July 24, 2014 (Thu)-1

Time	Hotel Nikko Kanazawa
8:00	Registration desk open
	Hougaku Hall, ISHIKAWA ONGAKUDO
10:10	**Prenary Session II (Keynote Speech III)** ***Dr. Thomas Itter*** **(Member of the euspen council, Director, Mechanics & Mechatronics Concepts at Carl Zeiss SMT GmbH)** **Precision Engineering enabling Nanolithographic Chip Manufacturing**
10:50	**Prenary Session II (Keynote Speech IV)** ***Emeritus Prof. Kanji Ueda*** **(The University of Tokyo)** **Manufacturing Science and Technology toward Value Creation**
11:30 13:00	**Lunch**

July 24, 2014 (Thu)-2

Time	**Hotel Nikko Kanazawa**			
	Room A	**Room B**	**Room C**	**Room D**
	Non-conventional machining (3) *Chairman:* *(Prof. Masanori Kunieda)*	**High precision machining (3)** *Chairman:* *(Prof. Akihisa Kubota)*	**MEMS/NEMS** *Chairman:* *(Prof. Satoru Takahashi)*	**Other related technologies (1)** *Chairman:* *(Prof. Hirohisa Narita)*
13:00	**A11:** Laser Recovery of Wire Saw Damaged Poly-crystalline Silicon Wafers *Keiichiro Niitsu, Jiwang Yan*	**B11:** Improvement of Hole Quality in Drilling of a CFRTP material *Yorihiro Yamashita, Ken-ichi Hirosaki, Masahiro Takano, Mitsuhiko TakaA, Mitsugu Kimizu, Wataru Okumura*	**C11:** Improvements of Patterning Characteristics of Scan-Projection Lithography Using a Gradient Index Lens Array *Toshiyuki Horiuchi, Naoki Takada, Hiroshi Kobayashi*	**D11:** Analysis of State Variation of Grinding with AE Signal *Neng-Hsin Chiu*
13:20	**A12:** Laser Sintering of Silicon Particles and carbon Nano-fibers to Fabricate Composite Thick Films for Lithium Ion Batteries *Yuki Iwabuchi, Jiwang Yan*	**B12:** Two-stage Precision Figuring Process Applying Numerically Controlled Electrochemical Machining with Suction Type Electrode *Naoki Mitsushima, Katsuyoshi Endo, Kazuya Yamamura*	**C12:** Moldless fabrication of biconvex polymer microlenses from phase-separated microfluidic Janus droplets *Haruka Suzuki, Takasi Nisisako, Takeshi Hatsuzawa*	**D12:** Mechanism of Reduction in Cutting Force with Micro Textured Tool *Hiroki Kiyota, Fumihiro Itoigawa, Yu Hasegawa, Kiichi Meguro, Takashi Nakamura*

13:40	**A13:** Fabrication of Soft X-ray Ellipsoidal Focusing Mirror by Highly Accurate Electroforming Process *Takehiro Kume, Yoshinori Takei, Takahiro Saito, Hiroto Motoyama, Takahiro Hirata, Satoru Egawa, Hidekazu Mimura*	**B13:** Femtosecond-laser-induced Nanofabrication on Glass *Akihiro Shibata, Naoto Kaneko, Shinya Suzuki, Ken Oguri, Keita Shimada, Masayoshi Mizutani, Tsunemoto Kuriyagawa*	**C13:** LSPR Properties of Metallic Nano Dot Arrays fabricated by the Nano Plastic Forming and Annealing process *Masahiko Yoshino, Akihiro Nagamatsu, Zhenxing Li, Motoki Terano*	**D13:** A novel cutting concept of FRP composites utilizing fiber-orientation dependence of tool wear process *Yuta Morikawa, Satoru Maegawa, Shinya Hayakawa, Fumihiro Itoigawa, Takashi Nakamura*
14:00	**A14:** Numerical Simulations of Behavior of Polarized Light Beams in Trench-digging *Hiroshi Kikuchi, Hisao Kikuta, Akio Mizutani*	**B14:** Water Repellency Control of Oxygen-Free Copper Surface by Diamond Cutting of Micro Grooves *Kazuma Asakura, Jiwang Yan*	**C14:** An application of transfer printing for fabricating a MEMS element *Arata Kaneko, Hiromichi Murakami, Takahiro Yamashita, Youhei Kakuba*	**D14:** Self-assembly of fine particles along tool-mark produced by free-form cutting for optical element *Nobuyuki Moronuki, Yuji Okubo*
14:20	**A15:** Effect of Rake Angle on the Finish Cutting of the Enhanced Layer Made by Frictional Stir Burnishing *Yuusuke Yamada, Yoshimasa Takada, Hiroyuki Sasahara*	**B15:** Improving the Accuracy of Numerically Controlled Sacrificial Plasma Oxidation Using an Array of Electrodes to Produce Ultra-uniform SOI *Hiroyasu Takei, Satoshi Kurio, Yasuhisa Sano, Satoshi Matsuyama, Kazuto Yamaguchi*	**C15:** Theoretical Analysis of Spatial Process Resolution of Evanescent Light Exposure for Nano-stereolithography *Hiroyuki Tahara, Kodai Miyakawa, Satoru Takahashi, Kiyoshi Takamasu, Toshimune Nagano*	**D15:** Fabrication of freestanding assembly of fine particles intended for catalyst carrier *Nobuyuki Moronuki, Shoto Morita*
14:40 15:00	**Coffee break**			

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

July 24, 2014 (Thu)-3

Time	**Hotel Nikko Kanazawa**			
	Room A	**Room B**	**Room C**	**Room D**
	Non-conventional machining (4) *Chairman:* *(Prof. Haruhisa Sakamoto)*	**High precision machining (4)** *Chairman:* *(Prof. Hideharu Kato)*	**Machining control** *Chairman:* *(Prof. Norikazu Suzuki)*	**Other related technologies (2)** *Chairman:* *(Prof. Nobuyuki Moronuki)*
15:00	**A16:** Surface Modification of GaN by Irradiation of Atmospheric Pressure Plasma for Damage-free Polishing *Hui Deng, Katsuyoshi Endo, Kazuya Yamamura*	**B16:** Compensation System of Thermal Deformation for Compact Lathe By Temperatures Measured at a Few Points *Yoshiaki Ishino, Hiroshi Tachiya, Akira Wakabayashi, Yoshiyuki Kaneko, Katsuhiro Nakagaki, Takafumi Kinoshita*	**C16:** Model-based Feedback Control via Control Integrated Observers *Kai Litwinski, Peters René, Berend Denkena, Ludger Overmeyer*	**D16:** Comparison of Dynamic and Static Elastic Analysis in Glass under Normal Load using Finite Difference method *Akira Chiba, Hirofumi Hidai, Souta Matsusaka, Noboru Morita*

15:20	**A17:** Improvement of Spatial Resolution in Figuring using Open-Air Type Plasma Chemical Vaporization Machining with Pulse Width Modulation Control *Yoshiki Takeda, Yuki Hata, Joyo Ito, Katsuyoshi Endo, Kazuya Yamamura*	**B17:** Technologies of 5 Axis Machining Center to Achieve High Accuracy and High Efficiency Machining *Yusuke Katada, Akihiro Kitamura*	**C17:** Hybrid Positioning for Large Laser Cutting Operations of Carbon Fiber Reinforced Plastics, A concept for light weight laser cutting machines *Kai Litwinski, Martin Eckl, Thomas Lepper, Berend Denkena*	**D17:** A Basic Study on Life-Sized Model Generation of Human Body Parts in Medical Field *Hirohisa Narita, Natumi Saito*
15:40	**A18:** Effect of Plasma Irradiation in Removal Rate of Single Crystal Diamond in Plasma Assisted Polishing using a Quartz Glass Tool *Takaaki Tabata, Kouki Monna, Shinya Makiyama, Hui Deng, Katsuyoshi Endo, Hideaki Yamada, Akiyoshi Chayahara, Yoshiaki Mokuno, Shinichi Shikata, Kazuya Yamamura*	**B18:** Positioning Property of the Air Bearing Lead Screw Stage by the Comparison between Feedback Sensor and Outer Sensor *Yuta Tazawa, Makoto Fukuda*	**C18:** Reference Toolpath Modification for High Speed Cornering Motion *Burak Sencer, Susumu Inagaki, Eiji Shamoto*	**D18:** Surface modification of PTFE for a high adhesive Cu layer by open-air type plasma treatment with graft copolymerization *Haruka Sato*
16:00	**A19:** Dependency of OH Emission Intensity in Material Removal Rate of Sapphire Substrates in Plasma Assisted Polishing *Kohki Monna, Hui Deng, Takaaki Tabata, Katsuyoshi Endo, Kazuya Yamamura*	**B19:** Form Error Prediction of Aspheric Ultraprecision Machining Based on Response Surface Methodology *Yung-Tien Liu, Liangchi Zhang*	**C19:** Unit Arc Length Increment Method for Non-circular Curve Interpolation *Hao Chen, Mo Chen, Yitian Cai, Xuecheng Xi, Wansheng Zhao*	**D19:** Laser Frequency Calibration System with Optical Frequency Comb Linked to UTC(NMIJ) *Kazuhiko Kawasaki, Kaoru Miyata, Yoshimasa Suzuki, Shinichiro Yanaka, Hajime Inaba, Feng-Lei Hong*
16:20	**A20:** Parametric Analysis of Ball End Magnetorheological Finishing of Si Wafer *Saraswathamma Konapall, Sunil Jha, P Venkateswara Rao*	**B20:** Development of Ultra precision 5-axis machine tool －Evaluation of lens array mold machining for optical lens－ *Tomohiro Hirose, Yoshihiro Kami, Tatsuhito Shimizu, Makoto Yabuya, Yoshitaka Morimoto*	**C20:** Extraction and reproduction of buffing skill using a 5-axis portable machine capable of sensor-less force control *Takashi Kuramochi, Yasuhiro Kakinuma*	**D20:** Study on Improvement of Surface Integrity in Cantilever Bar Turning of Inconel 713C *Rikio Hikiji*
16:40 17:00	**Coffee break**			

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

Time	**Hotel Nikko Kanazawa** **Main Banquet Hall 4F**
17:00 18:30	**Poster session**

Time	Hotel Nikko Kanazawa
	Main Banquet Hall (L) 4F
19:00 21:00	**Banquet** **(*TSURU* —Large Baunqueting Hall 4F—)**