

2012 Spring National Meeting of Japan Thermal Spray Society 18-19 June, 2012 (Rijyo Kaikan, HIROSHIMA, JAPAN) Technical Program

Monday 18 June

9:00 Opening Remarks				
9:10-10:25 Cold Spray · Warm Spray (I)		Chair : Motohiro Yamada		
Exhibition of Exchange Meeting (Photo Contest)	101	Development of High-Pressure Warm Spray Technology Assisted by Supporting Industry Project	Plasma Giken Co. Ltd " Kagoshima University NIMS " "	○Naoyuki Ohno Hiroataka Fukanuma Hiroshi Katanoda Seiji Kuroda Makoto Watanabe Osamu Ohashi
	102	Design of High-Pressure Warm Spray Gun and Calculation of Particle Behavior	Kagoshima University Plasma Giken Co. Ltd "	Hiroshi Katanoda ○Bo Sun Naoyuki Ohno
	103	Measurement of In-flight Particles in High-Pressure Warm Spraying by the PIV Method	NIMS " Plasma Giken Co. Ltd "	○Hiroshi Araki Seiji Kuroda Naoyuki Ohno Bo Sun
	104	Coatings Fabrication of Titanium Alloys by High-Pressure Warm Spray	NIMS " " Plasma Giken Co. Ltd	○Rafal Molak Hiroshi Araki Seiji Kuroda Naoyuki Ohno
	105	Development of TiO ₂ Film for Dye Sensitized Solar Cell by Cold Spray Technique	Tohoku University " "	Kazuhiro Ogawa ○Tatsuya Murakami Gyouki Gai
10:35-12:05 General Meeting of Award Ceremony				
--- Lunch Break ---				
13:00-14:00 Special Lecture		Historical Role of TAIRA no KIYOMORI and the Seto Inland Sea	Hiroshima Prefectural Museum Yasuyuki Suzuki	
--- Break ---				
14:10-15:25 Cold Spray · Warm Spray (II)		Chair : Kazuhiko Sakaki		
	106	Influence of powder compressive strength and substrate of cold spray deposition	Iwate Industrial Research Institute " "	○Tetsuya Sonoda Takayuki Kuwashima Takashi Saito
	107	Study on heat tradability of cold sprayed copper coatings	Tohoku University Graduate school, Tohoku University Tohoku University "	○Yuji Ichikawa Yusuke Watanabe Isamu Nonaka Hideo Miura
	108	Fabrication of Cr/Cu Composite Powder And Coating Deposition Using Cold Spray Method	Graduate school, Toyohashi University of Technology " Hitachi Research Laboratory, Hitachi, Ltd. Toyohashi University of Technology	○Shuta Yoshino Shigeru Kikuchi Kazutaka Okamoto Motohiro Yamada Masahiro Fukumoto
	109	Influence of Particle Velocity on The Adhesive Strength of Cold-sprayed Coatings	Plasma Giken Co. Ltd " "	○Renzhong Huang Yoshihito Araki Hiroataka Fukanuma
	110	Fundamental Study of Stress Corrosion Cracking Resistant Cold Sprayed Coatings	Tohoku University "	Kazuhiro Ogawa ○Yuji Ozawa
--- Break ---				
15:35-17:05 Organized Session "Suspension/Solution Precursor Plasma Spray Process (SPS/SPPS)"				
OS1 Introduction to Suspension Plasma Spray Process Suzuki Masato (AIST)				
OS2 Application of Metal Nanoparticles Slurry into Plasma Spraying Process Tasaki Satoko, Kirihara Soshu (JWRI, Osaka Univ.)				
OS3 Ceramic Film Deposition by Solution Precursor Plasma Spray (SPPS) Yasutaka Ando (Ashikaga Institute of Technology)				

9:00-10:15 Spray Process		Chair : Kazuhuro Ogawa	
201	The Characterization of WC-Fe Alloy Coating Deposited by Cold Spray	Fujimi Incorporated " " Tohoku University	○Kazuto Satou Haruhiko Furukawa Junya Kitamura Kazuhiro Ogawa
202	Application of Metal Nanoparticles Slurry into Plasma Spraying Process	Joining and Welding Research Institute, Osaka University Graduate School of Engineering, Osaka University Joining and Welding Research Institute, Osaka University	○Soshu Kirihara Yousuke Itakura Satoko Tasaki
203	Si ₃ N ₄ Ceramics Coating by Slurry Mist System Thermal Plasma Spray	Joining and Welding Research Institute, Osaka University Graduate School of Engineering, Osaka University Joining and Welding Research Institute, Osaka University	○Satoko Tasaki Yousuke Itakura Soshu Kirihara
204	Fabrication of Fine Alumina Coatings on Stainless Steel Substrates by Using Thermal Nanoparticle Spraying of a Slurry Atomizing Type	Graduate School of Engineering, Osaka University Joining and Welding Research Institute, Osaka University "	○Itakura Yusuke Tasaki Satoko Kirihara Soshu
205	Effect of the Addition of the WC shot of Powders on Mechanical Properties of WC-10mass%Co-4Cr coatings by High Velocity Air Fuel Spraying	Shinshu University Graduate School, Shinshu University " " Fujimi Incorporated " " New Metals and Chemicals Corporation, Ltd.	○Kazuhiro Sakaki Masami Kato Hidenori Miyajima Kazuto Satou Junya Kitamura Toshiki Takamatsu
--- Break ---			
10:25~11:55 Reactive Spray and New Process		Chair : Satoru Takahashi	
206	Effect of Mass of Metal in Organic Metal Complex on Flame Spray to Film Configuration	Nagaoka University of Technology " " " Chubu Chelest Co., Ltd. Nippon Steel Hardfacing Co., Ltd " " Nagaoka University of Technology " "	○Sekiya Tetsuo Shirai Tomoyuki Toyama Ayumu Hasebe Yasuhiro Nakamura Atsushi Masahiro Noguchi Yu Li Shigeo Ohshio Hiroki Akasaka Hidetoshi Saitoh
207	Deposition of Photo-catalytic Titanium Oxide Particles on Resin Substrate by Atmospheric Thermal Spray Using Vortex Plasma	Ashikaga Institute of Technology	○Yasutaka Ando
208	Formation of AlN Film Deposited with Supersonic Free-Jet PVD	Shibaura institute of Technology " Hitachi Ltd., Yokohama Research Laboratory "	○Yukari Maeno Atsushi Yumoto Kazuaki Naoe Masashi Nishiki
209	Reactive Plasma Spraying of AlN/Al ₂ O ₃ Feedstock Powder upon Fabrication of AlN coating	Toyohashi University of Technology " " "	○Mohammed Shahien Motohiro Yamada Toshiaki Yasui Masahiro Fukumoto
210	Theoretical Consideration for Fabricating IR Filters, And Demonstration of Deposition And Optical Properties of Film by Aerosol Deposition	AIST " " " "	○S. Hirose H. Tsuda Y. Ezuka M. Kobiyam Akedo
211	Infrared Transmitting Ceramic Coatings Fabricated by Aerosol Deposition	AIST " NEC AIST	○Jun Akedo Hiroki Tsuda Keishi Ohashi Shingo Hirose
--- Lunch Break ---			
13:10-14:25 Thermal Spray Property and Evaluation Method		Chair : Yasutaka Ando	
212	Corrosion Fatigue in Aqueous Solution of WC/Hastelloy Coated Mild Steel	Hiroshima Institute of Technology Graduate school, Hiroshima Institute of Technology IZUMI FOOD MACHINERY Co.,Ltd Hiroshima Institute of Technology " " "	Yoshiko Shinhara ○Toshiyuki Kayamoto Yuzo Kono Kozo Ohtani Chiharu Fukushima Rongguang Wang Mitsuo Kido
213	Cavitation Erosion Property of HVOF Sprayed WC Cermet Coatings	TOCALO Co., Ltd. Thermal Spray Technology R&D Laboratories	○Yuhei Ohide Akihiro Kannno Yoshifumi Kobayashi Kazumi Tani
214	Investigation of Adhesion Test for HVOF Cermet Coatings by 4 point bending	Niigata Institute of Technology Graduate school, Niigata Institute of Technology	○Yasuhiro Yamazaki Takahiro Sakai
215	Estimation of Cracks in Ceramic Coatings During Plasma Spraying - Measurement by Laser AE Method -	The University of Tokyo " NIMS " " The University of Tokyo	○Kaita Ito Hitoshi Kuriki Hiroshi Araki Seiji Kuroda Manabu Enoki
216	Estimation of Cracks in Ceramic Coatings During Plasma Spraying - Elastic-plastic Analysis by FEM -	The University of Tokyo " NIMS " " The University of Tokyo	○Hitoshi Kuriki Kaita Ito Hiroshi Araki Seiji Kuroda Manabu Enoki
--- Break ---			
14:35-15:50 Thermal Spray Property and Evaluation Method/Pre-treatment and Post-treatment		Chair : Kazuto Sato	
217	Development of removal technology of ceramic sprayed coating by water jet method	University of Yamanashi " " Tokyo Metallikon Co.,Ltd	Kohei Nishida Masanobu Nakamura ○Keiji Sonoya Naotaka Seki
218	Development of Blasting Alternative Technology by Atmospheric Arc Treatment Process	Ashikaga Institute of Technology, Collaborative Research Center	○Yoshimasa Noda
219	Combined Low Temperature Plasma Treatment for Sprayed SUS316L Coating	Technology Research Institute of Osaka Prefecture "	○Shinichiro Adachi Nobuhiro Ueda
220	Effect of Polishing Conditions on Porosity of Thermally Sprayed Ceramic Coating Measured by Image Analysis	Tokyo Metropolitan University National Institute for Material Science " " Tokyo Metropolitan University	○Kensuke Haba Seiji Kuroda Hiroshi Araki Satoru Takahashi
221	A Novel Optical Angle Sensor for Detection of Surface Condition	Hiroshima Institute of Technology " " "	○Kozo Ohtani Takeshi Tanaka Chiharu Fukushima Mitsuo Kido
16:00 Closing Remarks			