



Commission XVI – Polymer Joining and Adhesive Technology

XVI-1006-
2021

Preliminary Agenda for the Meeting of Commission XVI

74th International Institute of Welding Annual Assembly, Online

July 12-14, 2021

ROOM TBD (ZOOM)

Author: D. Grewell (Chairman)

Monday, July 12th, 2021, 12:50 – 16:10 (5:50 am-9:10 am CT)

1. Opening and welcome by the chairman 12:50 – 13:00
2. Papers

(Hybrid Welding)

- 2.1. XVI-1001-21: “Joining of Sheet Metal and Thermoplastic Composites Using Injection Riveting”, by Dimitri Krassmann, Paderborn University (Pre-recorded)
13:00 – 13:40
- 2.2. XVI-1002-21 “Determination of the frequency- and temperature-dependent stiffness and damping properties of thermoplastics for the prediction of the vibration and heating behaviour during ultrasonic welding” by Weihermüller, M., IKV-Aachen
13:40 – 14:20
- 2.3. XVI-1003-21: “Fatigue behavior of aluminum-FRP hybrid joints manufactured by laser-assisted metal-polymer joining”, Klaus Schrickler, Technische Universität
14:20 – 15:00
- 2.4. XVI-1004-21 “Optimization of single-lap PA6-15CF/Ti-6Al-4V hybrid joints produced by Additive Manufacturing”, by Carlos Belei, Graz University of Technology
15:00 – 15:40
- 2.5. XVI-1005-21 “Effects of Surface Contamination on Plastic Ultrasonic Welds”, by Jeff Ellis, EWI
15:40 – 16:10



Tuesday, July 13th 2021, 13:00 – 15:20 (6:00 am-8:20 am CT)

(Ultrasonic Welding)

- 2.6. XVI-1006-21: “Latest Innovations in Ultrasonic Welders from Dukane”, Leo Klinstein, Dukane Ultrasonics 13:00 – 13:40
- 2.7 XVI-1007-21 “Mechanical performance optimization of additively-manufactured 316L stainless steel – PEEK hybrid joints produced by Ultrasonic Joining”, by Willian Carvalho, Graz University of Technology 13:40 – 14:20

(Thermoplastic Industrial Welding Processes)

- 2.8 XVI-1011-21: “Development of scale-up rules for the quasi-simultaneous laser transmission welding of thermoplastics” by Theresa Arndt, Paderborn University (Pre-recorded) 14:20 – 15:00
- 2.9. XVI-1009-21: “Heated tool butt welding of two different materials - Established methods versus artificial intelligence”, by Karina Gevers, Paderborn University (Pre-recorded) 15:00 – 15:40
- 2.10. XVI-1010-21: “Material Specific Predicting of the Optimal Joining Parameters for the Screw Blind Rivet Joining Process”, by Johannes Hillemeier, Paderborn University 15:40 – 16:10

Wednesday, July 14th 2021, 13:00 – 15:20

- 2.11 XVI-1008-21: “Vibration Welding of Bleached Bamboo Pulp Board”, by David Grewell, NDSU 13:00-13:40
- 2.12 XVI-1013-21: “A Method For Cross-Sectional Analysis Of Polymer Welds”, by Miranda Marcus, EWI (Pre-recorded) 13:40 – 14:20
- 3.0 WitW- Prof. Dr.-Ing. Thomas Boellinghaus 14:20 – 14:30
- 4.0 XVI Business meeting (Nomination of Chair) 14:30 – 14:50