July 23, 2014 (Wed)-1

Time	Hotel Nikko Kanazawa
8:00	Registration desk open
	Hougaku Hall, ISHIKAWA ONGAKUDO
10:00	**Opening Address** ***Mr. Kein-ich Nakamura* , Conference Chair (President, Nakamura-Tome Precision Industries Co., Ltd.)**
10:10	**Prenary Session I (Keynote Speech I)** ***Prof. Alexander H. Slocum* (ASPE Former President, MIT)** **Big hydrostatic bearing for ships and offshore wind machines**
10:50	**Prenary Session I (Keynote Speech II)** ***Mr. Kunio Noji* (Chairman of the Board, Komatsu Ltd.)** **Monozukuri (Competitive Manufacturing) of Komatsu**
11:30	**Lunch**

July 23, 2014 (Wed)-2

Time	**Hotel Nikko Kanazawa**			
	Room A	**Room B**	**Room C**	**Room D**
Session	**Non-conventional machining (1)** *Chairman:* *(Prof. Jiwang Yan)*	**High precision machining (1)** *Chairman:* *(Prof. Takashi Matsumura)*	**Tribological systems** *Chairmanan:* *(Prof. Naoto Ohtake)*	**Technical session** *Chairman:* *(Prof. Yoshitaka Morimoto)*
13:00	**A01:** Finish-Cutting of Polycrystalline Diamond by Micro Wire-EDM Using a Novel Pulse Control Method. *Mu-Tian Yan, Yu-Liang Su, Yi-Ting Liu*	**B01:** Precision Machining and Measurement of Diffractive Lens Made of Synthetic Quartz *Mutsumi Okada, Hirofumi Suzuki, Daisuke Kato, Hideo Hanada, Hiroshi Araki, Shingo Kashima*	**C01:** Influence of Slurry Flow Behavior on Material Removal Rate of Sapphire-Chemical Mechanical Polishing *Michio Uneda*	**D01:** Future Machine and Cutting Tool Trends *Chris Mills, Takeo Sone*
13:20	**A02:** High Spindle Speed EDM with Electrostatic Induction Feeding by Controlling the Duration of High Frequency Discharge *Norliana Mohd Abbas, Masanori Kunieda*	**B02:** Wear Behavior of Mini-size Diamond Wheel in Ultrasonic Assisted Grinding *Masakazu Fujimoto, Yongbo Wu, Mitsuyoshi Nomura, Hidenari Kanai, Masahiko Jin*	**C02:** Synthesis of Porous Amorphous Boron-Carbide (a-CB:H) Film and Characterization of Their Behavior in Different Environments *Shahira Liza Kamis, Naoto Ohtake, Hiroki Akasaka*	**D02:** Turning method of Non-Axisymmetric Curved Surface by linear motor driven Lathe *Katsuhiro Nakagaki, Yoshitaka Morimoto, Hideharu Kato, Keigo Takasugi, Naohiko Suzuki, Yoshiyuki Kaneko, Makoto Yamano, Yutaka Tokuno*

13:40	**A03:** Comparison of Gap Phenomena between EDM in Oil and Deionized Water Using Transparent Electrodes *Tomoo Kitamura, Masanori Kunieda, Kohzoh Abe*	**B03:** Study on cylindrical mirror grinding by ultra fine infeed dressing *Takeshi Osaka, Junichiro Takagi*	**C03:** Applicability of surface plastic flow process as surface modification of sulphide containing copper alloy bearing *Yoshimasa Hirai, Tomohiro Sato, Takehisa Fukui, Yuma Horiba, Hatsuhiko Usami*	D03: Advanced Machinig using piezo based actuator systems *Bucht Andr, Welf-Guntram Drossel, Kenny Pagel, Holger Kunze, Hans-Juergen Roscher*
14:00	**A04:** Analysis on the Time of Material Ablation in EDM by Molecular Dynamics *Xiaodong Yang, Lisi Liu, Masanori Kunieda*	**B04:** Simulation Analysis of Thermal Deformation of a Workpiece during Cylindrical Plunge Grinding *Takashi Onishi, Moriaki Sakakura, Yohei WadaA, Naoki Sato, Kazuhito Ohashi, Shinya Tsukamoto*	**C04:** Deposition of segment-structured DLC films by FCVA method *Shota Kondo, Kei Saito, Makoto Matsuo, Yoshinao Iwamoto, Hiroki Akasaka, Naoto Ohtake*	**D04:** Energy efficiency using lightweight clamping devices as the example *Hans Michael Weller, Hidetoshi Suzuki*
14:20	**A05:** Development of high-speed on-machine 3D scanning system *Derek Marshall*	**B05:** Ultra-precision Finishing of Diamond Substrate using an Fe Lapping Plate in H_2O_2 Solution *Akihisa Kubota, Shin Nagae, Shuya Motomura, Mutsumi Touge*	**C05:** Study on an identification method of real contact area considering plastic deformation of a surface roughness *Kyoko Nakamura*	**D05:** New material Mineral cast syntheric granite for the machine base for the different application fields. *Michael Kadoma*
14:40 15:00	**Coffee break**			

RoomA-C: Banquet Hall 3F, Room D: Function Room 3F (*La Grant Lumiére*)

July 23, 2014 (Wed)-3

Time	**Hotel Nikko Kanazawa**			
	Room A	**Room B**	**Room C**	**Room D**
Session	**Non-conventional machining (2)** *Chairman:* *(Prof. Kazuya Yamamura)*	**High precision machining (2)** *Chairman:* *(Prof. Mutsumi Touge)*	**Design** *Chairman:* *(Prof. Michio Uneda)*	**Green manufacturing** *Chairman:* *(Prof. Yasushi Umeda)*
15:00	**A06:** Control and Electrode Compensation in Piezoelectric Self-adaptive Micro-EDM *Xiuzhuo Fu, Ya Zhang, Dezheng Kong, Qinhe Zhang*	**B06:** Micromilling Operation of AISI 52100: Experimental and Numerical Analysis *Aldo Attanasio, Domenico Umbrello, Rachid M'saoubi, Elisabetta Ceretti*	**C06:** New Mechanical Design of a Large Lens Optics for Subaru Telescope *Kohei Imoto*	**D06:** Reuse and Recycle EOQ Model for Reverse Logistics with a Marginal Reuse Rate *Tomomi Nonaka, Toshiya Kaihara, Nobutada Fujii, Jiali Zhu*

15:20	**A07:** Friction Characteristics of Microstructured Surface using Whirling Electrical Discharge Texturing Vitchuda Lertphokanont, Takayuki Sato, Masahiro Oi, Minoru Ota, Kai Egashira, Keishi Yamaguchi, Toshikazu Nanbu, Hirotaka Miwa	**B07:** Micro Milling of Sapphire *Takashi Matsumura, Tetsuya Yamaguchi*	**C07:** The Effect of Non-normality on Statistical Tolerance Index *Akimasa Otsuka, Fusaomi Nagata*	**D07:** A System that Seeks Appropriate Path between Houses for Promoting Reuse of Products. *Yuki Yamamori, Keisuke Nanjo, Kei Kato, Hiroshi Ookawa, Hiroshi Kawaharada, Hiroyuki Hiraoka*
15:40	**A08:** Electron Backscatter Diffraction (EBSD) Analysis of Wire-EDMed Surfaces -A new way to identify the metallurgical conditions in process induced rim zones- *Fritz Klocke, Lars Hensgen, Andreas Klink, Joachim Mayer, Alexander Schwedt*	**B08:** Helical Blade Machining of CoCrMo Alloy *Takashi Matsumura, Masaki Serizawa*	**C08:** A Study on Modeling of Market Circulation of Production Facility Modules by Considering Diversity of Value *Akira Tsumaya, Chunyan Wu, Akira Tsumaya, Toshiharu Taura*	**D08:** Towards the optimization of product sustainability and performance in machining processes. *Giovanna Rotella, Stefania Rizzuti, Dominico Umbrello*
16:00	**A09:** Experimental Investigation of Parameters Affecting the µEDM of Non-conductive AlN Ceramics *Nirdesh Ojha, Eldho Mathew, Florian Zeller, Claas Mueller, Holger Reinecke*	**B09:** Examination of Generation Characteristics of Finished Surface Roughness with Extreme-small-diameter Ball-endmills *Kengo Shimizu, Haruhisa Sakamoto, Masayori Ito, Yasunori Kobayashi*	**C09:** Asset Development and Reuse Strategies in Cloud-compliant Service Development *Shigeru Hosono, Yoshiki Shimomura*	**D09:** Reduction of Power Consumption in Rough Turning *Yohei Oda, Masahiko Mori, Makoto Fujishima, Yoshimi Takeuchi*
16:20	**A10:** Production efficiency translates to competitive cost per part *Laurent Vuille*	**B10:** Estimation of Workpiece Flow Stress and Friction for FEM Simulation of High-speed Orthogonal Cutting Process *Norfariza Wahab, Hiroyuki Sasahara*	**C10:** A Method for Visualizing Values of a Service Using Monte Carlo Simulation *Ken Kawase, Jyunya Shindo, Yutaro Nemoto, Fumiya Akasaka, Yoshiki Shimomura*	**D10:** Development of Electric Rust Preventive Machining Method System - Image analysis and calculation on Particle Removal for Recycling Water - *Naohiro Nishikawa, Takekazu Sawa, Yoshihiro Hagihara, Nobuhito Yoshihara, Hiroaki Okawai, Masahiro Mizuno, Toshirou Iyama, Shinya Tsukamoto*

RoomA-C: Banquet Hall 3F, Room D: Function Room 3F (*La Grant Lumiére*)