Time Table on Sunday 17th, July 2022

Floor				Basement 1st Floor														29th Floor						
Time	Palais Royal A	Palais Royal B	Palais Royal C	Palais Royal D	Châtelet	Étolie	Vendôme	Concerto	Harmonie	Fantaisie	Menuet	Foyer	Pensée	Camélia	Mimosa	Cosmos	Ginga	Hikari	Niji	Akatsuki	Akane			
8:30 —							C-13 Working Groups							Secretariat	Secretariat	Secretariat								
11:00 —											C	offee Brea	ık											
	General Assembly						C-13 Working Groups							Secreatariat	Secreataria	t Secreatariat								
12:30 — 13:00 —	Lunch Break		Ice Breaking				Lunch Break							1	Lunch Break									
14:00 — 14:30 — 15:00 — 15:15		nening and (Fronius International) (Osaka University)	Session		Unavailable			C-13 Working Groups							Secreatarial	t Secreataria	t Secreatariat							
	Trade and Carbon	• • • • • • • • • • • • • • • • • • • •				Coffee Break																		
	(Mitsubishi He	eavy Industries) tiatives of Mitsubishi Heavy		Coffee Brea	ak			Coffee Break																
17:15 18:00	Production Revolution by Kynote 4, Bri (Toyota Motor TRANSFORMATIV	Industries Group for Energy Transition Kynote 3, Joshua Mook (GE Additive) Production Revolution by 3D Additive Manufacturing Kynote 4, Brian J. Krinock (Toyota Motor North America) TRANSFORMATIVE CHANGE IN THE AUTOMOTIVE INDUSTRY		Unavailable			C-13 Working Groups																	
19:30 —	IIW Opening	g Ceremony												Secreatariat	Secreataria	t Secreatariat								
22:00 —			Welcome	Reception																				

Time Table on Monday 18th, July 2022 1. AM 2. Al & DX 3. Hydrogen 4. New materials 5. Future technology 6. Advanced technology

Floor											Basement 1st Floor								
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Time	Palais Royal A	Palais Roya	IB		Palais Royal C	Palais Royal D		Ch	nâtelet		Étolie		Vendôme		Concerto		Harmonie		Fantaisie
8:30																			
	Chair1 Robert E. Shaw, Jr. (Steel Structures Technology Center) Chair2 Tomoya Kawabata (The University of Tokyo)																		
	Keynote 5, Hideyuki Suzuki (The University of Tokyo)											_	echnical visit lecture						
	Renewable Energy Revolution by Power Generation with Floating Offshore Wind Turbine											'	echnical visit lecture						
	Keynote 6, Hiroaki Sakashita (Class NK)																		
	Zero-emission transition in shipping																		
	Keynote 7, Noriko Morioka (IHI Corporation)																		
	Towards the future of net-zero aviation																		
	Keynote 8, Masahiro Indo (Shimizu Corporation)																		
	Construction DX Initiatives	=																	
10:30	Shimz Smart Site Next Generation Building construction System																		
11:00	Coffee Break	Coffee Brea		[Hyd	Coffee Break	Coffee Break [Future technology] Welding process/ii	(New		ee Break issimilar resistance spc		Coffee Break [AM] Process 1	[Advance	Coffee Break d technology] Fatigue and fracture 1	TAAAT	Coffee Break Modeling and simulation 1	[Now	Coffee Break	IAM	Coffee Break
	[AM] Process control	[AI &DX] Automation of we Invited 1(AI & DX), Kazı			Irogen] Welding Process & Renew. Energy), Kunihiko Koike	Invited 1(Future Technology), Yurugi K	anzaki		relding		New approaches in additive			ĮAIVIJ	[Cancelled] ANN Based Approach	[INEW	materials] Brazing materials [Cancelled] Study on Brazing	[AM]	Materials and properties 1 Microstructure and Properties of
	Invited 1(AM), Christoph Leyens (Fraunhofer IWS) Innovative Aerospace and Space Structures made by Additive	(Yaskawa Electric Co Evolution of solutions provided	rporation)		[Iwatani Corporation) trends toward the realization of a	(Mistubishi Heavy Industries), Contribution to Carbon Neutrality by	MHI	(Frauni	laterials), Bernd Mayer hofer IWS),	A-6 7	manufacturing The final steps in DED with powder and wire towards guaranteed quality	Shir	1(Other fundamentals), Atsuto mada (Panasonic Connect),	A-15 15	To Control The Dimensional Accuracy In Wire Arc Additive Manufacturing Process	M-11 6	Behavior of Diamond with Nickel Base Boron Free Solder	A-25 5	TNZT-TiB2 Composite Processed by Laser-Powder Bed Fusion
	Manufacturing	Sustainable Manufacturing Sup of Robots -		hydrogei	n society and development of d welding and fusing technologies	Nuclear Engineering Systems and Supporting Welding Technology (Tent	ts		sive Bonding of Fiber Composite Parts		and *First Time Right*		asonic GREEN IMPACT for Manufacturers' futures		Managadaning 1 100000				
	Controlled Droplet on Demand Deposition in Plasma MIG Welding: A Numerical Simulation Study	A Automatic welding welding operators	g with the skilled s technique due to the		Vehicle To Arc (V2Arc): The High Efficiency Arc Welding/Cutting	Nondestructive Detection of Unwelded Parts of T-joints		MFDC Alumin	Resistance Spot Welding of num to Steel / Effects of		Development of Metal Additive Manufacturing Technology for Gas		[Cancelled] Fatigue Testing And Modelling Of Flare Bevel Groove		Transition strategy optimization of Inconel625-HSLA steel functionally		[Cancelled] Effects Of HF And Zr On Microstructure And Properties		Effects of notch-load-defect interactions on the true stress-
	A-1 54		e processing and	H-1 68	Equipment Supplied Primary Power From Electric Vehicles For Quick	Magnetic Flux Leakage Tes F-1 72 High Sensitivity Sensors	ting with	Welding 92 Shape	g Program Pulses, Electrode and Polarity on	A-7 22	Turbine Hot Parts	0-1	Welded Aluminum T-Joints	A-16 66	graded material fabricated by wire arc additive manufacturing		Of Ni-based Boron Free Solder And Prazed Diamond Joint	A-26 9	logarithmic strains and strain hardening of L-PBF 18Ni300
					Recovery Work Against Natural Disasters			Microst	tructure and Strength										
	In-Situ Process Analysis Of Laser Welding By Temporally And Spatially Mapped Radiation Reflection Measurements		elding Bead Length and	d	Identification And Feasibility Evaluation Of A Friction Stir Welding Application	Multi-faceted Evaluation of Dissimilar joining between h	iah		orative Simulation of Nugget n and Process Signals for		Process Design for Multi-material Arc Directed Energy Deposition		Ageing Effect on Fatigue Performance of Offshore Structures		Surface roughness of an additively manufactured AISi10Mg aluminum		[Cancelled] Effect Of Cr Content On Microstructure, Melting		Inhomogeneous formation of microstructure in a martensitic
	A-2 35	D-2 27 Segmentation and Algorithms		H-2 4	In The Colombian Energy Sector	F-2 83 tensile strength steel plate a aluminum plate using usefu	nd M-2	170 Resista	ance Spot Welding	A-8 84		0-2	by Fracture Mechanics Method	A-17 74		M-13 8		A-27 3	4 stainless steel during wire arc additive manufacturing
12:30						non-destructive method									· ·		Solder		J
	Lunch	Lunch			Lunch	Lunch		L	.unch		Lunch		Lunch		Lunch		Lunch		Lunch
	24.6.	Landin			Lanon	Landin		_			Landi		Landin		Landin		Landii		Lanon
14:00	[AM] Materials and properties 2	[AI &DX] Optimization and	d management	[Hydro	ogen] Mechanical Behavior	[Future technology] Welding for thick		· ·	rials] Steel welds		[AM] Process 2 Process integrated closed-loop		Advanced technology] FSW	[AM]	Modeling and simulation 2 Composite Bead Models for	[Nev	materials] Other processes Deteriorated Characteristics on the		[AM] Defects Microstructure and cracking in
	Invited 2 (AM), Moataz Attallah (University of Birmingham)	Invited 2 (AI & DX), Yoshihide Paradigm changes in the weld			H2 & Renew. Energy), Katsuya	Invited 2 (Future Technology), Masa Mochimaru (Toshiba Energy System	s & (Nipp	pon Steel Corp	aterials), Takahiro Osuki poration), New stainless		control of Wire-Arc-Additive- Manufacturing	Ueya	(Other fundamentals), Tomoyuki ama (DAIHEN Corporation),		Capturing Process Complexities in Weld-Deposition Based Additive		Fatigue Strength of Dissimilar A6061/Galvannealed		WAAMed Al alloys by integrated analytical and process modelling
	Opportunities in New Metallic Materials in Metal Additive Manufacturing	heavy Industry using cutting technologies	ng-edge digital	Morimoto International	(Kawasaki Heavy Industries), Liquefied Hydrogen Supply Chain	Solutions), Forefront of ITER Project, the Dream F	usion super	rior hydrogen e	n both high strength and embrittlement resistance	A-9 10	0		lenge to Welding and Joining ogy for Applying Multi-Material in	A-18 40	Manufacturing	M-14 5	O Steel Joints Fabricated by Friction Stir Spot Welding	A-28 1	36
	I left and OCD and Describe O. Wheels the A.d Donald	Ontinination of the	Alder December		IData de artico efilia 7 Torreto de la constanta de la constan	Power Energy	for hig		ydrogen gas application		December of the Park		Electric Vehicle		Declare of Blassies at a Delation for		Disclosing And Hateld Observations		December the Markenian of
	Influence Of Process Parameters On Microstructure And Properties Of WAAM Deposited High Strength Steel Thin Wall Structures	the second second	Aero Engine Parts		Deterioration of HAZ Toughness by Residual Sn and Determination of its Allowable Content for Electric Furnace	APPLICATION OF HIGH- PRECISION ASSEMBLY TECHNOLOGY FOR LARGE		content	ated heat affected zone ferrite it influence on toughness for and duplex and new duplex		Parametric Study of Melt Pool Geometry in Hybrid Plasma Arc- Laser Melting Process for Additive		Evaluation Strategy Via Comparisor Of A Heat-Input Model For The Friction Stir Welding Process	l l	Design of Biomimetic Prickles for Heterogenous Joints by Additive Manufacturing		Dissimilar And Hybrid Structures Via Magnetic Pulse Welding		Research on the Mechanism of Liquation Cracks in Wire-Arc Additive Manufacturing of
	A-3 168	D-3 29 Manufacturing		H-3 118	Steels	F-3 85 TECHNOLOGY FOR LARG STRUCTURES BY LASER WELDING	BEAM M-3	89 stainles weldab	as steel grade with emilanced	A-10 75	Manufacturing Application	O-3	11 Friction Stir Welding Process	A-19 12	3	M-15	3	A-29 1	Aluminum Alloy
	[Cancelled] Directed Energy Deposition of Invar using Pre-alloyed Wire Compositions and Feasibility Study of In-situ Alloying using Fe		ality Management ng based on Monitorin		Effect of Stress Field on TRIP behavior and its influence on fracture behavior	Development of Narrow-gay Welding for Ultra-thick Cast	Steel	A study	y on creep and tensile ties at high temperature for		Cold metal transfer-based twin wire arc additive manufacturing of Iron		Study on the material flow and influencing factors during friction		Mathematical Modeling of Current and Voltage Behavior in Short-circu	it	[Cancelled] Optimization Of Ti/Al Interface Zone At TA2/A5150 Joints		Control of the morphology of micron-sized protrusions for
	and Ni Elemental Wires A-4 90	D-4 173	ard	H-4 122	of Commercial Stainless Steels at cryogenic temperature	using Hot-wire Method and F-4 53 power Diode Laser	High-	welds o	of modified 9Cr-0.5Mo Steel	A-11 13	Aluminides	0-4	stir welding of aluminium alloys	A-20 57	Arc Welding with Application to Arc	M-16 7	By Growing K2Ti6O13 Whiskers On Titanium Surface	M-6 1	metal/polymer joining by selective laser melting technology
	[Cancelled] Influence of Heat Treatment on the Microstructure and Hardness of 17-4PH	Visualization Tech	Velding Operations hnology for		Physical simulation based HAZ characterization of different pipeline	The Optimization of High-Ei and Low Heat Input Hot-wir	ficiency Gas	Microst	fluence Of Filler Material On tructural And Mechanical		Experimental And Theoretical Analysis Of Heat Accumulation In		Avoiding void formation in Friction Stir Welding of High Hard Armor		Proposal of Early Numerical Model for LFW Process by Particle Metho	d	Partial Cleaning Of Aluminium Sheet Surfaces For Thermal		Welding repair for Ni base superalloy
	A-5 76 ADAM Welded Stainless Steels	D-5 58 Acceleration of Di Heavy Industry Fa	igital Transformation in	H-5 129		F-5 48 Metal Arc Welding for Thick Plate in Shipbuilding Indust	Steel	108 Propert	ties Of Diode Laser Welded 00	A-12 60	Laser Wire Direct Energy Depositio	O-5	174 (HHA) Steel	A-21 11		M-17 3	1 Joining	M-7 3	7
16:00	0,7,2,1		i.		O-# D- 1	0 " 5 :			- Develo		O-# P		0-# 5		C-# P		0-# 5		C-# D
16:30 —	Coffee Break	Coffee Brea	ı.		Coffee Break	Coffee Break		Coffe [Hydrog	ee Break		Coffee Break [AM] Other topics	[/	Coffee Break Advanced technology Laser process		Coffee Break [AM] Process 3	Nev	Coffee Break materials] Simulation and calcula		Coffee Break [New materials] Dissimilar FSW
									Of Welding Parameters On ed Cracking Of Welded Type ainless Steel				Reduction of porosity in laser arc hybrid welding of aluminum alloys		Wire-based laser direct energy deposition process for nuclear equipment		Thermomechanical laser welding simulation of dissimilar steel- aluminum overlap joints		[Cancelled] Effect of Alloy Element Content on Properties of Aluminum/Steel Filled Friction Stir
							H-6	100			M), Sudarsanam Suresh Babu	O-6	28	A-22 36	1-1-1-1-1-1	M-18	S S S S S S S S S S S S S S S S S S S	M-8 1	Welded Joints
						10.14".1				Onivers	ity of Tennessee, Knoxville)								
17:00						IC-WUs Panel Discussion			mental Set-up For In-situ		A comparative study of the carbon		Bead Shape Effect On Solidification		Effect of the Location on the		Tensile Behavior of The Weld HAZ		[Cancelled] Study on the Effect of
						T dilei Discussion		Measur Diffusio	rement Of Hydrogen on During GMAW Operation		footprint of AM-based remanufacturing vs. traditional		Cracking During Hot-wire Laser Welding On Narrow-gap Joint of Ni-		Fracture Toughness of Wire Arc Additively Manufactured		in Ultra-High Strength Steels		Ce Content on the Friction Stir Welding with Filler Wire Welded
							H-7	161		A-13 16	machining of metal components	0-7	52 base Alloy	A-23 16	Components Using Different Filler Metals	M-19 1	35	M-9 1	Joints Performance of Aluminum Alloy and Steel
17:30									on Beam Brazing And		Investigations Into The		Numerical Study of Laser Beam		[Cancelled] Effect of Friction Stir		A Method To Evaluate Surface		Fatigue life of thin sheet dissimilar
							H-8	163 Wende	ng Of Components For Distein 7 X Facing The High	A-14 11	Processability Of Glass Materials B Additive Manufacturing Techniques	O-8	Shaping on Molten Metal Flow Behaviour in Laser Melting	A-24 13	Processing on Microstructure and Mechanical Properties of Al-Cu Allo Produced by Wire Arc Additive	M-20 1	Tension Of Liquid From The Liquid Shape Of Sessile Drop In Gravity	M-10 1	aluminium joints of 2024 and 5056 alloys produced by friction stir
18:00								energy	/ Plasma						Manufacturing				welding technology
18:00																			
19:00 —																			
20:00 —		Japanese Ever																	
21:00 —		"IC-WU's Ex	change Rec	eption"															
22:00 —		1																	
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25.00		J.		1								l		l		1		l	

Time Table on Monday 18th, July 2022 -cont'd 1. AM 2. Al & DX 3. Hydrogen 4. New materials 5. Future technology 6. Advanced technology

		29th Floor																		
Time	Menuet	Foyer	Pensée	Camélia	Mimosa	Cosmos		Ginga	Hikari					Niji			Akatsuki	Akane		
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8:30 —				Secretariat Secretariat Secre		Secretariat														
	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break		Coffee Break			Coffee Break			Coffee Break			Coffee Break		Coffee Break	
11:00	[Future technology] Friction welding Linear friction welding of AA1050-H24		Chair2 [Future technology] High power beam Mitigation of liquation cracking in					[Al &DX] Education and training Step Change In Welding Simulation To Qualify		\//	[AI &DX] Automation		[Ad	vanced technology] Welding residual stress Numerical study on the effect of peening tool's			Future technology] Metallurgy ect of water salinity on properties of	[/	Advanced technology] Assessment Sustainability Assessment of	
	joint and AA5052-H34 joint		F-15 96 laser welding of pairs of L-PBF processed and wrought plates of Inconel 718				D-6	Professional Welders At Siemens Mobility Krefeld, Germany In The Regulated Filed Of Welding Technology	D-13	Me		O-13		movement on deformed profile and HFMI-induced residual stresses	F-25	39	Iltipass underwater wet welded joints	O-19 1	Welding Processes: A Review	
	[Cancelled] Effect of magnetizing parameters on friction sits welded steel plate using a micro-magnetic technique F-7 56	Poster Session	F-16 Development Of Low Distortion Fillet Welding Technology Combining Hot-wire And High- power Diode Laser On 9%-NI Steel For LNG-fueled Ship				D-7	Worldwide Welder Shortage And Approaches To Overcome The Crisis	D-14		plication of Deep Learning to Seam acking in Plasma Arc Welding	O-14		Mechanism for Stress Relaxation and Long-term Stability of the Compressive Stress Introduced by WJP and Buffing Stress Improving Treatments	F-26		ect of dilution ratio in weld metal hard facing Solidification cracking susceptibility	O-20 3	Transformation Of Proprietary Welding Data Software From A PC- Based Application To A Cloud- Enabled Container Application Using Standard Interfaces.	
	[Cancelled] Evaluation of Tungsten Carbide Tool Material During Friction		New electron beam weld technique for welding of Niobium SCRF					Welding Simulators - Green Training For Top Welders		Cl	arification of Reasons for Defect Detection Deep Learning in Visual Weld Inspection			Study on Joint Characteristics in Laser Butt Welding of AMed and Bulk Ti6Al4V plates	,	Las Mic	ser Pressure Welding Induced crostructure Associated With Corrosion		Calculation of the welding costs and times using various heat resistant	
12:30	F-8 126 Stir Cladding of Copper on Steel Substrate		F-17 91 cavities from the inside for optimal cavity performance				D-8	73	D-15			O-15	139		F-27	102 Res	sistance Of Al-Li Alloy 2198	O-21	steels at pressure vessels	
	Lunch Lunch		Lunch	Lunch	unch Lunch Lunch		Lunch		Lunch		Lunch					Lunch		Lunch		
14:00	[Future technology] Arc welding process Development of highly productive							[AI &DX] Ispection Application of Phased Array Ultrasonic Testing		De	&DX] Prediction of weld quality velopment of Analysis Method to Predict			[Al &DX] Skill evaluation of welders Beginners' Welding Plate Evaluation Using						
	F-9 111 Influence Of Metal Deposition Modes On The Side Wall Fusion And Properties Of Metal Deposition Modes Are Welded Joints	Poster Session	F-18 Distributions To Reduce Spatter Formation At High Feed Rates During Laser Welding Removing The Bottleneck in Laser Welding Of Electrical Conductors for Electric Vehicles	Secreatariat	Secreatariat	Secreatariat	D-9	for Tube-to-Tubesheet Weld of Heat Exchanger using Deep Learning Study of Fracture Behaviours on a Tube-to- Tubesheet Weld Joint for a Heat Exchanger 47	D-16	61 Op	seep Life from Wolding Process and Study Appropriate Heat Source Parameters. bilimization of HAZ Shape Factors by yesian Estimation for Creep Performance provement of Heat-Resistant Steel Welded int	D-23		Convolutional Neural Network Sensing of Welder's Motion and its Relationship wit Welding Quality for Semi-Automatic Arc Welding	ħ	Spec	cial Session for			
	Cancelled Effect of Electrode Tip Angle on Penetration, Bead Width, Distortion, and Atmospheric Contamination During Pulse GTA Welding of Grade-2 Titanium Alloy (CP-TI) Distribution of AC-GTA in like Mars Atmosphere	i osiei oessioii	F-20 Influence Of Beam Shaping On The Process Efficiency During Laser Welding Influence Of Beam Shaping On The Process Efficiency During Laser F-21 146 Welding	Secretariat	Secretarial			A Study For Automatic Inspection Of Leg Length And Undercut in the T-shaped joint Using Deep Learning In-line Detection of Internal Defects for Lap Joint welding of Galvanized Steel Sheet by Laser Ultrasonic Technique	D-18	Es	timization of process conditions to iximize creep rupture time in steel welds tablishing process-structure linkage for neration of virtual micrograph using deep iming method	D-25		Development of a Prototype 3D Measuring and Judging System to Improve the Accuracy of Visual Inspection of Weid Bead Appearance and 10 Digits Inspection Results for Welder Qualification Tests Effect of torch movement on weld quality in semi- automatic CO2 are welding	e -	Youn	g Professionals			
16:00																				
16:30 —	Coffee Break [Future technology] Other dissimilar joint	Coffee Break	Coffee Break [Future technology] Reistance welding		Coffee Break			Coffee Break [Advanced technology] Fatigue and fracture 2		[A	Coffee Break I &DX] Sensing of weld quality		[Advar	Coffee Break	Chair2	[Future	Coffee Break re technology] Fe-Al dissimilar join		Coffee Break	
17:00	Dissimilar joining of Mg/Al light metals by explosive welding		Development of resistance spot welding technology applying adaptive control for narrow pitch spot welding				O-10	Fatgue Strength of Weld Root at Ship Structural Joints	D-20	26	tection Of Weld Intensity By Experimental alysis And Machine Learning.	O-16		Detection Of Pores During Laser Beam Welding Of AIMg3 Using The Temperature Field	F-28	41 - Sti flare braz	velopment of high-speed brazing technology bibling hot-wer and high-power diode laser steel/aluminum alloy dissimilar joint (1st ort) tudy of influential factors on strength of e-V groove joint brazed by high-speed zing process -			
17:30	Copper-Aluminum Joining By Novel Locked Projection Welding Process F-13 80	Poster Session	Microstructure and Mechanical Properties of Ring Mass Median in Chromium Molybdenum Steel F-23 97				O-11		D-21		ald Appearance Inspection of Excess Metal ing DETR	O-17	33	Evaluation Of Large Scale Diffusion Bonded Interfaces By Means Of High Frequency Scanning Acoustic Microscopy	F-29	com for s repo 20 - Ev mici braz	velopment of high-speed brazing technology binling hotwire and high-power diode laser steel aluminum alloy dissimilar joint (2nd ort) valuation of the effect of coating on rostructural evolution during high-speed zing process -			
18:00	P-14 82 Development of metal/thermoplastic dissimilar joining using laser process.		Resistance welding of square nuts F-24 162				O-12	Revealing duclile-to-brittle transition mechanism and enhancing cryogenic ductility of tin (Sn) for cryogenic electronics	D-22	101 Go	Study on Quality Control Utilizing Stress incentration Factor of Welded Joints iculated with On-site Measurement Data Chemical Tanker Construction	O-18	69	Study On The Interfacial Temperature Developmen For Various Friction Welding Processes	F-30	Cra	al-Lime and Visible Monitoring of Fatigue ack Propagation of Aluminum to Steel sistance Spot Welds using Organic chanochromic Luminescence			
18:00 — 19:00 — 20:00 — 21:00 — 22:00 —																				