

Conference Program

Sunday February 28, 2016

TIME	DESCRIPTION	LOCATION
16:00 - 18:00	Registration	<i>Grand Ballroom (Front)</i>
16:30 - 18:00	IRGTM Meeting (by Invitation Only)	<i>Champak Room</i>
18:00 - 19:00	Networking Session (Cocktail Reception)	<i>Lagoon Garden Lawn</i>

Monday February 29, 2016

ROOM	GRAND BALLROOM
08:00 - 08:30	Registration (<i>Front</i>)
08:30 - 08:45	Opening Ceremony
08:45 - 09:15	KEYNOTE I "Tool Wear in Modern Cold Sheet Metal Forming and Its Counter Measures" <i>by Prof. Peter Groche (Technische Universität Darmstadt, Germany)</i>
09:15 - 09:45	KEYNOTE II "Tribo-Characteristics of Thin Hard Coatings and Some Considerations in Applying Them to Metal Forming Die" <i>by Prof. Yoshinari Tsuchiya (Gifu University, Japan)</i>
09:45 - 10:00	Sponsorship Acknowledgement and Group Photo
10:00 - 10:15	Break (<i>Foyer Area</i>)

ROOM	GRAND BALLROOM	PALM I
SESSION	A - METAL FORMING MODELS <i>Chair: Asst.Prof. Numpon Mahayotsanun</i>	B - COATINGS <i>Chair: Dr. Panadda Sheppard</i>
10:15 - 10:35	P15012-011 "General Friction Model Extended by the Effect of Strain Hardening" <i>by Chris Nielsen</i>	P15012-010 "Tribological Characteristics of TiCN Composite and Co-Based Alloy Dies with Low Thermal Conductivity in Hot Forging" <i>by Ryo Matsumoto</i>
10:35 - 10:55	P15012-012 "A Fully-Coupled Approach for Modelling Plastic Deformation and Liquid Lubrication in Metal Forming" <i>by Esmeray Ustunyagiz</i>	P15012-015 "Nano- and Micro-Tribological Investigations on Molybdenum Based Coatings for Application on Bearing Surfaces" <i>by Florian Pape</i>
10:55 - 11:15	P15012-024 "Friction Law in Dry Forming of Metals with Work Hardening" <i>by Takafumi Nakano</i>	P15012-018 "The Effect of CrN Coating Thickness on Plasma Nitride Hardened Cold Work Tool Steel Sliding Against Advanced High Strength Steel" <i>by Thitikorn Chamchuang</i>

ROOM	GRAND BALLROOM	PALM I
11:15 - 11:35	P15012-026 "A Third-Body Modelling Strategy for the Prediction of Adhesive Transfer Layer Formation on Forming Tools" <i>by Pierre Montmitonnet</i>	P15012-044 "Thermal Sprayed Coating for Improvement of High Stress Erosion Resistance in Stainless Steel" <i>by Chalermchai Sukhonkhet</i>
11:35 - 11:55	P15012-030 "Friction Law in Metal Forming Under Lubricated Condition" <i>by Naoto Maruyama</i>	P15012-080* "Studies on Selection of the Materials Used for the Friction Elements in Suspensions Carriages" <i>by Krzysztof Zaba</i>
11:55 - 12:15	P15012-093 "Integrated Adhesion Model in Dry Forming and Machining" <i>by Hoichi Kitano</i>	P15012-083 "Tribo-films Control in Machining of DA718 by Accelerating the Initial Machining Conditions" <i>by Junfeng Yuan</i>
12:15 - 13:00	Lunch (<i>Pacifica Restaurant</i>)	
ROOM	GRAND BALLROOM	
13:00 - 13:30	INDUSTRY I "New Trends in Lubricants for Cold Forging" <i>by Mr. Masato Otake (Thai Parkerizing Co., Ltd., Thailand)</i>	
13:30 - 14:00	INDUSTRY II "Impacts of Bio-Fluid Global Trends to Thailand Market" <i>by Mr. Nuttawut Rungsimutuchat (PTT Plc., Thailand)</i>	
ROOM	GRAND BALLROOM	PALM I
SESSION	C - METAL FORMING TESTS <i>Chair: Asst.Prof. Sirichai Torsakul</i>	D - CONTACTS & TEMPERATURES <i>Chair: Dr. Pitichon Klomjit</i>
14:15 - 14:35	P15012-023 "Investigation of Tribological Conditions in the Strip Drawing Test Using Liquid CO ₂ and N ₂ as a Volatile Lubricant" <i>by Christoph Woerz</i>	P15012-014 "Tribological Investigations of Angular Contact Ball Bearings Operated under Small Pivoting Angles for Production Process Analysis" <i>by Florian Pape</i>
14:35 - 14:55	P15012-031 "The Effect of Short-term Heat-treatment on the Tribological Characteristic of Heat-treatable Aluminum Alloys" <i>by Michael Machhammer</i>	P15012-016 "Influence of Contact Pressure on Heat Transfer and Friction Factor Identification at Elevated Temperature" <i>by Yuki Kanda</i>
14:55 - 15:15	P15012-052 "Tribological Performance of Non-Chlorinated Metal Working Fluid in Strip Drawing of Advanced High Strength Steel" <i>by Phanuwat Jewwattanak</i>	P15012-022 "Investigation of the Tribological Conditions in Forming Gears with Oscillating Ram Movements" <i>by Wilhelm Schmidt</i>
15:15 - 15:35	P15012-054 "Effect of Bending Angles to Friction in Strip Drawing of Stainless Steel" <i>by Pramote Koowattanasuchat</i>	P15012-028 "Investigation of Friction Conditions at Elevated Temperatures for Hot Stamping" <i>by Patrik Schwingenschloegl</i>

*P15012-080 in Session B changed to Session H

ROOM	GRAND BALLROOM	PALM I
15:35 - 15:55	P15012-066 "Effect of Friction Coefficient on Part Quality for Parabolic Part in Hydromechanical Deep Drawing Process" <i>by Kotchakorn Wiratchakul</i>	P15012-094 "Three-body Microcontact Model of Rough Surfaces and its Application on Chemical-mechanical Polishing" <i>by Jeng-Haur Horng</i>
15:55 - 16:15	P15012-075 "Design and Assessment of Rotating Tool for Incremental Sheet Forming" <i>by Muftooh Siddiqi</i>	P15012-098** "Study of Cutting Temperature and Lubricant of Band Saw Machine" <i>by Jeng-Haur Horng</i>
16:30 - 17:30	TTA Annual Meeting (by Invitation Only) (<i>Champak Room</i>)	
18:00 - 21:00	Banquet Dinner (<i>Kan Eang @ Pier Restaurant</i>)	

Tuesday March 1, 2016

ROOM	GRAND BALLROOM	
09:00 - 09:30	KEYNOTE III "Tribological Design and Engineering in Surface Treatment for Semi-Dry and Dry Stamping" <i>by Prof. Tatsuhiko Aizawa (Shibaura Institute of Technology, Japan)</i>	
09:30 - 10:00	KEYNOTE IV "Tribology in Tube Forming" <i>by Assoc.Prof. Gracious Ngaile (North Carolina State University, USA)</i>	
10:00 - 10:15	Break (<i>Foyer Area</i>)	
ROOM	GRAND BALLROOM	PALM I
SESSION	E - EXTRUSION <i>Chair: Dr. Sasawat Mahabunphachai</i>	F - ADVANCED SURFACES <i>Chair: Assoc.Prof. Varunee Premanond</i>
10:15 - 10:35	P15012-049 "Investigation of Friction Models in Micro-Extrusion of 6063 Aluminum Alloy" <i>by Sedthawatt Sucharitpawatskul</i>	P15012-017 "High Accurate Measurement of Surface Topography by Atomic Force Microscope and its Traceability" <i>by Jariya Buajarern</i>
10:35 - 10:55	P15012-050 "Numerical Investigation of Feature Size Effect on Friction Force in Micro-extrusion of AA6063" <i>by Sukunthakan Ngerbamrung</i>	P15012-027 "Advances in Tribologically Beneficial Surface Patterns Manufactured by Machine Hammer Peening" <i>by Daniel Trauth</i>
10:55 - 11:15	P15012-082 "Investigation of Friction in Cold Extrusion of Aluminum Alloy" <i>by Sirichai Torsakul</i>	P15012-038 "Surface Texturing for Fine Blanking Tools – Influence of Shape and Texturing Sequence on Tribological Properties" <i>by Marko Sedlacek</i>

**P15012-098 in Session D changed to Session H

ROOM	GRAND BALLROOM	PALM I
11:15 - 11:35	P15012-096 "Study on Extruded Material Surface Formation Mechanism" <i>by Yusuke Yamauchi</i>	P15012-048 "Surface Modification of Cemented Tungsten Carbide (WC-Co) by Ultra-Short Pulse Laser Processing and its Tribological Properties" <i>by Shiqi Fang</i>
11:35 - 11:55	P15012-099 "Synergy Effect of Coating and Lubricant on Forward-Backward Micro-Extrusion of 6063 Aluminum Alloy" <i>by Tatsuya Funazuka</i>	P15012-053 "Tribological Performance Prediction of Textured Tool Surfaces in Sheet Metal Forming by Using Finite Element Simulation" <i>by Pichitpong Pongsaranun</i>
11:55 - 12:15	P15012-100 "Tribocorrosion Behavior of Aluminum Alloys 5083 in 3.5% NaCl Solution" <i>by Pitichon Klomjit</i>	P15012-074 "Friction Anisotropy at the Interface Formed by Aluminum 6111-T4 Sheet and Textured D2 Tooling" <i>by Qian Wang</i>
12:15 - 13:00	Lunch (<i>Pacifica Restaurant</i>)	
ROOM	GRAND BALLROOM	
13:00 - 13:30	INDUSTRY III "Contribution of Hot Multifriction Tribological Tests on the Understanding of Wear and Friction Behaviour in Hot Forging Application" <i>by Dr. Eric Gard (InS Thai Ltd., Thailand)</i>	
13:30 - 14:00	INDUSTRY IV "Role of Latest Analytical Chemistry in Company" <i>by Dr. Yoshikatsu Nagasawa (Ryukoku University, Japan)</i>	
14:00 - 14:15	Break (<i>Foyer Area</i>)	
ROOM	GRAND BALLROOM	PALM I
SESSION	G - LUBRICATION <i>Chair: Dr. Nuwong Chollacoop</i>	H - TOOL WEAR <i>Chair: Dr. Pongsak Tuengsook</i>
14:15 - 14:35	P15012-013 "Determination of Lubricant Bulk Modulus in Metal Forming by Means of a Simple Laboratory Test and Inverse FEM Analysis" <i>by Mohd Hafis Sulaiman</i>	P15012-020 "Numerical Simulation of Tool Wear in Ductile Mode Machining of Quartz Glass" <i>by Masahiko Yoshino</i>
14:35 - 14:55	P15012-033 "Investigating the Tribological Properties of Al 6061 Using Polymer Media" <i>by Sarthak Srivastava</i>	P15012-051 "Finite Element Simulation of Tool Wear in Strip Ironing of Steel Sheet" <i>by Pramote Koowattanasuchat</i>
14:55 - 15:15	P15012-035 "Effect of Spraying Conditions on Film Formation of White-Type Lubricants for Hot Forging" <i>by Yoshiki Sakai</i>	P15012-058* "Investigation of Tool Wear Process and Cutting Forces in Machining to Carbon-fiber-reinforced Plastics Composites" <i>by Satoru Maegawa</i>

*P15012-058 in Session H changed to Session B

ROOM	GRAND BALLROOM	PALM I
15:15 - 15:35	P15012-036 "The Relationship between High-Temperature Reaction of Hot Forging Lubricants and Dynamic Behaviour at Compressed Workpiece-Die Sliding Interface by In-situ Observation" <i>by Zhang Jun Feng</i>	P15012-062 "Tool Wear Properties of Sharpened CVD Diamond Coated Tool in Turning of Cemented Carbide Rod" <i>by Shinya Suganuma</i>
15:35 - 15:55	P15012-040 "Improvement of Tribological Performance of Low-Viscosity Oil for Cold Forming by Adding Solid Lubricant" <i>by Kazuhito Asai</i>	P15012-063 "Wear and Failure of CVD Diamond Coated Tool in End-milling of WC-Co Die Materials - Influence of Particle Size of WC Powder and Depth of Cut" <i>by Tomoya Minami</i>
15:55 - 16:15	P15012-046 "Optimization on Wear Performance of Waste Cooking Oil as Engine Additive Using RSM (First Order Model)" <i>by Sakinah Muhamad Hisham</i>	P15012-064 "Reduction of Cutting Tool Wear Using Extremely Short Time Intermittent-Cutting" <i>by Yuki Terasaka</i>
16:15 - 16:35	P15012-057 "Developments in Environmentally-Friendly Metalforming Lubricants" <i>by Steven Schmid</i>	P15012-067** "An Evaluation of Mechanical Characteristics in Subsurfaces of Multi-layered Materials" <i>by Yukari Kobayashi</i>

Wednesday March 2, 2016

ROOM	GRAND BALLROOM
09:00 - 09:30	KEYNOTE V "Tribology in Micro-Forming Processes" <i>by Prof. Kuniaki Dohda (Northwestern University, USA)</i>
09:30 - 10:00	INDUSTRY V "Development of High Efficient Universal Tribology Testing Platform" <i>by Dr. Wanxin Sun (Bruker Nanosurface, Singapore)</i>
10:00 - 10:15	Closing Ceremony
10:15 - 10:30	Break (Foyer Area)
10:30 - 16:30	Networking Activity (Excursion Package)

**P15012-067 in Session H changed to Session D