8:30-Opening 8:40 8.40enary lecture I (ME1) Potential of Toroidal Traction-Drive IVT for Torqu-Converter Less Automatic Power Transmission: Hirohisa Tanaka (Yokohama National Univ.) 9.20 9:20-Planary lecture II (AS) Sophisticated Electrostatic Motors - Toshiro Higuchi (University of Tokyo) Chair, Koichi Suzumori (Okayama Univ.) 10:00 10:00lanary lecture III (Tribo) 10.40 Machine elements Tribology Machine design Manufacturing Room A Acutuator Room C Tribology Masayoshi Muraki (Shonan Institi Keiichi Watanuki (Saitama Univ.) ulation and digital system Yasuo Kondo (Tottori University) Noritsugu Umehara (Nagoya Prof. Kazuhiro Yoshida (Tokyo undary lubrication Tech.). Masaharu Komori (Kyoto cro/nano process of actuat iding contact achine design of Technology) Institute of Technology Nobuhiko Henmi (Shinsvu Univ.) Dajii Noda, Shuhei Svuhei Kurokaw Takashi Tomikaw Identification of the parameters of Mixed Lubrication Simulation of Ruetjes(Laboratory for Analysis and Simulation of Yamashita, Yoshifumi (Taiho Kogvo). Development of Reverse Toshiharu Kazama (Kvushu Univ.). 11.00gear eccentricity by using Formation of High Aspect Ratio C6 Shigeyuki Suga, Hitoshi Tin Overlay Bearing Performance of Lead-free D01 A Univ.) Soo-Yong Kim (Dong-B01 Matsumoto, Masaru E01 Machine Tools, Aachen Different Manufacturing Process
University), Tobias for Bevel Gear Cutting C03 (Muroran Institute of Hydrostatic Spherical Bearings for A01 Yasutsune Ariura, Akid Engineering System on Point Be measured transmission error Microcoil Using by Dipping Method 11.20 Technology) Hydraulic Piston Pumps/Motors Kawamoto (Denso Setomoto, Tadashi Wada (Taiho Kogyo). Projection curves Naoyuki Noritaka Aso (Oita Shigeko Ohtani (AIST) Inst. of Tech.), Fumihiro Boundary Friction Using Lubrican Vibration Analysis of the Helical Yoshifumi Matsumoto National College of A Knowledge-based System with Toshio Kojima (Tokyo A Database of Arc Welding Cas 11.20-Itoigawa,Takashi Norihisa (Okuma), Takashi Containing Phosphate Ester Takayuki Nishind . Fabrication of spiral micro coil Lubrication Characteristics of Il-Ju Bae (Yonse A02 (Mazda Motor) B02 Syuuhei Yamasita, Daiji C10 Technology), Keigo D02 Web Ontology Language in an O2 Metropolitan Industrial to Assist Troubleshooting by Q&A Gear System Using the Integrated additive under Low Speed and Low 11.40 lines for electromagnetic actuator Grease Lubrication Plain Bearing University) Noda, Tadashi Hattori Fukunaga(Oita Nati Excavator Design Technology Research Style Excitation Model Nakamura (Nagoya Inst. of Contacting Pressure Conditions (Univ. of Hyogo) College of Technology Takavuki Araras Tae-Ho Kim (Dong-A A Multi-Axial Materials Testing (Doshisya Univ.) Design Method of Number of too Surface Modification and Direct National College of Naoya Ishizawa D03 Hiroyuki GOTO (JSPMI) 11:40-Corporation), Hitoshi Temperature Rise in Grease Preproduction Manufacturing of RO3 Hirovasu Lleda Dajij Bonding of Different Materials for Low Noise Gear Considering C11 Technology), Keigo FO3 Seung-soo Lee Soon C.14 Hattori (Toshiha Sliding Surface in Rotary A03 Yasuhiro Uenishi System Using6-DOF Parallel Lubrication Plain Bearing Micro Gear 12:00 Compressor Mechanisms (Jatco), Toshiki Human Aural Characteristics Noda, Tadashi Hattori irradiated H2O Ion Kyung Kim (Dong-eui Fukunaga (Oita Kinematics Hirogaki (Doshisy (Univ. of Hvogo) National College of ritz Klocke (WZL, Yoshiyasu Tamanaha, Katsuhiro Ashihara Simulation of the Gear Hobbing Takayuki Tokoroyama Inst. of Tech.), Chanat Phase Calibration of Vibration to A theoretical modeling for micro RWTH Aachen 12:00-Noritsugu Umehara (Nagoya Univ. ), Yoichi B04 Masafumi Miwa, Shigeki Patterned Electrodes united with Tsuchitani (Wakayama Ion conductive polymers surfaces (Taiho Kogyo), Hiromu D04 Kazuyuki Kojima (Saitama University) Process - Determination of the Loads on the Tool using an FE-Reduction of adhesion of Neural Network Model of Task A04 Ratanasumawong E04 University), Tobias Estimate Gear Excitation Force grooved bearings under mixed Ambient Conditioning System coagulated blood in electrical knife Hashimoto(Tokai 12.20 (Chulalongkorn Univ.) Characteristic lubrication Schroeder, Stefan Akagami (Akita Hniv ) University) hased Simulation Model 12.20-13:30 Shigeka Yoshimoto(Tokyo Tae Hyong Chong (Hanyang Univ.) Physical and tactile sensors Prof. Masahiro Ohka (Nagoya Shin-ya Sasaki(Tokyo University of ologically friendly Fumihiro Itoigawa (Nagoya Inst. Strength I Surface modification I merical analysis University of Science) Masashi Yamanaka (Tohoku Univ and their applications University) nufacturing No.1 Makoto Kamiya (IV Eri Hamajima (Nagoya Masanori Sek Yasuo kondo (Totto Optimal Motion Planning of the University), Yuji Yamashita (Okayama Univ.), Effect of Cavitaion Shotles Jniversity), Hiroyuki Plasma coating without supplying 13:30-D05 Sun-Ho Kim (Seoul National University) Development of polishing simulator A study on emission free process Youngsheng Zhu (Xi'an Redundant Parallel Kinematic C34 A05 Hitoshi Sovama Peening on Fatigue Life of Case-Hardened Steel Gear C9 Koizumi, Hiroyuki source gas by using pulsed-plan F05 Yamaguchi (Yonag 13.50 for MAGIC polishing Mechanisms Using Principal in die forging manufacturing National Coledge of Technology), Satosh Kousaka, Yoshihiro ablation of solid polymer Component Analysis Yoshida (Okavama Arakawa, Noritsus Mechanism of the decrease in Kenji Yamaguchi (Yonago Nationa Michimasa Uchidate A Fundamental Study on the Cutting Performance of Water Hiroyuki Kousaka, (Kyushu Univ.), Syuhe Nobuvuki Iwatsuki Systematic Analyses of Forward Iwate University), Akira 13.50-Research on summit parameters soluble Coolant Diluted with Surface Durability of High Strengt C35 Iwabuchi, Koh Kikuchi, A06 Kurokawa, Yoii 218 Noritsugu rubber material and stainless-steel D06 (Tokyo Institute of Technology) Dynamics of Spatial Closed-loop F06 College of Technology Recycled Water form Spent Coolant Tomoharu Shimizu( Iwate of isotropic surface roughness 14.10 Spheroidal Graphite Cast Iron by plasma-ion treatment of the Mechanisms Yasuo kondo (Tottori Matsukawa, Masahito Umehara(Nogova Gears University) Goka (Hitachi Metals) University) Emmanuel Audras rubber surface
Measurement of shearing strength University). Syu Daniel Tilahun Redda Surface Durability of the Toshiaki Wakabayash Ema Tamura (TMCIT), Masahiro Ohka (Nagoya Tactile Sensing Using an at the interface of carbon Daisuke Matsuura Redundancy Utilization of Hyper Tribological Action and Cutting (Nagoya University), E07 (Kagawa University), 14.10-Kenii Takei, Rvozo (Mivazaki Univ.). Developed Cr-Mo-Si steel under ComputingMethodofContactStress A07 B07 Univ.), Shingo Kondo (Mitsubishi Electric) Electronic Circuit Casing Stochastic Resonance C19 Yusuke Tsukiyama nanotube film synthesized by D07 (Tokyo Institute of Technology) Redundant Robots Based on Performance of Lubricants in MQL 14:30 Nemoto(TMCIT). Hideo Tsutomu Nakanishi, the Rolling-Sliding Contact Machining of Steels Takavuki Tokorovama. surface decomposition of silicon Movability and Assistability Gang Deng. Condition Oil Corporation) Michiko Kusunol Shingo Kanda (N carhide Satoshi Suda (Nippon A Comparison of Rolling Contac The evaluation of fracture energy (Okayama Univ.), Akira Method of Displaying the Sense of The Influences of Atmosphe University), Takayuki D08 Jun NANGO (Yamagata Static analysis of the shoulder B08 Atsushi Tazo, Takashi Maeno (Keio Univ.) university). Noritsugu E08 Oil Corpration), 14:30-Surface analysis of friction scar o Fatigue of Steel Roller under C30 Tokoroyama, Noritsugu CNx with FT-IR C22 Umehara (Nagoya at the interface between university), Ryusi Ohashi, fish protein and metal at the interface between baked A08 Yoshida, Yasuhide both Roughness and Softness Carrier Gases on Efficient MQL Machining of Aluminum 14:50 Traction Oil Lubrication and und joint using spatial mechanism Using Ultrasonic Tactile Display Umehara(Nagoya Mizuno, Kento university), Ryusi Ohas Akira Hanafusa(Rinnai) Turbine Oil Lubrication (Kagawa Univ.) University) Huaipeng Wang Keita Horiuchi (Yokohama An expert system with tactile Research on the strength of (Nagoya University), Development of Nanometer Image 14:50-National University), Ken Nakano(Yokohama National University) An expert system with tactile information based on the signals frictional vibration Edzrol Niza Mohamad, metallic glass micro gear B09 Institute of Tottori
Prefecture), Fumio Obata. Takayuki Tokoroyama. Tribology properties of Carbon-**Ewoud van West** Development of Scara-type hapti-Δna Measurement System with Two-D09 Iwao Yamaji, Nobuyuk (Development of performance Noritsugu overcoated CNx (University of Tokyo) 15:10 wavelength Interferometry tester for micro gear) Umehara(Nagova Tohoku Univ.), Yukihar Univ.), Kenji Yamaguch Nobuhiko Henmi. (Hiroshima Univ.) Tooth Surface by Using a Laser A Study of a Piezoelectric Jerk (Institute of Frequency Analysis of Hard Disk 15:10-B10 Takeshi Nakai, Michihiko Tanaka Tribological Properties of DLC-D10 (Doshisha Univ.) Tomoko Hirayama logically friendly Satoshi Suda (Nippon Oil A10 Kazuteru Nagamura, C13 Technologists), Nob Sensor: Improvement of Frequenc Drive Spindle System Supported Sinterd Carbon Sliding Pair nufacturing No.2 15:30 Corpration) Kivotaka Ikeio, Rvozo Practical Use under the Condition Response Saito(Institute of by Hydrodynamic Bearings (Shinshu Univ.) Nemoto (TMCIT) of Lubricant) Technologists) Kazuteru Nagamura (Hiroshima uators and their Prof. Dajji Noda (University of urface modification II Yasuhisa Ando (AIST) iding friction I Prenary (Machine designr) Atsushi Korenaga (AIST) rength II E09 College of Technology), Force and Crater Wear by Dry Univ ) alications (1) Masayoshi Muraki Masashi Yamanaka Tomoski Yano (AIST Shinnosuke Kadowa Friction characteristics and Influence of hardness distribution Ecological and Clean Ball-End (Shonan Institute of (Tohoku Univ.), Shinji Yoshiaki Kubota, Toru (Nagoya university), 15:50-Basic Specifications of a Multi mechanical properties of tribofilms Bending Strength of Carburized B11 Shikayama, Takeo C37 Daisuke Yoshimura, F10 Kei-ichi Kawada (Aichi Milling of Molding Die Using Withdrawal of Chips by Suction C24 Technology), Tetsurou Miwa, Katsumi Inoue on the wear of DLC slid against Keynote lecture TV.LH Oh (KAIST) formed by ZnDTPs with different Pole Spherical Synchronous Mo 16:10 Forged Spur Gears Industrial Technology Institute), Takashi Ebihara(Shonan Yoshiki Kawasaki (O-Suzuki (Yasukawa Hirovuki Kousaka. cast iron in oil alkvl groups Effects of Heating Conditions on University), Takashi University of Univ.), Takao Koide, Mechanical Characteristics of Fukutsuka Toshiaki Residual Stress, Hardened Laver Hideaki Kanasugi Development of a Compact Size Lubricity of Ionic Liquids on Akiyoshi Kobayashi 16.10-OF POLYMERIC SLIDING Satoshi Oda (Fukuyama Science) Miki Nakako C42 Science, William Hiroki Mano, Atsushi Wakabayashi, Kouji A12 Univ.), Naoki Motooka and Bending Fatigue Strength of Multi-Degree-of-Freedom Linear Nitride Hard Thin Films for Zero B12 Takashi Maeno (Keio Friction and Wear of DLC under E11 (Meijo University), MATERIALS USED FOR CRANE 16:30 Yamamoto, Takamiti Induction Hardened Sintered Met Univ.) Ultrasonic Motor Vacuum Condition Shinya Minami Emission Cutting (Sumitomo Electric BOOM Korenaga, Koji Sakai, Takavuki Sintered Allov), Keiich (Nagoya Univ.), Shiho B13 Matsukawa (Orimpus), Masahiro Ohka (Nagoya Univ.), Testu Miyaoka University of Science). A Circular Arc Slider with a High Univ.). Taketoshi Load Bearing Capacity of A two-axis bimorph piezoelectric Study on the wear mechanism of 16:30-C43 Hiroyuki Kousaka (Nagoya University) E12 Yoshihiko Murakami (OSG corporation) Ecological Cutting by Ultra Fine C20 Shigeka Yoshimoto. Flying Height for Optical Disc A13 Maemori, Teruie Induction-Hardened Rolled actuator controlled by a multihydrogen-free diamond-like carbo 16:50 Crystalline Diamond Coated Tools Takashi Watanabe. Devices Takamasu (Kyushu Sintered Metal Gears lavered neural network slide against cast iron Yasuo Mori (Tokyo Univ.), Kouitsu tuators and their Masaaki Miyatake(Tokyo Universi Prof. Takefumi Kanda (Okayama Hidetsugu Terada (Yamanashi Hiroyuki Kousaka (Nagoya ding friction II ength III Masahiro Fuiii (Okayama Univ.) Akira Iwabuchi (Iwate University) Micro/nano mechanics (1) Micro/Nano processing of Science) polications (2) Kazuvoshi Manahe Doo-Sun Choi (Korea Effects of Pre-Treatment and Sobahan Mia (Saga Effect of sound velocity of The breakdown processes of thir A Study on the Ultra Precision R B14 Makoto Toeda, Takashi Maeno (Keio Univ.)

Design of High Efficiency and Long Life Ultrasonic Motor by Friction Drive with Reduced Slippage Design of Ultra Precision Stage (Yokohama National Institute of Machinery & 17:00-D14 Sang-Don Ye (Don-Eui University) Takao Koide, Michiaki Heating Time on Hardened Laver using Response Surface Methodology University), Nobuyoshi lubricating oil on its molecular C26 University). Ken oil films induced by quasi-static E13 Materials(KIMM)), TaeJin Drum Mold Fabrication Technolog Morimoto, Jun Iwanaga and Bending Fatigue Strength of 17:20 Je, Yeong-Eun Yoo, Kyung-Hyun Whang Ohno(Saga University) structure for Optical Films Nakano (Yokohama loading Induction Hardened Gears National University Changes of Attachment of Dust Dong-won Youn, Jung-Kvo Tanabiki (University of Hyogo), Youichi

f Babrication of the 3 dimension

f Hyogo), Youichi

fabrication of the 3 dimension

resist microstructure using X-ray

Ltd), Daiji Noda (University diffraction

of Hyogo), Tadashi Hattori Fabrication of the 3 dimension ho Park, Young-su Son B15 (Korea Institue of Seungchol CHOI (Tohoku University) (Hiroshima Univ.) (Shonan Institute of between Asperity Array and Non 17:20-Novel hybrid actuator using SMA and Characteristics of Traction Drive Wear of Involute-cycloid Oil Film-forming behavior and EHL C17 Technology), Hidehiko Ida, Katsumi D15 (Tokyo Institute of Asperity Array on Micro Contact Composite Tooth Profile Gear in Minimum Oil Supply 17.40 traction of some polymer solution Inoue (Tohoku Kivotaka Ikeio. Machinery and Masavoshi Technology) Surface due to the Behaviors of University) Muraki(Shonan Inho Bae (Stech&H Tetsuva Nakao, Disuke Hiroshi Tsujii (University (Yokohama National Dynamic behaviors of contact Assumption in Engineering Analys Micromanipulation System Using Hanspeter Dinner Effect of Starvation on Thermo-Yuichi NAKAZATO 17:40-B16 Gotsu (Kurume National Collage of Control of the HTS motor Fabrication of the X-ray mask 15 of Hyogo), Kazuma Fabrication of the X-ray mas Shimada, Makoto Tanaka, using the silicon dry etching C39 Somer M. Nacy C25 University), Ken D16 (Nippon Institute of SMA Actuator in a SEM with CCD A16 (KISSsoft AG), Tae of Wind Turbine Gearboxes and it surfaces in the friction of soft Elastohydrodynamic Lubrication of 18.00 Hyong Chong (Hanyang Effects on The Design Nakano(Yokohama materials Rolling/Sliding Contacts Technology) Camera Technology) Daiii Noda, Tadashi Hattor National University)