

# 2014 JTSS Fall Meeting

5-6,November,2014 (Hall of Toyohashi ARTS Theatre PLAT,Aichi, JAPAN)

## Technical Program

5,November,2014

9:50~10:00 Opening Remarks			
10:00~11:00 Session1 : Spray Process/Equipment and Associated Equipment(I) Chair: Hiroshi KATANODA			
101	Preparations and Evaluation of Si anode for Next-Generation Li-ion Battery by Supersonic Free-jet PVD Process	Graduate School of Shinshu University Shinshu University Shibaura Institute of Technology	○Ryota NAKANISHI Kazuhiko SAKAKI Junichi NAKAMURA Atsushi YUMOTO
102	Development of hybrid thermal spray coating technology treated by KURACERA®	Kurashiki Boring Kiko Co.,Ltd. "	○Yukinobu MAKINO Nobuaki SAKODA Sayaka SAKO
103	Trial on hard ceramic coatings by cascaded arc plasma spraying	Oerlikon Metco (Japan) Ltd. "	○Junya KITAMURA Kazuya FUJIMORI Mitsumasa SASAKI Tetsuyoshi WADA
11:00~11:10 --- Break ---			
11:10~12:10 Session2 : Cold Spray/Warm Spray(I) Chair: Yasuhiro YAMAZAKI			
104	Simulation of Coating Shape in Cold Spray Deposition	FUKUDA METAL FOIL & POWDER Co.Ltd. " Northeastern University	○Yukitaka HAMADA Katsunori OTOBE Shinichi NISHIMURA Yangfan LI Teiichi ANDO
105	Effects of Various Parameters on Calculated Particle Velocity of Cold Spray	Kagoshima University AIST Hokkaido	○Hiroshi KATANODA Hiromitsu MORITA
106	Study on the microstructure of bonding interface caused by the high velocity collision of the duralumin single projectile with metal targets	Fujikikosan Corp " " " NAC Image Technoloe Inc. Fukuoka Industrial Technology Center Kyushu Institute of Technology " " " "	○Kazunori SAKATA Koji TAGOMORI Naoki SUGIYAMA Daisuke OKA Yasuhiro SHINYA Hiroyasu SASAKI Yoshito KOGA Yasuhiro AKAHOSHI Takao KOURA Koichi NORIMATSU Yosuke FUJIMURA Yuki FUKUDA
12:10~13:10 --- Lunch Break ---			
13:10~14:10 Special Lecture Chair: Hideo TATCIKAWA			
Maglev and superconducting technology		Railway Technical Research Institute	Masayuki AIBA
14:10~14:20 --- Break ---			
14:20~15:40 Session3 : Texture · Structure/Coating property and Evaluation method(I) Chair: Motohiro YAMADA			
107	Edge design of thermal barrier coating by paying attention to stress singularity	Tocalo Co.,Ltd	○Yoshiyasu ITO
108	25 year exposure test of thermal sprayed Zn, Al, and Zn-Al coatings in marine environments	National Institute for Materials Science National Maritime Research Institute Soken Tecnix Co. Ltd. Tokyo Metallikon Japan Association of Corrosion Control	○Seiji KURODA Susumu UEMATSU Kei KATO Yasuhiro ICHIRYU Hiroshi SAITOH
109	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 Sliding Wear Behavior)	Graduate School of Science and technology, Shinshu University Shinshu University " Fujimi Incorporated Shinshu University	○Katsura OZAKI Kazuhiko SAKAKI Naoki HANAOKA Kazuto SATO Takashi HOSONO
110	A novel method of Shear Test to measure Adhesion by Compressive loading	Niigata Institute of Technology	○Yasuhiro YAMAZAKI
15:40~15:50 --- Break ---			
15:50~16:50 Symposium Past, Present, and Future Activities of Japan Thermal Spray Society Chair: Tomoko KOSAKI			
SP1	History of JTSS and Thermal Spray Technology in Japan	Japan Thermal Spray Society	Kazuo UENO
SP2	Japan Thermal Spraying Society -Transition Age to Academic Society-	Toyota Technological Institute	Yoshiki TSUNEKAWA
SP3	Overview and future prospects of thermal spray technology and directions for the Japan Thermal Spray Society	President of JTSS Vice-president of JTSS	Masahiro FUKUMOTO Seiji KURODA Kazuhiko SAKAKI
16:50~16:55 --- Break---			
16:55~17:40 Panel discussion Promising Thermal Spray Technology and Applications Chair: Tomoko KOSAKI			
			Masahiro FUKUMOTO Kazuo UENO Yoshiki TSUNEKAWA Seiji KURODA Kazuhiko SAKAKI Yutaka TATEISHI
17:40~17:50 --- Break ---			
17:50~19:50 Banquet			

Poster and exhibition session

6,November,2014

9:30~10:30 Session4 : Spray Process/Equipment and Associated Equipment(II) Chair: Junya KITAMURA			
201	Deposition Behavior from platinum Nano-Particle by Arc-Plasma Method process to a thin film	ULVAC-RIKO,Inc. Tokyo Metropolitan Univ. ULVAC-RIKO,Inc. "	○Hiroyuki TANAKA Satoru TAKAHASHI Nomi OIKAWA Satoshi ENDO Narishi GONOHE
202	Fundamental Study on Ceramic Spray Coating with Twin Cathode Plasma Torch	Yamaguchi University Chugoku Electric Power Co., Inc. "	○Satoshi SAKIYAMA Hideki SASAKA Sakae IMADA Makoto TANAKA Tomoaki KITAMURA
203	Thermal Barrier Coatings by Axial-injection Suspension Plasma Spraying	AIST. "	○Shahien MOHAMMED Masato SUZUKI
10:30~10:40 --- Break ---			
10:40~12:00 Session5 : Theory and Fundamentals of Spray Process/Reactive Spray and New Process Chair: Masato SUZUKI			
204	Fabrication of high-reflection characteristics alumina coating by suspension plasma spraying	Toyohashi University of Technology Graduate School Toyohashi University of Technology " " " Optocom Co.Ltd.	○Takaaki SUNADA Kyoto OHTSU Kazuaki FURUKAWA Motohiro YAMADA Masahiro FUKUMOTO Shinobu ITO
205	In situ measurement of inflight particles on suspension plasma spraying	Öerlikon Metco (Japan) Ltd " "	○Kazuya FUJIMORI Junya KITAMURA Mitsumasa SASAKI Tetsuyoshi WADA
206	Effect of the substrate/particle interfacial contact ability on the flat tening behavior of thermal sprayed particles	Toyohashi University of Technology "	○Daiki SUZUKI Natsuki MAEDA Masahiro FUKUMOTO
207	Anti marine corrosion technique using ultra rapid cooling thermal spraying	Yoshikawa Kogyo co.,Ltd. " Nakayama Amorphous co.,Ltd. "	○Yasuhiro OMORI Yusuke NISHIURA Takashi KUMAI Yoshio SHIN Toshiharu MORIMOTO
12:00~13:00 --- Lunch Break ---			
13:00~14:20 Session6 : Texture · Structure/Coating property and Evaluation method(II) Chair: Kazuhiko SAKAKI			
208	Effect of C and/or P Addition on Microstructure and Melting Point of Co-Based Self-Fluxing Alloy for Thermal Spray	Kyushu Institute of Technology " Toyota Motor Kyushu, INC. " Kyushu Institute of Technology	○Ryo WAKANA Chikara HAMAGUCHI Azusa MIHARA Naoki FUKUNAGA Eizaburo MARUYAMA Tatsuya TOKUNAGA Hidenori ERA
209	Microstructural Transition in Iron-Based Metallic Glass Coating by Heat Treatment	Fukuoka Industrial Technology Center " Fujikikosan Corp " " Kyushu University	○Yoshito KOGA Michiko OGATA Kazunori SAKATA Masakazu OZEKI Yasuhiro SHINYA Daisuke OKA Kouhei KUWATORI Ichihito NARITA Hirofumi MIYAHARA
210	High temperature oxidation properties of MCrAlY coatings by Atmospheric Plasma Spraying	TOCALO Co.Ltd. Syun NISHIZAKO TOKYO UNIVERSITY OF SCIENCE	○Tatsuo SUIDU Masayuki ARAI
211	Blast Erosion Characteristics of HVOF Coatings and SS400	Iwate University Hard Industry " " Aomori Prefectural Industrial Technology Research Center	○Yosuke SUENAGA Takuichi YAMAGATA Torao YAMAGATA Hiroshi IZAKI Kimio WADA Shoji SASAKI
14:20~14:30 --- Break ---			
14:30~15:50 Session7 : Cold Spray/Warm Spray(II) Chair: Kazuhiro OGAWA			
212	Synthesis of Agglomerated TiO <sub>2</sub> Powder for Cold Spray Application	Graduate student, Toyohashi University of Technology " Toyohashi University of Technology	○Toibah Binti ABD RAHIM Manabu SATO Motohiro YAMADA Masahiro FUKUMOTO
213	Effect on substrate temperature to adhesion strength of cold-spray	Toyohashi University of Technology " "	○Chisato YOSHIDA Yuta WATANABE Motohiro YAMADA Masahiro FUKUMOTO
214	Cold Spraying of Plastic Composites Powder	Fujimi Incorporated " "	○Kazuto SATO Junya YAMADA Kyohei OTA
215	Effect on substrate surface roughness to cold spray coating property	Toyohashi University of Technology " "	○Tomoyuki ISHIIHARA Yuta WATANABE Motohiro YAMADA Masahiro FUKUMOTO
15:50~16:00 --- Break ---			
16:00~17:20 Session8 : Cold Spray/Warm Spray(III) Chair: Kazunori SAKATA			
216	Effect of heat treatment of titanium oxide powder on the coating by cold spray method	Toyohashi University of Technology Graduate School " Toyohashi University of Technology	○Manabu SATO Toibah Binti ABD RAHIM Yuta WATANABE Motohiro YAMADA Masahiro FUKUMOTO
217	Improvement of Wear Resistance for Cold Sprayed SUS316L Coating by Low Temperature Plasma Nitriding	Technology Research Institute of Osaka Prefecture "	○Shinichi ADACHI Nobuhiro UEDA
218	Investigation of internal stress in cold sprayed coating	Toyohashi University of Technology(Graduate student) " Toyohashi University of Technology	○Yuta WATANABE Chisato YOSHIDA Motohiro YAMADA Masahiro FUKUMOTO
219	Influence of Native Oxides on Solid State Bonding	Tohoku Univ. " " "	○Kohei OHTA Kentaro HASHIMOTO Yujia ICHIKAWA Takehito SHIMATSU Kazuhiro OGAWA
17:20~ Best Presentation Awarding and Closing Remarks			

exhibition session