35-9:55	Experimental study on low-temperature sintering of Al 6012 and 2017 with copper nanopaste	Denise Eusewig, Susann Hausner, Guntram Wagner, TU Chemnitz, Germany	VII-0314-26 XVIIB-0097-26
9:55-10:15	Current-assisted healing of sintered silver joints via microstructural control	Tomoki Matsuda, Takugo Naganuma, Tetsuhiro Matsuda, Makoto Kambara, Shinji Fukumoto, The University of Osaka, Japan	VII-0315-26 XVIIB-0098-26
10:15-10:45	Coffee Break		

Session II-2 (Diffusion Bonding and Micro-Joining), Chair: Tomokazu Sano, Lukas Wojarski

Time	Agenda Item/Presentation Title	Presenter	Document
10:45-11:05	Progress with multi-principal element alloy braze filler metals	Warren Miglietti. Miglietti and Associates, LLC, USA.	XVIIA-0386-26 VII-0316-26
11:05-11:25	A direct diffusion bonding strategy for fabricating micro-deformation SiCp/Al composite joints via pulsed current	Jingze Cui, Ce Wang Harbin Institute of Technology, China	XVIIB-0100-26 VII-0317-26
11:25-11:45	Charge density and electronic structure analysis of the β-Si_3N_4/TiN solid-state bonding interface	Hiroaki Tatsumi, Shunya Nitta, Atsushi M. Ito, Arimichi Takayama, Makoto Takahashi, Hiroshi Nishikawa, The University of Osaka, Japan	VII-0318-26 XVIIB-0101-26
11:45-12:05	Study on the fracture behavior of Ti-6Al-4V diffusion bonded joint with typical interfacial voids	Zhaoxi Li, Northwestern Polytechnical University, China	XVIIB-0102-26 VII-0319-26
12:05-12:25	Design, implementation, and testing of wire feeding system for laser beam micro welding of medical products with wire-shaped filler materials in the dia. range from 0.1 to 0.5 mm	Holger Letsch, Pascal Schnabel, Maik Berger, Jonas Hensel, TU Chemnitz, Germany	VII-0320-26 XVIIA-0383-26
12:30-14:00	Lunch Break		

Tuesday July 14th, 14:00-18:00, Room: Paracelsus

Joint meeting of C-VII Microjoining and Nanojoining and C-XVII on Brazing, Soldering and Diffusion Bonding with Nanomaterials

Session III-1 (Ceramic Micro-Nano Joining), Chair: Warren Miglitti, Susann Hausner

Time	Agenda Item/Presentation Title	Presenter	Document
14:00-14:20	Coating regulates interfacial and mechanical properties of Si-Y brazed SiC	Fugang Lu, Tiesong Lin, Peng He, Zhengzhou Advanced Research Institute, Harbin Institute of Technology, China	XVIIA-0384-26 VII-0321-26
14:20-14:40	Cold spray metallization using Al- and Ti-based interlayers for laser joining of alumina to metals	Gurdial Blugan, Heloisa Ramlow, Karol Kuglarz, Empa, Switzerland	VII-0322-26 XVIIA-0385-26
14:40-15:00	Investigation of the influence of Cr and TiC coatings during laser welding of 1.4404 bipolar plates using process emission	Zhiheng Ye, Fraunhofer Institute for Laser Technology, Aachen, Germany	VII-0323-26 XVIIA-0387-26
15:00-15:20	Advanced ceramic joining using glass and me-tallic glass for semiconductor manufacturing applications	Karol Kuglarz Empa, EPFL, Switzerland	XVIIA-0388-26 VII-0324-26
15:20-15:40	Miscellaneous: Future joint meeting in IIW AA, International Conferences, Intermediate meeting, etc. Submission of documents, Paper recommendations to WITW, etc.	Huaping Xiong and Jolanta Janczak-Rusch	
15:45-16:15	Coffee Break		

Session III-2 2 (Dissimilar Joining and Soldering), Chair: Lei Liu, Lukas Wojarski

Time	Agenda Item/Presentation Title	Presenter	Document
16:15-16:35	Brazing of Al-Cu dissimilar joints using novel low-melting AlGeSi- and AlAgCuSi-based brazing metals	Benjamin Sattler, Susann Hausner, Guntram Wagner, TU Chemnitz	VII-0325-26 XVIIA-0389-26
16:35-16:55	Knowledge-informed learning for intermetallic compound thickness prediction and optimization in reflow soldering	Taohan Wang, Hanwen Feng, Wan Tai, Jiayun Feng , Shang Wang , Baolei Liu, Yanhong Tian; Harbin Institute of Technology, China	VII-0326-26 XVIIC-0079-26
16:55-17:15	Microstructural analysis of vacuum brazed NiTi-AISI304-joints using Cu and Nb as filler material	Alexa Nebel, TU Dortmund University, Germany	XVIIA-0390-26 VII-0327-26
17:15-17:35	Harnessing interpretable machine learning and iterative optimization for the breakthrough design of ultra-ductile and high-strength SAC-based solder alloys	Ruyu Tian Harbin Institute of Technology, China	XVIIC-0080-26 VII-0328-26
17:35-17:40	Discussions and Closing Remarks.	Jolanta Janczak-Rusch and Huaping Xiong	

Wednesday July 15th, 14:00-15:40

Room: Mozart 1

Session IV-1, Chair: Jolanta Janczak-Rusch, Tomokazu Sano

Time	Agenda Item/Presentation Title	Presenter	Document
14:00-14:20	VII Chair election and IIW SEC Visit	All, IIW SEC Elisabetta SCIACCALUGA	
14:20-14:40	Update Best Practice discussion	Tomokazu Sano	
14:40-15:00	Sub-commission Discussions	All	
15:00-15:20	Discussion: Outreach activities to promote VII	All	
15:20-15:40	Miscellaneous: NMJ2027 conference, intermediate meeting, joint meetings at AA Closing remarks	Jolanta Janczak-Rusch	
15:45-16:15	Coffee Break, end of meeting		