

**ICDES2010 Time Schedule (Morito Memorial Hall, Tokyo University of Science)**

**Nov. 17, 2010 (Wed.)**

<b>Time</b>	<b>Smoking is prohibited throughout the compound.</b>	
10:00- Hall of 1st Floor	<b>Reception (Hall of 1st Floor)</b> <b>Conference Room 2 (2nd Floor):</b> Cloak and Secretariat <b>Conference Room 3 (2nd Floor) &amp; Lounge (1st Floor):</b> Break and Communication Room	
13:00-13:30 Forum 1	<b>Opening ceremony (at Forum 1, Nov. 17, 2010)</b> (Host: Tohru Kanada) Address from Conference Chairman Masafumi Katsuta (President, JSDE)  Address from Executive Committee Hirokazu Shimoda  Address from Site Manager Shigeka Yoshimoto  Announcement Toshio Otaka	
13:45-14:45 Forum 1	<b>Special speech (at First Forum, Nov. 17, 2010)</b> (Host: Tohru Kanada) <b>1-01</b> Practice of creative design Yotaro Hatamura	

<b>Time</b>	<b>Forum 1 (Nov. 17, 2010)</b>	<b>Forum 2 (Nov. 17, 2010)</b>	<b>Conference Room 1 (Nov. 17, 2010)</b>
15:00-15:20	<b>Design methodology 1</b> (Chair: C. L. Dym & E. Dewberry) <b>Keynote speech</b> <b>1-02</b> Challenges in engineering design (Approaches for variant design and configuration, considering module design and complexity) J. Feldhusen, K.-H. Grote and G. Pahl	<b>Mechanism 1</b> (Chair: T. Kanada & M. Seki) <b>2-01</b> Experimental study on preventing web defects under transport with concave roller S. Hikita and H. Hashimoto	
15:20-15:40	<b>Keynote speech</b> <b>1-03</b> Design interventions, prediction and science in the sustainable transition of large, complex systems E. Dewberry and J. Johnson	<b>2-02</b> Designing method of micro-grooved roller used for plastic-film transportation H. Hashimoto and S. Hikita	
15:40-16:00	<b>1-04</b> Development strategy consideration in environmentally friendly product design K. Oizumi and N. Tokuoka	<b>2-03</b> Development of highly effective pedaling mechanism for bicycle using link mechanism K. Aizawa, T. Nagamine, M. Suzuki, K. Kumagai and T. Oizumi	
16:00-16:20	<b>Break</b>	<b>Break</b>	<b>Break</b>
16:20-16:40	<b>Design methodology 2</b> (Chair: K. - H. Grote & A. Piros) <b>Keynote speech</b> <b>1-05</b> Reflecting engineering values through design for sustainability C. L. Dym	<b>Mechanism 2</b> (Chair: H. Hashimoto & M. Komori) <b>2-04</b> Fundamental characteristics of reverse-type differential rotary to linear conversion mechanism M. Seki, I. Shimizu and M. Fujii	
16:40-17:00	<b>Keynote speech</b> <b>1-06</b> Modelling and managing reliability growth in engineering design process L. Walls and J. Quigley	<b>2-05</b> A study on noncircular gears with non-uniform teeth K. Kumagai and T. Oizumi	
17:00-17:20	<b>1-07</b> Fuzzy evaluation in configurable product design A. Piros	<b>2-06</b> Effect of tooth meshing stiffness and tooth flank form on the motion of gears E. Z. Mohamad, M. Komori, H. Murakami and A. Kubo	

**Advance notice for Banquett (Nov. 18, 2010)**

18:00-20:00 **Banquette at "Moon Light" (43rd Floor), Keio Plaza Hotel (Shinjuku, Tokyo)**

Host : Tohru Kanada  
 18:00 Opening address by Masafumi Katsuta (Conference Chairman, President, JSDE)  
 18:10 Awarding ceremony (Coordinated by H. Aoyama, Chair of Awarding Committee)  
 18:30 Toast  
 Communing together, winning and dining  
 20:00 Closing address by H. Shimoda (Chair of Executive Committee)

**ICODES2010 Time Schedule (Morito Memorial Hall, Tokyo University of Science)**

**Nov. 18, 2010 (Thur.)**

Time	Forum 1 (Nov. 18, 2010)	Forum 2 (Nov. 18, 2010)	Conference Room 1 (Nov. 18, 2010)
9:10-9:30	<b>Design methodology 3</b> (Chair: L. Walls & K. Oizumi) <b>Keynote speech</b> 1-08 Design innovation by engineering and science  T. Murakami		
9:30-9:50	<b>Keynote speech</b> 1-09 Multispace design model as framework for design science toward integration of design  Y. Matsuoka	<b>Tribology 1</b> (Chair: K. Sonoda & M. A. Kumar) 2-07 Influence of substrate roughness and thickness of DLC coating on tribological behaviour in vacuum under sliding contact  M. A. Kumar, M. Fujii, K. Murata and T. Fukuda	<b>Design and development 1</b> (Chair: H. Aoyama & K. Mitsuhashi) 3-01 Software FMEA method for GAMP5 based computerized system validation  M. Takahashi and T. Tanzawa
9:50-10:10	1-10 Design for mechanical adaptability  M. Kannan, S. Ramesh babu, C. Muthazhagan and V. Jeyaprakash	2-08 Experimental study on characteristics of full-flat thrust bearing with partial water-repellent surface  A. Takeuchi	3-02 GAMP based retrospective computerized system validation for PLC  M. Takahashi and T. Tanzawa
10:10-10:30	1-11 Description of product design in terms of stakeholder mind  K. Oizumi and K. Aoyama	2-09 An observation of oil film thickness of piston pin in real engine with ultrasonic technique  A. Takeuchi	3-03 Influence of feature on cylindrical parts in micro assembly by laser trapping  K. Mitsuhashi and H. Takahashi
10:30-10:50	<b>Break</b>	<b>Break</b>	<b>Break</b>
10:50-11:10	<b>Design education 1</b> (Chair: S. Hosnedl & S. Kise) <b>Keynote speech</b> 1-12 Engineering design as a form of politics  P. Little	<b>Tribology 2</b> (Chair: A. Takeuchi & H. Yanada) 2-10 Modeling of dynamic friction behaviors of hydraulic cylinders  X. B. Tran, N. Hafizah and H. Yanada	<b>Design and development 2</b> (Chair: K. Watanuki & L. Hou) 3-04 A new hyperthermia system for deep tumors in the abdominal region without contact  S. Ono, M. Suzuki, E. Morita, Y. Shindo, M. Kubo and K. Kato
11:10-11:30	1-13 Examination of such basic contents that carries out the three dimensions mechanical design  S. Kise, S. Sekiguchi, K. Okusaka and S. Hirano	2-11 Friction and power loss at contact surface of rollers under EHL condition  K. Sonoda, A. Ishibashi and Y. Sunagawa	3-05 Development of a support system for effective hyperthermia treatments with a needle applicator in virtual  N. Mimoto, K. Nakane, Y. Shindo, M. Kubo, K. Tsuchiya and K. Kato
11:30-11:50	1-14 Consideration of response to new direction of design in design education  R. Iwata and S. Hirano	2-12 Experimental study on dynamic characteristics of fluid film bearing for HDD spindle motor  M. Ochiai, Y. Sunami and H. Hashimoto	3-06 Development of surface refining system using highlight lines  H. Aoyama and Y. Komatsu
11:50-13:30	<b>Break</b>	<b>Break</b>	<b>Break</b>
13:30-13:50	<b>Design education 2</b> (Chair: S. Hirano & T. Kanada) 1-15 Effective engineering design research, education and practice in context  S. Hosnedl and Z. Srp	<b>Tribology 3</b> (Chair: S. Yoshimoto & T. Kazama) 2-13 Measurements of film thickness and pressure distribution for optimized thrust air bearing  Y. Sunami, M. D. Ibrahim, M. Ochiai and H. Hashimoto	<b>Design and development 3</b> (Chair: T. Otaka & T. Saito) 3-07 Construction and testing of a gasoline engine system with laser-induced breakdown ignition  T. Saito, K. Hobayashi and H. Furutani
13:50-14:10	1-16 Questionnaire-based investigation of the knowledge of machine element price for undergraduate mechanical engineering students  S. Noguchi and T. Kanada	2-14 Optimum design of oil lubricated thrust bearing for hard disk drive  M. D. Ibrahim and H. Hashimoto	3-08 Implementation of fuzzy logic controller for parallel hybrid electric vehicle  N. N. F. Nashed, S. Wahsh, H. GALAL and T. Dakroury
14:10-14:30	1-17 Effective machine design education  T. Yoshida, K. Hamaguchi, Y. Nakao, S. Takahashi and S. Itaya	2-15 Tribological approach to side-plates in external gear pumps (Temperature measurement, vibration analysis, and geometry design)  T. Kazama, S. Oguma and R. Huang	3-09 Virtual reality-based job training based on brain activity assessment using functional near-infrared spectroscopy  K. Watanuki and L. Hou
14:30-14:50	<b>Break</b>	<b>Break</b>	<b>Break</b>
14:50-15:10	<b>Design education 3</b> (Chair: P. Little & S. Hashimura) 1-18 A new mechanical engineering education program using 3D-CAD/CAE  S. Hashimura, H. Tanaka, R. Ishimaru, Y. Nakatake, M. Fujita and S. Matsui	<b>Tribology 4</b> (Chair: M. Ochiai & T. Ishii) 2-16 Numerical calculation of foil thrust bearings with viscoelastic materials using finite element method  K. Somaya and S. Yoshimoto	
15:10-15:30	1-19 Education of manufacturing system using 3D-CAD  K. Asahina, T. Hirano and T. Otaka	2-17 A consideration on the endurance property of ball guide systems  H. Suzuki, Y. Shimizu and T. Ishii	
15:30-15:50	1-20 Computational mechanics for design course students  K. Takenouchi	2-18 Design analysis for reducing lost motion in ball screws  M. Ueda and H. Shimoda	
15:50-	<b>Move to Banquette site (45 minutes by train and walk from conference site)</b>		
18:00-20:00	<b>Banquette at "Moon Light" (43rd Floor), Keio Plaza Hotel (Shinjuku, Tokyo) including Awarding Ceremony</b>		

## ICDES2010 Time Schedule (Morito Memorial Hall, Tokyo University of Science)

**Nov. 19, 2010 (Fri.)**

Time	Forum 1 (Nov. 19, 2010)	Forum 2 (Nov. 19, 2010)	Conference Room 1 (Nov. 19, 2010)
9:10-9:30	<b>Thermal and fluid eng. 1</b> (Chair: M. Katsuta & K. Nishihara) <b>1-21</b> Vehicle fuel production by wood biomass gasification utilizing dual fixed bed gasifier K. Fujimoto, Y. Takatani, Y. Sakai, T. Koya, T. Saika and H. Nagamoto		<b>Robotics 1</b> (Chair: Y. Yamazaki & H. Niimi) <b>3-10</b> Research of autonomous mobile robot in Tsukuba Challenge 2009 (Examination of autonomy running with GPS and IMU) K. Honda, A. Matsumoto, K. Kishi and Y. Yamazaki
9:30-9:50	<b>1-22</b> Evaluation of design of two radiators used in automotive engine cooling system M. A. Ardekani, A. Anvar and Y. Yassi	<b>Vibration and dynamics 1</b> (Chair: Y. Sekiguchi & X. Liu) <b>2-19</b> Design of a novel linkage mechanism for manual pulse thresher B. K. Saha	<b>3-11</b> Relationship between body design and temporal resolution of a visual sensor M. Hanei, T. Sekino and K. Kikuchi
9:50-10:10	<b>1-23</b> Entry and dispersion of a suspension droplet into water M. Nomura, R. Tsujino, Y. Ueda and M. Iguchi	<b>2-20</b> Vibration and noise analysis of elliptical gears X. Liu, K. Nagamura and K. Ikejo	<b>3-12</b> Fast stair climbing and descending using vibration by mechanical design properties of a robot M. Hirano, S. Kobayashi, M. Endo, K. Negishi, Y. Chiba and K. Kikuchi
10:10-10:30	<b>1-24</b> Model study on transition to turbulence in blood flow in arteries K. Nishihara, K. Sumida, Y. Ueda, Y. Sasaki, Y. Nakahata and M. Iguchi	<b>2-21</b> Sound transmission of polycarbonate window pane with damped sandwich structure for automobile S. Min, K. Nagamura, N. Nakagawa and M. Okamura	<b>3-13</b> Design and development of small size humanoid robot H. Niimi, M. Koike, S. Takeuchi and N. Douhara
10:30-10:50	<b>Break</b>	<b>Break</b>	<b>Break</b>
10:50-11:10	<b>Thermal and fluid eng. 2</b> (Chair: R. Tsujino & T. Kobayashi) <b>1-25</b> The proposal of thermal design method of stand-off thermal protection system with consideration for uncertainties M. Katsuta, T. Ogasawara and T. Ishii	<b>Vibration and dynamics 2</b> (Chair: K. Nagamura & S. Ogawa) <b>2-22</b> Design of perforated open end for the reduction of resonance sound in acoustic tube S. Tejima and Y. Sekiguchi	<b>Robotics 2</b> (Chair: K. Kikuchi & N. Iwatsuki) <b>3-14</b> Development of rescue robot with sub crawlers and examination of performance by hardware design A. Matsumoto, S. Nakagome, N. Furuya and Y. Yamazaki
11:10-11:30	<b>1-26</b> A study on optimization of thermal stress for a large area electrode deposition equipment T. Kobayashi, T. Fukui, R. Hashimoto and H. Kanematsu	<b>2-23</b> The method of determining the vehicle framework in safety development using a spring-mass model S. Ogawa, H. Takeshita and I. Kamimoto	<b>3-15</b> Simulation for modeling walking of four-legged robot "AIBO" in consideration of contact with field surface H. Sekiguchi, Y. Uchino and T. Kanada
11:30-11:50	<b>1-27</b> Thermal deformation prediction in machine tool model by using transfer functions F. Suzumura, H. Makihara and G. Katayama	<b>2-24</b> Riding comfort reproduction of railway vehicle by universal shaking table S. Fujiwara, T. Saito, Y. Miyajima and H. Shimosaka	<b>3-16</b> Motion control of a planar robot moving by pressing arms against bars N. Iwatsuki and D. Ikeda
11:50-12:10	<b>1-28</b> Effect of hydrogen addition on ethanol spray combustion in a constant vessel S. Hoshino and H. Saitoh	<b>2-25</b> Strength and noise of injection-molded-plastic-gear filled with rice-hull-silica-carbon (Effect of the median grain diameter and fill ration) T. Itagaki, H. Takahashi and H. Iizuka	<b>3-17</b> Space securing in minimally invasive surgery (Development of training simulator and force feedback master manipulator) H. Takanobu, Y. Akabane, K. Suzuki, H. Miura, H. Kawamitsu, K. Izawa, J. Okamoto, M. G. Fujie and H. Iseki
12:15-12:20	<b>Closing ceremony</b> (Host: Tohru Kanada) Address from Executive Committee Nobuyuki Iwatsuki		
13:30-17:10	<b>Optional bus tour</b> (Application from web site) Hamamatsu-cho Bus Terminal (45 minutes by walk and trains from the site) -> Trade Center Building -> Sumida-gawa River Cruise -> Asakusa -> Nakamise -> Ginza -> Imperial Hotel Tokyo (Teikoku Hotel Tokyo) -> Hamamatsu-cho Bus Terminal		