2015 JTSS Fall Meeting

12-13 November, 2015(Hall of Promotion of Machine Industry,Tokyo,JAPAN)

Technical Program

12, November, 2015

9:30-9:40	**Opening Remarks**			
9:40-11:00	**Session 1 : Cold Spray / Warm Spray**	Chair		Takayuki KUWASHIMA
101	Gas-dynamic Estimation of Mixing Stagnation Temperature of Cold Spray Process	Kagoshima University 〃 〃 AIST	○	Hiroshi KATANODA Keita ITAGAKI Akira FUKUDA Hiromitsu MORITA
102	A Study on Void Formation Mechanism of Cold Spray Copper Coatings after the Heat Treatment	NHK Spring Co., Ltd.	○	Yuichiro YAMAUCHI
103	Optimization of the Shape of Rectangular Cross-Section Nozzle in High-Pressure Cold Spray (Influence of Nozzle Length of Each Section)	Graduate School, Shinshu Univ Shinshu Univ 〃 〃	○	Shinji ARAI Kazuhiko SAKAKI Tatsuyuki TAGAMI Takashi TSUCHIDA
104	Warm Spraying of High Strength Ni-Al-Bronze for Cavitation Protection	NIMS Humburg University 〃 NIMS Kagoshima University Humburg University 〃	○	Seiji KURODA Sebastian KREBS Simon FREDE Hiroshi ARAKI Hiroshi KATANODA Frank GAERTNER Thomas KLASSEN
	--- Break (11:00-11:10) ---			
11:10-12:10	**Session 2 : Corrosion Protection**	Chair		Yasutaka ANDO
105	Effect of Additional Elements for Sprayed Anticorrosive Aluminum Coating	Technology Research Institute of Osaka Prefecture Osaka Prefecture University Graduate School 〃 〃 〃 Kanmeta Engineering Co., Ltd.	○	Shinichiro ADACHI Tomokazu HIGUCHI Hiroyuki INOUE Tokuteru UESUGI Kenji HIGASHI Syuichi UENO
106	A Long Term Exposure Testing of Thermal-Sprayed Al, Zn and Zn-Al Coatings in Marine Environment	National Maritime Research Institute Tokyo Metropolitan University National Institute for Materials Science	○	Susumu UEMATSU Satoru TAKAHASHI Seiji KURODA
107	Corrosion Resistance of Zn-Ti pseudo alloy spraying.	Graduate School of Kansai University Kansai University Kurimoto, LTD 〃	○	Nobusato KISHI Toru MARUYAMA Takahiro SAKAI Yoshinobu YAMADA
	--- Lunch Break (12:10-13:10) ---			
13:10-14:30	**Special Lecture I**	Chair		Kunihiko WADA
	Applications and Challenges of Thermal Spray Technology for Aero Engine Industry	IHI Corporation		Nobuyoshi MORI
	Applications and Challenges of the Thermal Spraying for Glass-Ceramics Industry	Research Center, Asahi Glass Co., Ltd		Kazuo HAMASHIMA
	--- Break (14:30-14:40) ---			
14:40-15:20		Chair		Kazuya FUJIMORI
	Presentation by Exhibitor			
	--- Break (15:20-15:30) ---			
15:30-17:10	**Session 3: New Process**	Chair		Masato SUZUKI
108	Dielectric Strength of SiC Film Fabricated by Supersonic Free-Jet PVD	Graduate School of Engineering and Science, Shibaura Institute of Technology Shibaura Institute of Technology Nippon Fusso Co., Ltd	○	Kaito TAKAGI Atsushi YUMOTO Naoki FUKUMURA
109	Soft-magnetic Properties of Iron-base Alloy Films Deposited with Supersonic Free-Jet PVD	Graduate School of Engineering and Science, Shibaura Institute of Technology Shibaura Institute of Technology	○	Masahiro YAMAMOTO Atsushi YUMOTO
110	Visualization of the Effects of Particle Impact Angle in the Aerosol Deposition Method	Toyohashi University of technology 〃 〃	○	Junichi MIYASHITA Masahiro FUKUMOTO Motohiro YAMADA
111	Fabrication of Electrically Conductive Film on Polymer Base Material by Low-power Microwave Atmospheric Pressure Plasma Spraying Method	Toyohashi University of technology 〃 Mitsui Kinzoku ACT Corporation Toyohashi University of technology	○	Keisuke YAMADA Toshiaki YASUI Mayuko TSURUTA Masahiro FUKUMOTO
112	Influence of Material Feeding Behavior on Suspension Plasma Spraying	Oerlikon Metco 〃 〃 〃	○	Kazuya FUJIMORI Toshiyuki YAMANE Junya KITAMURA Tetsuyoshi WADA
	--- Break (17:10-17:20) ---			
17:20-17:50	Introduction and Report of Suppoet Program for Young Member	Chair		Takayuki KUWASHIMA
18:10-19:30	**Banquet**	Chair		Masaya NAGAI

Poster and exhibition session & photo contest

13, November, 2015

9:00–10:20	**Session 4 : New Material**	Chair		Shingo HIROSE	Poster and exhibition session
201	Amorphous Thermal Spray Coating with Hard Materials Exhibiting Cleavage Fracture	Nakayama Amorphous Yoshikawa Kogyo The university of Tokyo	○	Toshiharu MORIMOTO Takashi KUMAI Jun YANAGIMOTO	
202	Feasibility Study of Metallic Coatings on High Thermal Conductive Graphite Using Low-Temperature Plasma Spray	Tohoku Univ. Startack Co., Ltd, Thermo Graphitics Co., Ltd Tohoku Univ 〃	○	Kenta HIRAYAMA Akira NARITA Katsuhiro CHIKUBA Yuji ICHIKAWA Kazuhiro OGAWA	
203	Fabrication of Y_2O_3 Coating on C-FRP	Toyohashi University of Technology graduate student Toyohashi University of Technology 〃 〃	○	Hiroyuki TOKUYAMA Amirthan GANESAN Motohiro YAMADA Masahiro FUKUMOTO	
204	Microstructure and Mechanical Properties of Warm Spray Titanium Coating on CFRP Substrate	Toyohashi University of technology 〃 〃 〃	○	Takuma OKADA Masahiro FUKUMOTO Motohiro YAMADA Ganesan AMIRTHAN	
	--- Break (10:20-10:30) ---				
10:30–11:30	**Session 5 : Microstructures and Properties I**	Chair		Atsushi YUMOTO	
205	Microstructural Evolution during Fusing and CCT Diagram of Ni-based Self-fluxing Alloy	Graduate Student, Kyushu Institute of Technology Kyushu Institute of Technology 〃	○	Kazuki YOSHIDA Tatsuya TOKUNAGA Hidenori ERA	
206	Influence of Phosphorus on the Solidification Temperature of Nickel-base Self-fluxing Alloy	Kansai University 〃 Nomura Plating Co, Ltd 〃	○	Masaaki INAZUMI Toru MARUYAMA Keizi NAKAI Yasushi KITAMURA	
207	Influence of Spray Gun Nozzle Geometry on Mechanical Properties of WC-10%Co-4%Cr Coatings Prepared by High Velocity Air Fuel Spraying (Influence of Divergent Length)	Graduate School, Shinshu Univ Shinshu University Graduate School, Shinshu Univ Shinshu University Fujimi Incorporated	○	Katsura OZAKI Kazuhiko SAKAKI Naoki HANAOKA Daiki HARADA Kazuto SATO	
	--- Lunch Break (11:30-12:30) ---				
12:30–13:20	**Special Lecture II** Application of the Spray Coating Technology to an Automobile Engine	Chair NISSAN Motor Co.,Ltd. 〃		Kazuhiko SAKAKI Hidenobu MATSUYAMA Eiji SHIOTANI	
	--- Break (13:20-13:30) ---				
13:30–15:10	**Session 6 : Deposition Mechanism**	Chair		Makoto WATANABE	
208	The Effect of Wetting between Molten Particle and Substrate on Plasm Sprayed Particle Flattening Behavior	Toyohashi University of technology 〃 〃	○	Natsuki MAEDA Wei Boyi Masahiro FUKUMOTO	
209	In situ Observation of Arc Spraying Phenomenon using High Speed Camera	Tokyo Metropolitan University National Maritime Research Institute Photron Ltd. 〃	○	Satoru TAKAHASHI Susumu UEMATSU Takashi TANAKA Kosaku SAITO	
210	Improvement of Precision of a System Simultaneously Measuring Velocities and Temperatures of Spray Particles	National Institute of Technology, Oshima College Yamaguchi University Chugoku Electric Power 〃	○	Hideki SASAOKA Satoshi SAKIYAMA Sakae IMADA Makoto TANAKA	
211	Development of Particle Measurement System in Thermal Spray Process	Plazwire Co. Ltd 〃 〃 Kyushu University	○	Masafumi YAMASAKI Yasuyuki KAWAGUCHI Katsunori MURAOKA Yukihiko YAMAGATA	
212	Prototype Learn Support System with Haptic Sense for Obtaining Hand Thermal Spraying Techniques	AIST 〃	○	Shingo HIROSE Yukitoshi EZUKA	
	--- Break (15:10-15:20) ---				
15:20–16:20	**Session 7 : Properties II**	Chair		Yasunari ISHIKAWA	
213	Examination of Corrosion Rresistance of the Alumina Spray Deposit Characteristic formed in an Inside Diameter Part	Shinco Metalicon Co.,Ltd 〃 〃 〃 〃	○	Tadashi OSAKO Motoyuki KONDO Yasushi NOMURA Mitsuru YOSHIDA Yutaka TATEISHI	
214	High temperature oxidation properties and mass changes of CoNiCrAlY alloy powders	Tocalo Co., Ltd. 〃 Tokyo University of Science	○	Tatsuo SUIDZU Syun NISHIZAKO Masayuki ARAI	
215	Porosity and Thermal Xonductivity of Plasma Aprayed Zirconia Coatings	Tokyo Metropolitan University 〃 National Institute of Advanced Industrial Science and Technology Tocalo Co., Ltd. 〃 Nippon Steel & Sumikin Technology Co., Ltd.	○	Satoru TAKAHASHI Minako YOKOTA Megumi AKOSHIMA Akihiro KANNO Tatsuo SUIDZU Takashi TANAKA	
16:20–16:30	**Best Presentation Awarding and Closing Remarks**				