



Commission XVI - Polymer Joining and Adhesive Technology

Agenda Annual Assembly 2025

XVI-1117-25

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Comments: June 22-25, Genoa, Italy – Room Ponente

1. Agenda

IIW 2025 Annual Assembly - C-XVI's Meeting - Room "Ponente"				
Date	Time	Presentation	Speaker	Title
June 23, 2025	8:30-8:45	Administrative Meeting (commission leadership and delegates)		
	8:45-9:15	XVI-1115-25	Fabian Friedrich	Optimisation of the joining strategy and residual stress considerations for heated tool welding of polyethylene with high wall thicknesses
	9:15-9:45	XVI-1103-25	You Wu	Optimization of resistance welded joints in thermoplastic composite by the synergy of ultrasonic and carbon fiber heating elements
	9:45-10:15	XVI-1109-25	Su Jin Lee	Laser direct joining and cutting process for engineering plastic of environmentally friendly vehicles
	10:15-10:45	Break		
	10:45-11:15	XVI-1114-25	Yayun Liu	Effect of PC Thickness and Welding Parameters on the Strength of Dual-wavelength Laser Welding
	11:15-11:45	XVI-1112-25	Klaus Schrickner	Thermal efficiency of laser-based polymer-metal joining
	11:45-12:15	XVI-1104-25	Awais Awan	Ultrasonic joining of carbon fiber reinforced polyamide with beech wood: Process Optimization and Interface Characterization
	12:15-12:30	Administrative Meeting (commission leadership and delegates)		
June 24, 2025	8:30-8:45	Administrative Meeting (commission leadership and delegates)		
	8:45-9:15	XVI-1107-25	Holger Seidlitz	Load adjusted joining technologies for multi-material constructions with thermoplastic composites and metals – TAF
	9:15-9:45	XVI-1116-25	Sergio Amancio	Recent Developments in Additive Manufacturing of Metal-Polymer Hybrid Structures
	9:45-10:15	XVI-1106-25	Gean Marcatto	AddJoining of Beech Wood and Carbon Fiber-Reinforced Polyamide: Effects of Water Uptake on Interfacial Adhesion and Mechanical Strength
	10:15-10:45	Break		
	10:45-11:15	XVI-1111-25	Adelaide Almeida	Promoting the Certification of Adhesive Bonding Professionals
	11:15-11:45	XVI-1113-25	Maksym Iurzhenko	Materials and technologies for adaptive additive manufacturing of plastic products
	11:45-12:15	IIW management and Welding in the World Editor-in-chief presentations		
June 25, 2025	8:30-8:45	Administrative Meeting (commission leadership and delegates)		
	8:45-9:15	XVI-1108-25	Janos Lukács	Effect of hydrogen blending into natural gas on the polymer structural elements of the gas distribution networks
	9:15-9:45	XVI-1102-25	Matteo Pedemonte	Fracture energy of adhesive bonded joint
	9:45-10:15	no presentations		
	10:15-10:45	Break		
	10:45-11:45	Technical discussion on standardisation	Matteo Pedemonte	Development of a new scheme for the adhesive classification: final results
	11:45-12:15	Closing Administrative Meeting (commission leadership and delegates)		

2. Commission leadership

Commission XVI — Polymer Joining and Adhesive Technology			
Chair	Sergio AMANCIO	Austria	sergio.amancio@tugraz.at
Vice Chairs	Klaus SCHRICKER	Germany	klaus.schricker@b-tu.de

3. Terms of Reference

The Commission

Commission XVI is a Working Unit which focuses on the areas of polymer joining and adhesive technology. Both of these fields are dedicated to series production which necessitates high automation levels. It provides an interesting forum for high-level discussions among the world's leading scientists, who represent the very small scientific communities involved in these spheres of materials joining. Developments over the past years have increased the importance of polymer joining and adhesive technology with modern hybrid materials and fibre-reinforced plastics. The Polymer and Joining and Adhesives Technology Commission promotes the development and dissemination of fundamental and applied knowledge to joining of polymers, additive manufacturing, adhesives as well as joining of dissimilar materials to polymers. Deliverables include state-of-the-art papers for publication in *Welding in the World* that address o new scientific and technological solutions, o best practice Globally Relevant International Standards o new joining technologies o joining of hybrid systems o additive manufacturing.

Commissions Webpage: <https://iiwelding.org/iiw-working-groups/iiw-c-xvi/>

C-XVI Summary for 2024 Annual Report

Commission XVI's strategy is dedicated to advancing adhesives, joining, welding, and additive manufacturing of polymers, composites, and hybrid materials (e.g., metal-polymer, and wood-polymer). These innovations are essential for developing next-generation lightweight and sustainable structures. The recent commission's focus on joining and additive manufacturing of hybrid materials has gained significant recognition within the international welding and joining community. For the first time in IIW history, a C-XVI member received both the Yoshiaki Arata Award (2023) for scientific excellence and the Halil Gedik Award (2024) for industrial impact. The 2024 Annual Meeting in Rhodes highlighted significant advances in polymer welding, additive manufacturing, adhesive bonding, and hybrid joining techniques. A renewed interest in the mechanical fastening of industrial polymers was evident through dedicated presentations. Additionally, a special technical session on adhesive bonding standardization brought experts together to discuss emerging trends and the development of new standards across various materials.

4. List of Delegates

Delegate Name	Country
-	AUSTRALIA
Sergio AMANCIO	AUSTRIA
	BELGIUM
	CANADA
Zhiwu XU	CHINA
	CROATIA
	CZECH REPUBLIC
	DENMARK
Susanna HURME	FINLAND
	FRANCE
Volker SCHOPPNER	GERMANY
	HUNGARY
	INDIA
Matteo PEDEMONTE	ITALY
Tetsusei KURASHIKI	JAPAN
	PORTUGAL
Su jin LEE	REPUBLIC OF KOREA
Marius COCARD	ROMANIA
	SERBIA
Milan MARONEK	SLOVAKIA
Damjan KLOBCAR	SLOVENIA
	SPAIN
Marie ALLVAR	SWEDEN
Paolo MATARRESE	SWITZERLAND
	THAILAND
	THE NETHERLANDS
	TURKEY
Maksym IURZHENKO	UKRAINE
	UK
Miranda MARCUS	USA