

PRESM2021 Program_tentative_June 08

*On-site & real-time streaming

Time	July 21 (Wed)	Time	July 22 (Thu)	Time	July 23 (Fri)
09:30-11:50	Focus session A : Smart Manufacturing Session Chair : Prof. Sangwon Lee & Dr. Seok Woo Lee	09:30-11:50	Focus session D : Advanced Micro/Nano Fabrications and Applications Session Chair : Prof. Jongbaeg Kim & Prof. Moon Kyu Kwak	09:20-10:50	Focus session G : Advanced Manufacturing for Hydrogen Society Session Chair : Prof. Young-Beom Kim
11:50-13:00	Lunch	11:50-13:00	Lunch	10:50-11:10	Break
13:00-13:50	Plenary Session : Dynamic Measurement to Characterize Machine Tools and Machining Process *Prof. Atsushi Matsubara (Kyoto University, Japan)	13:00-13:50	Plenary Session : Smart Manufacturing Development in Taiwan - from Academy to Industry *Prof. Hung-Yin Tsai (National Tsing Hua University, Taiwan) □	11:10-12:00	Plenary Session : Rotor Dynamics: A Classical Yet Challenging Issue in Rotating Machinery *Prof. Seong-Wook Hong (Kumoh National Institute of Technology, Korea)
13:50-14:00	Break	13:50-14:00	Break	12:00-13:00	Lunch
14:00-15:30	Focus session B : Bio-additive Manufacturing for Future Medicine Session Chair : Prof. In Hwan Lee & Prof. Hyun-Wook Kang	14:00-15:30	Focus session E : Field Robot and Industrial Applications Session Chair : Prof. Baeksuk Chu & Hyeong-Joon Ahn	13:00-14:40	Focus session H : Design for Additive Manufacturing Session Chair : Prof. Young Tae Cho & Prof. Seok Kim
15:30-15:50	Break	15:30-15:50	Break	14:40-15:00	Break
15:50-17:40	Focus session C : Korea-Germany Intelligent Manufacturing System Laboratory Session Chair : Prof. Sung-Hoon Ahn	15:50-17:40	Focus session F : Advanced Design and Materials in Additive Manufacturing Session Chair : Prof. Keun Park	15:00-16:00	PRESM 2021 Awards
				16:00-16:30	PRESM2022 & Farewell

*Online : One-way streaming on PRESM online website : available for whole 3days(July 21~23) of symposium

- General session : Oral & Poster presentations in 7 topics
- Special session : Oral & Poster presentations in 8 topics

PRESM2021_Focus session(on-site) program (tentative_0608)

July 21, Wednesday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Focus session A Smart Manufacturing Session Chair : Prof. Sangwon Lee & Dr. Seok Woo Lee	A-1	09:30-10:00	30	Keynote	David Rosen	Georgia Institute of Technology	USA	Smart Additive Manufacturing Process Chains
	A-2	10:00-10:30	30	Keynote	Chien-Hung Liu	National Chung Hsing University	Taiwan	New Development of Measurement Technology for CNC Machine Tools
	A-3	10:30-10:50	20	R1	Hongseok Choi	Clemson University	USA	Transient Temperature Measurement using Micro Thin Film Thermocouples in Friction Element Welding
	A-4	10:50-11:10	20	R2	Soo Jeon	University of Waterloo	Canada	Leveraging Domain Knowledge in Active Sampling for Bayesian Estimation
	A-5	11:10-11:30	20	R3	Martin B. G. Jun	Purdue University	USA	Human Skill and Knowledge Transfer for Smart Manufacturing
	A-6	11:30-11:50	20	R4	Hyo Young Kim	Korea Institute of Industrial Technology	Korea	Industrial Robotic Machining for Future Manufacturing Systems
		11:50-13:00	80	Lunch				

PRESM2021_Focus session(on-site) program (tentative_0608)

July 21, Wednesday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Plenary session		13:00-13:50	50	Plenary1	Atsushi Matsubara	Kyoto University	Japan	Dynamic Measurement to Characterize Machine Tools and Machining Process
		13:50-14:00	10	Break				

PRESM2021_Focus session(on-site) program (tentative_0608)

July 21, Wednesday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Focus session B Bio-additive Manufacturing for Future Medicine Session Chair : Prof. In Hwan Lee & Prof. Hyun-Wook Kang	B-1	14:00-14:30	30	Keynote	W. Hong Yeo	Georgia Institute of Technology	USA	Smart and Connected Soft Bioelectronics for Advancing Human Healthcare
	B-2	14:30-14:50	20	R1	Hyeonji Kim	POSTECH	Korea	Light-Activated Decellularized Extracellular Matrix-Based Bioinks for Volumetric Tissue Analogs in Centimeter-Scale
	B-3	14:50-15:10	20	R2	Hee-Gyeong Yi	Chonnam National University	Korea	Cancer-on-a-Chip Engineering with 3D Bioprinting
	B-4	15:10-15:30	20	R3	Hyun-Wook Kang	Ulsan National Institute of Science & Technology	Korea	3D printing of a Programmable Local Drug Delivery System for Personalized Medicine
		15:30-15:50	20	Break				

PRESM2021_Focus session(on-site) program (tentative_0608)

July 21, Wednesday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Focus session C Korea-Germany Intelligent Manufacturing System Laboratory Session Chair : Prof. Sung-Hoon Ahn	C-1	15:50-16:20	30	Keynote	Henning Janssen	Fraunhofer IPT	Germany	Digital Enhanced Production Systems for the Processing of Advanced Materials for future Energy Applications
	C-2	16:20-16:40	20	R1	Arno Schmetz	Fraunhofer Institute for Production Technology IPT	Germany	Dataset Sustainability and Hybrid Data Management for Heterogenous Prototype-like Productions
	C-3	16:40-17:00	20	R2	Kui-Kam Kwon	Seoul National University	Korea	Depth Profile Prediction of Glass Microstructures Using Near-Infrared Laser-Induced Backside Wet Etching
	C-4	17:00-17:20	20	R3	Young-Jun Jeon	Seoul National University	Korea	Diffraction Structural Color Strain Sensor and Its Sensing Method Using Image Processing Algorithm
	C-5	17:20-17:40	20	R4	Soo-Ho Jo	Seoul National University	Korea	Phononic Crystals for Elastic Wave Energy Localization and Harvesting

PRESM2021_Focus session(on-site) program (tentative_0608)

July 22, Thursday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Focus session D Advanced Micro/Nano Fabrications and Applications Session Chair : Prof. Jongbaeg Kim & Prof. Moon Kyu Kwak	D-1	09:30-10:00	30	Keynote	L. Jay Guo	University of Michigan	USA	From Nanoimprint back to Photolithography for Scalable Nanopatterning
	D-2	10:00-10:30	30	Keynote	Keisuke Nagato	The University of Tokyo	Japan	Micro/Nanoreplication Technologies of Material Surfaces and their Applications
	D-3	10:30-10:50	20	R1	Yudi Rahmawan	Universitas Pertamina	Indonesia	Solar Powered-organic Wastewater Purification by a Photocatalytic Effect of Copper Oxides Spinel Phase
	D-4	10:50-11:10	20	R2	Jong G. Ok	Seoul National University of Science & Technology	Korea	Fab-less Fab: Lithography-free Nanopatterning and Vacuum-free Thin-film Architecturing
	D-5	11:10-11:30	20	R3	Tae-il Kim	Sungkyunkwan University	Korea	Lithography-free Strain Gauge Sensors inspired by Spider's Vibration Receptor
	D-6	11:30-11:50	20	R4	Hoon Eui Jeong	Ulsan National Institute of Science & Technology	Korea	Magneto-responsive Dynamic Structures for Active Droplet Control
		11:50-13:00	80	Lunch				

PRESM2021_Focus session(on-site) program (tentative_0608)

July 22, Thursday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Plenary session		13:00-13:50	50	Plenary2	Hung-Yin Tsai	National Tsing Hua University	Taiwan	Smart Manufacturing Development in Taiwan - from Academy to Industry
		13:50-14:00	10	Break				

PRESM2021_Focus session(on-site) program (tentative_0608)

July 22, Thursday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Focus session E Field Robot and Industrial Applications Session Chair : Prof. Baeksuk Chu & Hyeong-Joon Ahn	E-1	14:00-14:30	30	Keynote	Jayil Jeong	Kookmin University	Korea	A Framework for safety evaluation of automated vehicles
	E-2	14:30-14:50	20	R1	Changwon Kim	Pukyong National University	Korea	User Intention based Intuitive Mobile Platform Control: Application to a Patient Transfer Robot
	E-3	14:50-15:10	20	R2	Dongil Choi	Myongji University	Korea	Development of Autonomous Delivery Robot using Model Predictive Control
	E-4	15:10-15:30	20	R3	Jangho Bae	Kyunsung University	Korea	Human-Robot Collaboration System for Heavy Material Handling
	E-5	15:30-15:50	20	R4	Baeksuk Chu	Kumoh National Institute of Technology	Korea	Development of a Mist Spraying Robot for Suppressing Dust at Construction Fields
		15:50-16:10	20	Break				

PRESM2021_Focus session(on-site) program (tentative_0608)

July 22, Thursday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Focus session F Advanced Design and Materials in Additive Manufacturing Session Chair : Prof. Keun Park	F-1	16:10-16:40	30	Keynote	Eujin Pei	Brunel University London	UK	Design and Data Standards for Additive Manufacturing
	F-2	16:40-17:00	20	R1	Yeong-Jin Choi	Korea Institute of Materials Science	Korea	Development of Functionally Graded Material Insulating Spacer for Gas-insulated Switchgear using Radial Ceramic Additive Manufacturing
	F-3	17:00-17:20	20	R2	Cong Hong Phong Nguyen	Chung-Ang University	Korea	Stress-based Optimum Design of Metallic Additively Manufactured Functionally Graded Cellular Structure
	F-4	17:20-17:40	20	R3	Howon Lee	Seoul National University	Korea	Multi-material 3D Printing Stimuli-Responsive Materials and Its Applications

PRESM2021_Focus session(on-site) program (tentative_0608)

July 23, Friday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Focus session G Advanced Manufacturing for Hydrogen Society Session Chair : Prof. Young-Beom Kim	G-1	09:20-09:50	30	Keynote	Minhwan Lee	University of California, Merced	USA	Big Trend and Enabling Technologies Toward Hydrogen Society
	G-2	09:50-10:10	20	R1	Wonjong Yu	University of California-San Diego	USA	Nanostructured Electrode fabricated by Co-Sputtering for a Direct Methane Solid Oxide Fuel Cell operated under 500 °C
	G-3	10:10-10:30	20	R2	Gui Zun Cao	Shenzhen Hynovation Technologies Co., Ltd.	China	It will be announced soon
	G-4	10:30-10:50	20	R3	Jihwan An	Seoul National University of Science & Technology	Korea	It will be announced soon
		10:50-11:00	10	Break				

PRESM2021_Focus session(on-site) program (tentative_0608)

July 23, Friday		Time	PT	Role	Presenter	Affiliation	Nations	Title
Plenary session		11:10-12:00	50	Plenary3	Seong-Wook Hong	Kumoh National Institute of Technology	Korea	Rotor Dynamics: A Classical Yet Challenging Issue in Rotating Machinery
		12:00-13:00	60	Lunch				

PRESM2021_Focus session(on-site) program (tentative_0608)

July 23, Friday		Time	PT	Role	Presenter	Affiliation	Nations	Title	
Focus session H Design for Additive Manufacturing Session Chair : Prof. Young Tae Cho & Prof. Seok Kim	H-1	13:00-13:30	30	Keynote	Sang-Hoon Nam	MIT	USA	Toward Multiscale 3D-Printed Microlattices: Materials, Characteristics, and its applications	
	H-2	13:30-14:00	30	Keynote	Yukie NAGAI	Tokyo Metropolitan University	Japan	Product-based Shape Modeling Technologies by 3D Scanning for Next Generation Manufacturing	
	H-3	14:00-14:20	20	R1	Young Tae Cho	Changwon National University	Korea	Mechanical Properties of 3D-printed Microlattice Structures	
	H-4	14:20-14:40	20	R2	Keun Park	Seoul National University of Science & Technology	Korea	Programmed Printing Paths for Thermoresponse 4D Printing	
		14:40-15:00	20	Break					
		15:00-16:00	60	PRESM 2021 Awards					
		16:00-16:30	30	PRESM2022 & Farewell					