

2015 JTSS Spring Meeting

28-29, May, 2015(Osaka University Nakanoshima Center, Osaka, JAPAN)

Technical Program

28th, May, 2015

12:50-13:00		Opening Remarks	
13:00-14:00		Session 1: Coating Property/ Evaluation Method (I)	
101	Corrosion Rate of Al-Mg alloy thermal Spray Coating in NaCl Solution	Tocalo Co.,Ltd	○ Ryota SHINDO
		〃	Kenichiro TOGOE
		〃	Yasuyuki TAKATANI
		〃	Yoshio HARADA
102	Effect of Mg concentration on the corrosion fatigue crack behavior of Al-Mg coating layer	Anticorrosion commission on Japan thermal sprayer association	Masatoshi SHIMATANI
		Nagaoka University of Technology	○ Yuichi OTSUKA
		〃	Sarita MORAKUL
		〃	Yukio MIYASHITA
103	Influences of the hardness and shape of blast powder on erosion characteristics	Yoshiharu MUTOH	
		Iwate University	○ Yosuke SUENAGA
		Hard Industry Ltd.	Takuichi YAMAGATA
		〃	Torao YAMAGATA
		〃	Hiroshi IZAKI
		〃	Kimio WADA
		Aomori Prefectural Industrial Technology Research Center	Shoji SASAKI
14:00-14:10 --- Break ---			
14:10-16:10		Symposium: "Current Status and Challenges of Anticorrosion Thermal Sprayed Coatings"	
		Coordinator: Kazuo UENO	
Invited Lecture1	Current Status of Anticorrosion Thermal Spraying	Tocalo Co.,Ltd	Yasuyuki TAKATANI
Invited Lecture2	Anticorrosion Thermal Spraying for Bridge	Thermal Spraying for Corrosion Protection Coporative	Hiroshi OTSUKA
Invited Lecture3	Activity of Thermal Spraying for Corrosion Protection Coporative	Thermal Spraying for Corrosion Protection Coporative	Takao MENDE
Panel Discussions			
16:10-16:25 --- Break ---			
16:25-18:00		Session 2: Theory and Process of Thermal Spraying	
		Chair: Masato Suzuki	
104	Effects of Suspension Injection Condition on the Atomization and Velocity of In-flight Particles in Suspension Plasma Spraying	Graduate school of Chiba institute of technology	○ Takuma OHNUKI
		Science des Procedes Ceramiques et de Traitements de Surface	Michel VARDELLE
		〃	Simon GOUTIER
		〃	Armelle VARDELLE
105	Effect of Droplet Oxidation on Flattening Behavior of Metallic Droplet	National Institute for Materials Science	Seiji KURODA
		Chiba institute of technology	Yukihiro SAKAMOTO
		Toyohashi university of technology	○ Boyi WEI
		〃	Natsuki MAEDA
106	Mechanistic Analysis of Formation and Growth of Wedge-like TGO at the interface between Thermal Barrier Coating and Ce added Bond Coating	〃	Masahiro FUKUMOTO
		Tohoku University	○ Kazuhiro OGAWA
		〃	Shun HATTA
		〃	Yuji ICHIKAWA
107	Influence of coating method and component geometry on the properties of austenitic stainless steels	Tohoku Electoric Power Co., Inc.	Mitsuhiro OIKAWA
		〃	Hiroyuki YAMAZAKI
		〃	Tadashi TATSUKI
		Hoganas Sweden AB	○ Ingrid Miller HAUER
108	An Intorduction of New Workshop for Environmental Barrier Coating(EBC)	〃	Barbara MAROLI
		Tohoku University	○ Kazuhiro OGAWA
18:10-20:00 -- Bunquet --			

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9:30-10:50	Session 3: Cold Spray/ Warm Spray (I)		Chair: Makoto Watanabe
201	Trial Simulation of Thermal Spray Process using Open Source CFD Software	Kagoshima University	○ Hiroshi KATANODA
202	Experimental and numerical analyses of deposition behavior for a copper particle by cold spray emulated Single particle Shot System (3S)	Tohoku University " "	○ Kiyohiro ITO Yuji ICHIKAWA Kazuhiro OGAWA
203	Particle and its velocity distributions at nozzle exit in cold spray process.	PLASMA GIKEN CO.,LTD.	○ Michiyoshi SONE
204	Relation of physical properties of Ni-Cr alloy powder and characteristics of the cold spray coating	FUKUDA METAL FOIL & POWDER CO.,LTD. " "	○ Katsunori OTOBE Yukitaka HAMADA Shinichi NISHIMURA
10:50-11:00	--- Break ---		
11:00-12:20	Session 4: Cold Spray/ Warm Spray (II)		Chair: Junya Kitamura
205	Feasibility Study of WS and HVOF Metallic Coatings for Repair of Damaged Steel Structures	National Institute for Materials Science " " " "	○ Makoto WATANABE Gianluca MANCA Lukasz KONCA Hiroshi ARAKI Seiji KURODA
206	High Temperature Sliding Friction Behavior of Warm Sprayed (WS) Cr ₃ C ₂ -NiCr Coatings	Graduate School of Engineering, Nagaoka University of Technology National Institute for Materials Science " " " " Nagaoka University of Technology	○ Balavenkatesh RENGARAJ Akira KASAHARA Hiroshi ARAKI Makoto WATANABE Masahiro TOSA Seiji KURODA Masakazu OKAZAKI
207	Fabrication of thick coatings of Cu-based materials by warm spraying	National Institute for Materials Science " " Kagoshima University Helmut Schmidt University " "	○ Seiji KURODA Hiroshi ARAKI Makoto WATANABE Hiroshi KATANODA Sebastian KREBS Frank GAERTNER Thomas KLASSEN
208	Influence of the phosphorus content on various characteristics of cold sprayed copper coatings	NHK SPRING Co., Ltd. " " "	○ Yuichiro YAMAUCHI Shinya MIYAJI Satoshi HIRANO Masaru AKABAYASHI
12:20-13:30	--- Lunch Break ---		
13:30-14:30	Session 5: Coating Property and Evaluation Method (II)		Chair: Kazuhiko SAKAKI
209	High temperature oxidation properties of APS-CoNiCrAlY coatings formed by different particle size powders	TOCALO Co., Ltd. " TOKYO UNIVERSITY OF SCIENCE	○ Syun NISHIZAKO Tatsuo SUIDZU Masayuki ARAI
210	High temperature oxidation properties of APS-MCrAlY coatings formed by different particle size powders	TOCALO Co., Ltd. " TOKYO UNIVERSITY OF SCIENCE	○ Tatsuo SUIDZU Syun NISHIZAKO Masayuki ARAI
211	The thermal barrier characterization of thermal spray coating for the internal combustion engine	Yamanashi University " "	○ Masashi SEKINE Keiji SONOYA Masanobu NAKAMURA
14:30-14:40	--- Break ---		
14:40-15:40	Special Lecture		Chair: Sachio Oki
	National Project for Development of 3D Printer for Industry	Kinki University	Hideki KYOGOKU
15:40-15:50	--- Break ---		
15:50-16:50	Session 6: Thermal Spraying of Ceramic and Cermet		Chair: Tatsuo SUIDZU
212	Influence of powder property on atmospheric plasma spraying of ceramic coatings	Thermal Spray Materials Dept. Fujimi Incorporated " "	○ Kazuyuki TSUZUKI Hiroyuki IBE Kazuto SATO
213	Influence of Coating Thickness on Mechanical Properties and Residual Stress of WC Cermet Coatings Prepared by HVOF Spraying	Graduate School, Shinshu Univ. Shinshu Univ. Graduate School, Shinshu Univ. Fujimi Incorporated	○ Naoki HANAOKA Kazuhiko SAKAKI Katsura OZAKI Kazuto SATO
214	Preparation of hard chromium oxide coatings with optimization of parameters using cascaded arc plasma spraying	Oerlikon Metco (Japan) Ltd. " " "	○ Junya KITAMURA Kazuya FUJIMORI Mitsumasa SASAKI Tetsuyoshi WADA
16:50~17:00	Best Presentation Awarding and Closing Remarks		