

COMMISSION



International Institute of Welding

A world of joining experience

IIW Commission III

Chair: Prof. Dr. Jorge F. dos Santos

Co-Chair: Prof. H.S. Chang

PROVISIONAL PROGRAMME

Tuesday, 19th July

TIME SLOTS								TITLE, AUTHORS AND DELEGATION	EVENT	IIW DOCUMENT NUMBER
JAPAN		CHINA STANDARD TIME (CST)		CENTRAL EUROPEAN SUMMER TIME (CEST)		USA EASTERN STANDARD TIME (EST)				
08:30	09:00	07:30	08:00			19:30 (-1)	20:00 (-1)	Plenary session dealing with administrative issues of Commission III: <ul style="list-style-type: none"> - Welcome and Introduction Report Intermediate Meeting 2022 - Message from the IIW Secretariat (Dr. Elisabetta Sciaccaluga) - Report on Welding in the World (Prof. John Lippold) 	AA2022	III-2081-22
Contributions from Sub-Commission III-B Solid-State Based Processes Chair: Prof. P. Vilaça / Prof. J.F. dos Santos										
09:00	09:30	08:00	08:30			20:00 (-1)	20:30 (-1)	Development of double-sided friction stir welding of advanced high strength steel sheets, by Muneo Matsushita, Daiki Yamagishi, Satoshi Igi and Rinsei Ikeda, Japan (P)	AA2022 M	III-2084-22

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JAPAN		CHINA STANDARD TIME (CST)		CENTRAL EUROPEAN SUMMER TIME (CEST)		USA EASTERN STANDARD TIME (EST)				
09:30	10:00	08:30	09:00			20:30 (-1)	21:00 (-1)	Project RESURGAM: The development of friction stir welding of steel for the fabrication and under-water repair of ships, by Stephen Cater, Jonathan Martin, Santonu Ghosh, UK (P)	AA2022	III-2091-22
10:00	10:30	09:00	09:30			21:00 (-1)	21:30 (-1)	Development of solid state resistance spot joining method, by Takumi Aibara, Masayoshi Kamai, Yoshiaki Morisada, Takaaki Miyauchi, Shinichi Hasegawa and Hidetoshi Fujii, Japan (P)	AA2022	III-2086-22
10:30	11:00	Coffee Break								
11:00	11:30	10:00	10:30			22:00 (-1)	22:30 (-1)	A systematic analysis of maximum tolerable tool wear in friction stir welding, by Michael Hasieber, Felix Wenz, Michael Grätzel, James Andrew Lenard, Sebastian Matthes and Jean Pierre Bergmann, Germany, Germany (P)	AA2022 M	III-2082-22
11:30	12:00	10:30	11:00			22:30 (-1)	23:00 (-1)	Influence of different surface conditions on mechanical properties during ultrasonic welding of aluminum wire strands and copper terminals, by Pascal Pöthig, Michael Grätzel, Jean Pierre Bergmann, Germany (P)	AA2022 M	III-2083-22
12:00	12:30	11:00	11:30			23:00 (-1)	23:30 (-1)	Effect of ultrasonic vibration on the thermo-mechanical process variables in dissimilar Al/Mg alloys FSW, by C.S. Wu, M. Zhai, T. Wang, PR China (Online)	AA2022	III-2102-22
12:30	14:00	Lunch								

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JAPAN	CHINA STANDARD TIME (CST)	CENTRAL EUROPEAN SUMMER TIME (CEST)	USA EASTERN STANDARD TIME (EST)							
Contributions from Sub-Commission IIIA – Resistance Welding and Allied Processes Chair Prof. M. Kimchi / Prof. H.S. Chang										
14:00	14:30	13:00	13:30	07:00	07:30			Examination of post heating conditions to improve CTS of resistance spot weld joints, Taiga Taniguchi, Seiji Furusako, Shinji Kodama, Japan (P)	AA2022	III-2085-22
14:30	15:00	13:30	14:00	07:30	08:00			ANN versus RF in RSW monitoring, by Munkhchimeg Raash and Hee S. Chang, Republic of Korea (Online)	AA2022	III-2099-22
15:00	15:30	14:00	14:30	08:00	08:30			Influence of Surface Irregularities in Resistance Welding, by Martin Baumgarten, Stefan Heilmann, Christian Mathiszik, Jörg Zschetsche and Uwe Füssel, Germany (Online)	AA2022 M	III-2098-22
15:30	16:00	14:30	15:00	08:30	09:00			Development of RSW technology on automotive DP steels for dynamic loading, by L. Prém, Á Meilinger, Marcel Gáspár, Hungary (P)	AA2022 M	III-2095-22
16:00	16:30	Coffee Break								
16:30	17:00	15:30	16:00	09:30	10:00			Generalization of Metallurgical and Mechanical Models for Integrated Simulation of Automotive Lap Joining, Eric Brizes and Antonio J. Ramirez, USA (P)	AA2022	III-2110-22
17:00	17:30	16:00	16:30	10:00	10:30			Evaluation of joint quality in resistance spot welding by energy parameters, by Yevgenia Chvertko, Ukraine (Online)	AA2022	III-2093-22
17:30	18:00	16:30	17:00	10:30	11:00			Resistance Spot-Welding of Fe-Al Using Interlayer Technology, by B. Lara, L. Amanuel, R. Giorjao, and A. Ramirez, USA (P)	AA2022	III-2108-22

Wednesday, 20th July

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JAPAN	CHINA STANDARD TIME (CST)	CENTRAL EUROPEAN SUMMER TIME (CEST)	USA EASTERN STANDARD TIME (EST)							
Contributions from Sub-Commission IIIA – Resistance Welding and Allied Processes Chair Prof. M. Kimchi / Prof. H.S. Chang										
08:30	09:00	07:30	08:00			19:30 (-1)	20:00 (-1)	Effect of process parameters on the liquid metal embrittlement (LME) cracking in the resistance spot welding of zinc-coated steels, by Woo-Sung Jin, Arun Lalachan, Il-Guk Jo, Chang-wook Ji, Yeong-do Park, Republic of Korea (Online)	AA2022	III-2092-22
09:00	09:30	08:00	08:30			20:00 (-1)	20:30 (-1)	High cycle fatigue behaviour of a resistance spot welded advanced high strength steel, by Bindu Pal, Murugaiyan Amirthalingam and S. Ganesh Sundara Raman, India (Online)	AA2022 M	III-2094-22
09:30	10:00	08:30	09:00			20.30 (-1)	21:00 (-1)	Reduction of LME cracking severity in dissimilar resistance spot welded third generation advanced high strength steel with associated mechanisms, by M. Patel, M. Shojaee, A. R. H. Midawi, O. Sherepenko, H.Ghassemi-Armaki, E. Biro (Online)	AA2022	III-2105-22
10:00	10:30	09:00	09:30			21:00 (-1)	21:30 (-1)	Thermal influence of resistance spot welding on nearby overmolded plastic-metal joints, by Jan Wippermann, Gerson Meschut, Wikentji Koschukow, Alexander Liebsch, Maik Gude, Steven Minch, Björn Kolbe, Germany (Online)	AA2022 M	III-2096-22
10:30	11:00	Coffee Break								
11:00	11:30	10:00	10:30			22:00 (-1)	22:30 (-1)	Numerical study on thermal behavior in Cu wire to Kovar foil resistance micro-welding with a triple electrode configuration, Nannan Chen, G. Wu, Min Wang, X. Hua, Z. Wang, Yi Wei, PR China (Online)	AA2022	III-2089-22

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11:30	12:00	10:30	11:00			22:30 (-1)	23:00 (-1)	Shifting Timing and Location of Shoulder LME Cracks with Welding with Radius Faced Electrodes or Expulsion Conditions, by S. Song, M. Patel, O. Sherepenko, E. Biro, Canada (Online)	AA2022	III-2109-22
Contributions from Sub-Commission III-B Solid-State Based Processes Chair: Prof. P. Vilaça / Prof. J.F. dos Santos										
12:00	12:30	11:00	11:30			23:00 (-1)	23:30 (-1)	Successive friction stir processing/transient liquid phase bonding (FSP/TLP) of AISI304 stainless steel, by R. Bakhtiari, H. Nikukar, M. Divandari, E. Biro, Canada (Online)	AA2022 M	III-2106-22
12:30	14:00	Lunch								
14:00	14:30	13:00	13:30	07:00	07:30			Application of electrical power measurements for process monitoring in ultrasonic metal welding, by Florian W. Müller, Chun-Yu Chen, Alexander Schiebahn, Uwe Reisgen, Germany (P)	AA2022 M	III-2100-22
14:30	15:00	13:30	14:00	07:30	08:00			Influence of the temperature conditions on the joining quality during refill friction stir spot welding of aluminium, by Dennis Lauterbach, Nima Eslami, Alexander Harms, Daniel Keil, Klaus Dilger, Germany (P)	AA2022 M	III-2104-22
15:00	15:30	14:00	14:30	08:00	08:30			Influence of cold sprayed Zn interlayer on microstructure and mechanical properties of refill friction stir spot welded dissimilar Al/Mg joints, by Xinyu Liu, Zhikang Shen, Wenya Li, PR China (Online)	AA2022	III-2107-22
15:30	16:00	14:30	15:00	08:30	09:00			Hybrid Friction Eutectic Bonding (HFEB) of aluminium and copper, by Anna Regensburg, Germany (P) Winner of the 2022 Henry Granjon Award Category B "Materials behaviour and weldability"	AA2022	III-2103-22

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16:00	16:30	Coffee Break									
16:30	17:00	15:30	16:00	09:30	10:00			Friction stir lap welding of plastic to metal using adjustable tool, by Yefei Gao, Naotsugu Yamamoto, Jinsun Liao, Yoshiaki Morisada and Hidetoshi Fujii, Japan (P)	AA2022	III-2087-22	
17:00	17:30	16:00	16:30	10:00	10:30			Non-destructive evaluation of the Friction Stir Welding process, generalizing a deep neural defect detection network to identify internal weld defects across different Aluminum Alloys, by P. Rabe, A. Schiebahn, U. Reisgen, Germany (P)	AA2022 M	III-2101-22	
17:30	18:00	16:30	17:00	10:30	11:00			Material flow and thermal-mechanical analysis of Al/steel friction stir lap joining process, by Ninshu Ma, Peihao Geng, Hidetoshi Fujii, Japan (P)	AA2022	III-2088-22	