

SIP Additive Manufacturing International Workshop

Date: January 28-29th, 2020

Place: Tsukuba International Congress Center, room202 (Tsukuba, Ibaraki)

Time	Lap	Contents	Speaker
January 28th, 2020			
9:00	0:25	Arriving and Badging	
9:25	0:15	Opening address : Tetsuo Mohri Deputy Program Director, SIP "Materials Integration" for Revolutionary Design System of Structural Materials, JP	
9:40	0:10	Address by NIMS representative: Kazuhiro Hono Vice president, National Institute for Materials Science, JP	
9:50	0:10	Address from Industry: Shinya Imano Senior Manager, Mitsubishi Hitachi Power Systems, JP	
Session I : Additive Manufacturing			
10:00	1:00	Keynote lecture	Materials Ecosystem in Powder Bed AM Processes: Opportunities and Challenges, Behrang Poorganji, US
11:00	0:10	Break	
11:10	1:00	Keynote lecture	Advances in Modeling and Characterization of Additively Manufactured Materials, Peter Collins, Iowa State University, US
12:10	0:40	Invited lecture	Development of Superalloy MHA3300 for SLM Process with High Creep Strength and Ductility, Shinya Imano, Mitsubishi Hitachi Power Systems, JP
12:50	1:00	Lunch	
13:50	1:00	Keynote lecture	From Music to Sand Painting-the powder bed based multi-materials additive manufacturing, Shoufeng Yang, KU Leuven, BE, University of Southampton, UK
14:50	0:45	Invited lecture	Additive Manufacturing of High-strength crack-free Nickel based Hastelloy X, Quanquan Han, Cardiff University, UK
15:35	0:30	Invited lecture	Selective laser melting of austenitic alloys with high strength and high ductility, Zhongji Sun, Max Planck Institute for Iron Research GmbH, GER
16:05	0:15	Break	
16:20	0:30	Invited lecture	Interfacial defect formation mechanisms during laser powder bed fusion of Inconel-738LC superalloys, Avinash Hariharan, Max Planck Institute for Iron Research GmbH, GER
16:50	0:30	Invited lecture	Process Parameter Optimization for Preventing Solidification Cracking in Part Made by SLM Process, Houichi Kitano, NIMS, JP
17:20	0:30	Invited lecture	In-situ crack monitoring by acoustic emission method during selective laser melting process, Kaita Ito, NIMS, JP
17:50	0:40	Moving to banquet place	
18:30	2:00	Banquet	Banquet : Ciel Blue (Okura Frontier Hotel Tsukuba)
20:30	Adjourn		

Time	Lap	Contents	Speaker
January 29th, 2020			
Session II: ICME for Additive Manufacturing			
9:30	1:00	Keynote lecture	ICME & Materials Design for Additive Manufacturing Jiadong gong, QuesTek Innovations, US
10:30	0:10	Break	
10:40	1:00	Invited lecture	Modeling Additively Manufactured Superalloy Microstructures, Trevor Keller, National Institute of Standard and Technology, US
11:40	0:30	Invited lecture	Simulation and data analysis for powder-bed-fusion type additive manufacturing using electron beam, Kenta Aoyagi, Tohoku University, JP
12:10	0:50	Lunch	
13:00	1:00	Invited lecture	Advances in Numerical Modelling of Additive Manufacturing Processes, Tyler Alexander London, The Welding Institute, UK
14:00	0:30	Invited lecture	Prediction model of tensile properties with the microstructural features of SLMed Ti-6Al-4V based on an artificial neural network, Masahiro Kusano, NIMS, JP
14:30	0:20	Break	
14:50	1:00	Invited lecture	Assessing manufacturability and understanding material quality of Additive Manufacturing process through multi-scale and multi-physic simulation, Pierre-Adrien Pires, ESI Group, FRA
15:50	0:30	Invited lecture	Non-equilibrium multi-phase field model coupled with CALPHAD database for solidification microstructure evolution and melt flow influence, Sukeharu Nomoto, Nagoya University, JP
16:20	0:10	Closing: Makoto Watanabe, NIMS, JP	
16:30	Adjourn		

※ 本ワークショップは、SIP「統合型材料開発システムによるマテリアル革命」プロジェクトの研究開発活動の一環として実施されます。

