

# ICMDT 2015 Posters

Thursday, April 23

## Friction and Wear Mechanism

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1 Okayama University, Japan
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1 Niigata University, Japan
- 3278 EFFECT OF LATERAL FORCE ON DYNAMIC FRICTION BEHAVIORS OF PNEUMATIC CYLINDER  
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1 Toyota National College of Technology, 2 Toyohashi University of Technology, Japan
- 3286 IMPROVING OF TRIBOLOGICAL PROPERTY IN C/C COMPOSITES BY SURFACE TEXTURING  
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1 Tokyo University of Science, Japan

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1 Okayama University, Japan
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1 Tokyo University of Science, Japan
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1 University of Ulsan, Korea
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1 Tokyo University of Science, Japan
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1 Korea Atomic Energy Research Institute, 2 Korea Institute of Nuclear Safety, 3 Kyung Hee University, 4 Chungnam National University, Korea
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1 Tokyo University of , Japan
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1 Nagoya University, Japan

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1 Okayama University, Japan
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1 Seoul National University, Korea
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1 Hanyang University, Korea

- 3159 FABRICATION OF SI NANOWIRE-BASED PHOTODETECTOR ON FLEXIBLE POLYMER SUBSTRATE USING PATTERN TRANSFER METHOD  
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1 Seoul National University of Science & Technology, Japan
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1 Seoul National University of Science and Technology, Korea
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1 Tokyo Institute of Technology, 2 NewTechnology Management Co., Ltd., Japan

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1 Pusan National University, Korea
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1 Seoul National University of Science & Technology, Korea

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1 Okayama University, Japan
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1 Korea Advanced Institute of Science and Technology (KAIST), 2 Korea Institute of Machinery and Materials (KIMM), Korea
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1 Park systems Corp., Korea
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- 3224 INVESTIGATION OF HOT EMBOSsing PROCESS USING SOFT MICROMOLD  
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1 Chonnam National University, 2 Korea Institute of Industrial Technology, Korea
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1 Andong National University, 2 Chungbuk National University, Korea
- 3114 RESEARCH TO THE PLATING ON PLASTICS(ABS AND PLA)  
Hae-yong Yun<sup>1</sup>, Ho-chan Kim<sup>1</sup>, In-hwan Lee<sup>2</sup>  
1 Andong National University, 2 Chungbuk National University, Korea

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1 Chungnam National University, Korea
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1 Chungnam National University, Korea
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1 Korea Institute of Industrial Technology, Korea
- 3267 MICROFABRICATION OF SILVER CONDUCTIVE PATTERNS BY INKJET PRINTING AND HEATED GAS SINTERING PROCESSES  
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1 KITECH, 2 JESAGI HANKOOK Ltd., Korea

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1 Korea University, Korea
- 3190 Dynamic axial crush of rectangular tubes with perforations  
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1 Korea University, Korea
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1 Korea Institute of Industrial Technology, 2 MICROMOLD Co., Ltd., 3 OPTIS Co., Ltd., Korea

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1 Chsoun University, Korea
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1 Seoul National University of Science and Technology, Korea
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1 Seoul National University of Science and Technology, Korea

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1 Tokyo Metropolitan College of Industrial Technology, Japan
- 3015 A STUDY ON THE RELIABILITY OF DIAPHRAGM FOR THE MICRO-SPEAKER WITH THE ACCELERATED THERMAL AGING TEST  
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1 Korea Institute of Machinery & Materials, Korea
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1 Korea Institute of Machinery & Materials, Korea
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1 Keio University, 2 NANJO Auto Interior Co., Japan
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1 Far East University, Taiwan

- 3068 A CFD STUDY ON FLOW CHARACTERISTICS OF THE DUCT WITH MULTI-HOLES TYPE NOZZLES BY SHAPE VARIATIONS IN A STENTER  
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1 Korea Textile Machinery Research Institute, 2 University of Yeungnam, Korea
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1 Seoul National University, 2 Korea Institute of Industrial Technology, Korea
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1 Korea Institute of Machinery & Materials, Korea
- 3090 COMPARISON BETWEEN SOLENOID AND PIEZOELECTRIC DRIVING FREQUENCY FOR MICRO INJECTION OF LIQUID  
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1 Korea Institute of Machinery and Materials, Korea
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1 University of the Ryukyus, Japan
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1 Dong-A University, 2 Kyungpook National University, 3 Samsung Techwin, Korea
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1 Korea Institute of Machinery and Materials, Korea
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1 Korea Institute of Industrial Technology, 2 Incheon National University, 3 Yuhan College, Korea
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1 University of the Ryukyus, Japan
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1 Dongguk University-Seoul, Korea
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1 University of Seoul National University of Science and Technology, Korea
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1 Korea Textile Machinery Research Institute, Korea
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1 Meijo University, 2 University of Fukui, 3 Tokyo City University, Japan
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1 Kumoh National Institute of Technology, Korea
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1 JTEKT Corporation, Japan

- 3283 A METHOD TO IMPROVE THE PATTERNING OF ITO WITH THIN GOLD MASKING LAYER COATED ON GLASS SUBSTRATE USING NANOSECOND FIBER LASER AND ETCHING  
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<sup>1</sup> Inje University, Korea
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<sup>1</sup> Tokyo University of Science, Japan
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<sup>1</sup> LWR Fuel Development Division, Korea

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 Kenji Suzuki<sup>1</sup>  
<sup>1</sup> Kanagawa University, Japan
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<sup>1</sup> Korea Institute of Machinery and Materials, Korea
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<sup>1</sup> Tokyo University of Science, <sup>2</sup> DENSO Corporation, Japan
- 3049 DESIGN OF BOLTED JOINTS USING 3D-FE ANALYSIS (DEVELOPMENT OF SINGLE-BODY BOLT/NUT MODEL HAVING EQUIVALENT RIGIDITIES TO ACTUAL BOLT/NUT ASSEMBLY)  
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<sup>1</sup> Nagoya Institute of Technology, Japan
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<sup>1</sup> Niigata University, Japan
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<sup>1</sup> Tokai University, Japan
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<sup>1</sup> Ajou University, Korea
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<sup>1</sup> Korea Institute of Machinery & Materials, <sup>2</sup> ChungNam National University, Korea
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<sup>1</sup> Korea Institute of Machinery & Materials, Korea
- 3140 PRESSURE PULSATION AND DRIVING TORQUE ANALYSIS FOR POSITIVE-DISPLACEMENT ROTARY CLAP PUMPS  
 S. B. Shim<sup>1</sup>, Y. J. Park<sup>2</sup>, J. M. Kim<sup>3</sup>, Y. J. Kim<sup>4</sup>, K. U. Kim<sup>1</sup>  
<sup>1</sup> Seoul National University, <sup>2</sup> Korea Institute of Machinery and Materials, <sup>3</sup> ClapMC Co. Ltd., <sup>4</sup> Korea Institute of Industrial Technology, Korea
- 3154 HIGH ACCURACY ATOMIC FORCE MICROSCOPE SYSTEM FOR 450mm WAFERS  
 Hyo-Sang Kim<sup>1</sup>, Byoung-Woon Ahn<sup>1</sup>, Tae-Kyung Kong<sup>1</sup>, Sang-Joon Cho<sup>1</sup>, Sang-il Park<sup>1</sup>  
<sup>1</sup> Park systems Corp., Korea
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 Daisuke Wakabayashi<sup>1</sup>, Masaaki Miyatake<sup>1</sup>, Kei Somaya<sup>1</sup>, Shigeka Yoshimoto<sup>1</sup>  
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- 3168 THE INVESTIGATION OF DISTRIBUTION OF STRESS ON THE TAPER ROLLER BEARINGS FOR PERFORMANCE CONDITIONS  
Ji Woo Nam<sup>1</sup>, Seong Wook Cho<sup>1</sup>, Hong Sun Ryou<sup>1</sup>, Woo Jun Lee<sup>2</sup>, Hyung Jun Kim<sup>3</sup>  
1 Chung-Ang University, 2 FADAM Ltd., 3 HONG IN Ltd., Korea
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1 University of Hyogo, Japan
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