

# KIM–JIM Symposium

Room 105, October 27(Thu), 09:00~17:05

Time	Details	Speaker	Affiliation	Title	Chair
09:00~09:05	Welcome address	KIM President	KIM		Korea (Chang Yong Jo*(KIMS))
09:05~09:10		JIM President	JIM		
09:10~09:35	Keynote lecture	Jeong Lak Sohn	Korea Institute of Machinery & Materials(KIMM)	Recent Advances in Gas Turbine Technologies for Power Generation	
09:35~10:00		Haruyuki Inui*	Kyoto University	Ambient-temperature plasticity of high-temperature hard materials at micron-meter size scales	
10:00~10:10	Commemorative photo shoot & Break(10 min)				
10:10~10:30	Superalloy session	Ikuo Okada	Mitsubishi Heavy Industry Co. Ltd	Ni Base Superalloy for Industrial Gas Turbine	Japan (Haruyuki Inui*)
10:30~10:50		Je Hyun Lee	Changwon National University	Peritectic Solidification in Ni Base Superalloys	
10:50~11:10		Yoshinori Murata	Nagoya University	Importance of microstructural homogeneity and stability for long-term creep strength in nickel based single crystal superalloys	
11:10~11:20	Break(10 min)				
11:20~11:40	Superalloy session	Baig-Gyu Choi	Korea Institute of Materials Science(KIMS)	Effects of Alloying Elements on Microstructure and Creep Properties of Ni-base Superalloys	Japan (Seiji Miura)
11:40~12:00		Katsushi Tanaka	Kobe University	Effect of internal stress fields on the microstructural evolution in Ni-base superalloys	
12:00~12:20		Hyun Uk Hong	Changwon National University	A New Approach to Both Intra- and Intergranular Strengthening of Ni-Based Superalloys and Their Underlying Mechanisms	
12:20~13:30	Lunch				
13:30~13:50	Superalloy session	Yuhki Tsukada	Nagoya University	Three-dimensional phase-field simulation of rafting in a nickel-based superalloy	Korea (In-Soo Kim(KIMS))
13:50~14:10		Changheui Jang	Korea Advanced Institute of Science and Technology(KAIST)	Diffusion Bonding of the Wrought Ni-base Superalloys for High Temperature Application	
14:10~14:30		Hiroyuki Y. Yasuda	Osaka University	Fe-Based Superalloys Strengthened by B2-Type Precipitates	
14:30~14:50		Dae Won Yun	KIMS	The Effect of Ta on the High Temperature Oxidation of Ni-base Superalloys	
14:50~15:15	Break(25 min)				
15:15~15:35	Characterization, processing and alternative materials	Sunghun Lee	KIMS	Structure and thermal conductivity of 7-YSZ ceramic coating prepared by EB-PVD	Korea (Je Hyun Lee)
15:35~15:55		Hideyuki Murakami	National Institute for Materials Science(NIMS)	Oxidation Resistant Coating Activities at Research Center for Structural Materials	
15:55~16:05	Break(10 min)				
16:05~16:25	Characterization, processing and alternative materials	Pyuck-Pa Choi	KAIST	Atom Probe Tomography of superalloys	Japan (Yoshinori Murata)
16:25~16:45		Seiji Miura	Hokkaido University	Microstructure control of Nb-Si alloys for improving properties	
16:45~17:05		Doo Soo Kim	KEPCO Research Institute	Installation of reliability test facility for gas turbine blade in KEPCO RI	

\* Organizers of KIM–JIM symposium