



**2018 International Conference on
Robotic Welding, Intelligence and Automation (RWIA'2018)
&
The 12th Chinese Conference on
Robotic Welding (CCRW'2018)**

CONFERENCE BRIEF PROGRAM

1. General schedule of RWIA'2018&CCRW'2018

Date: December 7th , 2018		
Time	Agenda	Place
9:00-20:00	Registration	Main Hal, DoubleTree by Hilton
15:00-17:30	The Opening Ceremony of Guangdong Robotics Innovation Center and 2018 Experts Symposium on Innovation and Development of Robotic Industry of Guangdong-Hongkong-Macau Greater Bay Area	Science Hall, second floor, Luogang International Conference Centre
Date: December 8th , 2018		
8:30-12:00	Opening Ceremony & Plenary Speech	Banquet Hall, DoubleTree by Hilton
13:30-17:00	Invited Keynote / invited Technical Report	Banquet Hall, DoubleTree by Hilton
Date: December 9th , 2018		
8:30-12:00	Invited Keynote Speech	Banquet Hall, DoubleTree by Hilton
13:30-14:30	Cooperation between production, college and research units to sign contracts/ Talent job fair	Banquet Hall, DoubleTree by Hilton
14:30-17:30	CCRW'2018 session	Banquet Hall, DoubleTree by Hilton
13:30-17:30	RWIA 2018 session	Guangzhou Hall, DoubleTree by Hilton
Date: December 10th , 2018		
8:30-12:00	Visit Guangzhou Development Zone and Robot	
12:30-14:00	Lunch	
14:00	End	

2. Report Schedule of RWIA'2018&CCRW'2018

Time: 7-10 December 2018

Venue: Guangzhou Huihua DoubleTree by Hilton,
Luogang Convention Center of Guangzhou Development Zone

Date: December 7th, 2018					
Time	Topic			Chairs	Place
8:00-20:00	Registration Guangzhou Huihua DoubleTree by Hilton			Tao LIN Huabin CHEN	Main Hal, DoubleTree by Hilton
15:00-17:30	The Opening Ceremony of Guangdong Robotics Innovation Center and 2018 Experts Symposium on Innovation and Development of Robotic Industry of Guangdong-Hongkong-Macau Greater Bay Area			Guangdong Official Representative, Erbin LIU, Shanben CHEN	Science Hall, second floor, Luogang International Conference Centre
19:30	The meeting of Advisor Committee, Organization Committee and Program Committee			Shanben CHEN	Council Chamber
Date: December 8th, 2018					
Time	Classification	Speaker	Topic	Chairs	Place
8:30-9:30	Opening Ceremony	Introduction Guests		Shanben CHEN Yu-Ming ZHANG	Banquet Hall, DoubleTree by Hilton
	Theme Address	Address by host, chairman, guest and institutes			
	Awarding ceremony for RWIA/CCRW	RWIA/CCRW Foundation and academic Awards			
9:30-10:00	Invited Plenary Speech	Toshio FUKUDA Nagoya University	Multi-Scale Robotic System	Xiao-qi CHEN	Banquet Hall, DoubleTree by Hilton
10:00-10:10	Tea Break				
10:10-10:40	Invited Plenary Speech	Ren C. Luo Taiwan University	AI and Robotics Activating Intelligent Manufacturing Paradigm Shift: Dynamic Welding as an Exemplary Best Practice	Wei ZHOU Xinjun Liu	Banquet Hall, DoubleTree by Hilton
10:40-11:10	Invited Plenary Speech	Tianmiao Wang BUAA	The robot chance and challenge in China		
11:10-11:40	Invited Plenary Speech	Christian LAUGIER, INRIA-IRISA	Dynamic Scene Understanding and Upcoming Collision prediction to make Autonomous Driving safer: A Bayesian Approach		
11:40-12:10	Invited Plenary Speech	Han DING, Fangyu PENG, HUST	Future of Robotics: The Tri-Co (Coexisting-Cooperative-Cognitive) Robots		
12:10-13:30	Lunch				
13:30-13:55	Keynote Speech	Xinjun Liu Tsinghua University	Innovation of Robotized Manufacturing Equipments	Huiju LI Heping CHEN	Banquet Hall, DoubleTree by Hilton
13:55-14:20	Keynote Speech	Xianmin Zhang, SCUT	Perspectives of reliability technology of robotic equipment		
14:20-14:45	Invited Technical Report	Rene Galbavy Germany Staufen AG	The Relation of Automation with Other Areas of Planning in a Smart Factory		
14:45-	Invited	Meng KONG,	Explore FAUNC's Solution for		

15:10	Technical Report	SHANGHAI-FANUC Robotics CO., LTD.	Smart Manufacturing		
15:10-15:20	Tea Break				
15:20-15:45	Invited Technical Report	Gerd Holzschuh Austria Fronius	World Population Growth and Urbanization as the Driving Force to Welding Process Control 4.0	Xiangdong JIAO Ding FAN	Banquet Hall, DoubleTree by Hilton
15:45-16:10	Invited Technical Report	Sacks Boaz CEO Israeli Dexteris	Practical Cases Sharing of Industry-University-Research Cooperation on Agricultural Robot for Fruit Picking		
16:10-16:35	Invited Technical Report	Jens Fetzer Germany Cenit AG	Digital twin in Robotics Automation		
16:35-17:00	Invited Technical Report	BINZEL China Paul Luyeye	Innovative robotic solutions for both traditional articulated arm robots and new collaborative robots in gas metal arc welding.		
17:00-17:25	Invited Technical Report	Erbin LIU, GuangZhou Risong	The Application Tread of Intelligent Manufacturing System with Industrial Robotics		
17:25-18:00	Adjournment and Movement				
18:00-20:00	Banquet			Shanben CHEN, Erbin LIU	
Date: December 9th, 2018					
Time	Classification	Speaker	Topic	Chairs	Place
8:40-9:05	Keynote Speech	Makoto Kaneko, Osaka University:	Beyond Human Technology and its Robot Application	Xianmin Zhang Zengxi PAN,	Banquet Hall, DoubleTree by Hilton
9:05-9:30	Keynote Speech	Wei ZHOU, NTU, SG	Challenges in Development of Wall-Climbing Robots		
9:30-9:55	Keynote Speech	Yuming ZHANG UK, USA	Machine Learning Based Detection of Weld Joint Penetration from Weld Pool Reflection Images		
9:55-10:20	Keynote Speech	Xiaoqi CHEN UC, NZ	Robotic 3D Grinding for Superalloys		
10:20-10:30	Tea Break				
10:30-10:50	Keynote Speech	Heping CHEN TSU, USA	Optimal Welding Parameter Learning for Robotic Arc Welding Process	Dong Du Su WANG	Banquet Hall, DoubleTree by Hilton
10:50-11:10	Keynote Speech	Zengxi PAN, UW, AUS	Thermal behaviour in Wire Arc Additive Manufacturing: characteristics, effects, and control		
11:10-11:30	Keynote Speech	Ding FAN LUT	Progress and Trend of Intelligent Sensing and Control of Weld Pool in Arc Welding process		
11:30-11:50	Invited Speech	Wayne HU Springer Nature	Development of the Transactions on Intelligent Welding Manufacturing (TIWM)		
11:50-12:10	Keynote Speech	Shanben CHEN, SJTU	Hybrid Intelligence Problems in Intelligentized Welding Manufacturing Systems		
12:00-13:30	Lunch				
RWIA2018 Venue					
13:30-16:00	RWIA 2018 Invited Speech /	Baohua CHANG, THU	Research on the On-line Detection Technology for	Huang ZHANG	Guangzhou Hall,

	Selected Technical Report (15 minutes each)		automatic seam-tracking of T-joint from backside	Yonghua SHI	DoubleTree by Hilton
		Zhenmin WANG, Shisheng HUANG SCUT	Underwater Robot Welding and Additive Manufacturing		
		Liming LIU, DUT	Control Mechanism of Laser induced Arc and its Application in Welding		
		Hui GAO BIPT	The development of underwater friction welding technology,		
		Jiaxiang XUE SCUT	Study on unsteady numerical Simulation and process of Dual-pulse Welding		
		Guangjun ZHANG HIT	Research on GMA material augmentation and repair Technology of large chain Tooth Robot		
		Canfeng Zhou, BIPT	Study on Sub-sea Pipeline J-Lay Welding Technology		
		Guohong Ma, NCU	Image process and Ansys simulatiuon of DE-GMAW magnesium alloy		
		ZHAO Yaobang, SPMI	Application of laser intelligent welding technology in complicate aerospace components		
		Huabin CHEN, SJTU	In situ studies of full field strain/stress evolution in HAZ during arc welding process		
16:00-16:10	Tea Break				
	RWIA'2018 Selected Papers	Zhifen Zhang, XJTU	Selection of Arc Spectrum Features and Defect Recognition in GTAW Welding Based on Random Forest		
		Leilei Wang, SIMTech	A pathway to microstructural refinement through double pulsed GMAW		
		Ming Zhu, LUT	Mechanism of thermal-mechanical effect on molten metal and forming control of diode laser cladding		
		Gang Zhang, LUT	Modeling and optimization of adjustment of human welder on weld pool dynamics for intelligent robot welding		
		Di Wu SUES	Weld Penetration In-situ Prediction from Keyhole Dynamic Behavior Under Time-varying VPPA Weld Pools		
		Chao Chen, SJTU	Data driven Welding Expert System Based on Internet of Things		
CCRW2018 Venue					
13:30-14:00	Joint Meeting of Industry, University and Research	Risong, SCTU, SJTU, HIT, etc	Cooperation between production, college and research units to sign contract	Liu Erbin / Shanben Chen	Banquet Hall, DoubleTree by Hilton
14:00-14:30	Joint Meeting on Recruitment of Talents	Risong, SCTU, SJTU, HIT, etc	Talent job fair	Guangdong Official Representative	Banquet Hall, DoubleTree by Hilton
14:30-16:00	CCRW'2018 Invited Speech / Selected Technical Report (15 minutes each)	Dong Chun lin Chinese-Ukrainian Institute of Welding	Advanced Welding Technology & Automation	Jiangxiang XUE Wenhang LI	Banquet Hall, DoubleTree by Hilton
		Xu Shan CASICloud-Tech Data Institute (GD)	Internet &Cloud Computing Helps Robotic Intelligentized Manufacturing		
		Huajun Zhang ZPMC	Intelligent Welding Manufacturing Workshop for large lifting equipment Box girder		
		Pinchao Zhu	Flexible and Digital solution for		

		Cheng Welding Baoma	Automobile body Manufacturing	
		Wang Xin SinoMach IT	The Intelligent Welding Solution for Mild-Heavy Plates	
		Debin CHENG, GIGT	Copper Bar Intelligent Welding Technology and system	
16:00- 16:10	Tea Break			
16:10- 17:30	CCRW 2018 Selected Paper (10 minutes each)	Jiankang Huang, LUT	Study on technoogy and narrow gap application of swing TIG- MIG hybrid welding	Guangjun ZHANG Guohong MA
		Runquan Xiao, SJTU	Real time seam tracking system based on laser vision sensor	
		Wenyan Yang, LUT	Droplet transfer behavior and control of high-current GMAW	
		Zhanhui Zhang, SCUT	Profile map of weld beads and its formation mechanism in pulsed gas metal arc welding	
		Linbo zhang, LUT	Study on material transfer of additive manufacturing in bypass coupled GTAW	
		Nan Li, LUT	Double Electrode Micro-plasma Arc Welding Additive Manufacturing Control System	
		Jian Li, NCU	MIG Droplet Digital Image Dynamic Processing	
		Gang Li, SJTU	Study on Characteristics of Porosity Defects Based on Arc Spectral Information	
17:30- 18:00	Adjournment and Movement			
18:00- 20:00	Farewell Banquet		Xiangdong JIAO, Ding FAN	
20:00	Committee for excellent papers		Shanben CHEN	
Date : December 10th, 2018				
8:30- 12:00	Visit Guangzhou Development Zone and Robot Enterprises		Guobao TANG, Dongsheng Zhang	
12:00- 14:00	Lunch			
14:00	The End			

Note: The final program is subject to the version issued by the registration desk on December 7.