iDECON/MS2021 Parallel Session Schedule

DAY1 (Sept. 3, Fri)

13:30～	15:00		Parallel Session A1 Chairs	OS1: Sustainable Design and Manufacturing I Eiji Morinaga and Yoshiharu Iwata	
		paper #	Title	Authors	Affiliation
13:30～	13:50	11	Re-design of automobile steering knuckle for mass saving using ultra-fine ductile cast iron	Nurhayati Md Issa, Kondo Masaya, Itofuji Haruki, Saiful Amri Mazlan, Mohd Azizi Abdul Rahman, Mohd Hatta Mohammed Ariff and Koga Tsuyoshi	Yamaguchi University, I2C Technology Institute, Universiti Teknologi Malaysia
13:50～	14:10	13	Prediction of shear crack occurrence on iron powder die compaction by FEM analysis	Mayu Hayashi and Yukinori Taniguchi	National Institute of Technology (KOSEN), Nara College
14:10～	14:30	15	Optimum design of built-in high magnetic force components compatible with high magnetic efficiency and high rigidity	Takashi Ohnishi and Keiichi Watanuki	Magnetec Japan Ltd., Saitama University
14:30～	14:50	43	Study on strength of pipe-framed greenhouse against wind load using numerical analysis	Kenta Morikawa, Atsushi Suda, Yukinori Taniguchi, Shinichi Enoki and Kenichi Iida	National Institute of Technology(KOSEN), Nara College, Osaka Sangyo University
15:15～	16:45		Parallel Session A2 Chairs	OS6: Automation and Intelligent Systems Mas Fawzi Mohd Ali and Satoshi Kitayama	
		paper #	Title	Authors	Affiliation
15:15～	15:35	16	Modeling Human Prediction for Autonomous Mobile Robot Motion: Prediction based on a Latent Variable of Driving Force	Masanori Okada and Hideyoshi Yanagisawa	The University of Tokyo
15:35～	15:55	25	Communication-Path Generation for Adaptable Self-Organized Sensor Networks	Geunho Lee, Kouki Ogata, Haruka Noritake, Kota Okabe and Fumiaki Sugino	University of Miyazaki, Miyazaki Livestock Research Institute
15:55～	16:15	37	Architecture Definition of Socially Harmonized Autonomous Driving System Considering Ethics	Atsushi Iwamura and Hidekazu Nishimura	Keio University
16:15～	16:35	50	Geometric Deployment Scheme for Robot Swarms Capable of Adapting to Unknown Borders	Kouki Ogata, Geunho Lee and Yasuhiro Bonkobara	University of Miyazaki

13:30～	15:00		Parallel Session B1 Chairs	OS5: Manufacturing Systems Amm Sharif Ullah and Hirohisa Narita	
		paper #	Title	Authors	Affiliation
13:30～	13:50	5	Process parameters optimization for minimizing weldline and cycle time in rapid heat cycle molding using variable packing pressure profile	Shogo Tsurita, Satoshi Kitayama, Masahiro Takano, Yusuke Yamazaki, Yoshikazu Kubo and Shuji Aiba	Kanazawa University, Industrial Research Institute of Ishikawa, Sodick Co., Ltd.
13:50～	14:10	28	A Study on Machining Process Selection Using Machine Learning Based on Recognized Machining Features	Tetsuya Asano, Hibiki Kawakami and Keiichi Nakamoto	Aikoku Alpha Corporation, Tokyo University of Agriculture and Technology
14:10～	14:30	41	Skill Analysis of TIG Welding for Small Diameter Tubes in Order to Realize Skill Transfer with Movement	Shintaro Mizuno, Hirohisa Narita, Naoto Fujiura and Hideo Fujimoto	Meijo University, IHI Corporation, Nagoya Institute of Technology/GrandTech Fujimoto Co.,Ltd
14:30～	14:50	42	Characteristic analysis of radius end mills for inclined surface cutting	Yuri Narita and Hirohisa Narita	Meijo University
15:15～	16:45		Parallel Session B2 Chairs	OS2: Sustainable Design I Effendi Bin Mohamad and Tsuyoshi Koga	
		paper #	Title	Authors	Affiliation
15:15～	15:35	12	Method of Identifying Latent Needs in Innovative Design Methodology	Nurhayati Md Issa, Ando Jun, Muhammad Syamel Haziq Juhari, Wira Jazair Yahya, Ahmad Muhsin Ithnin and Koga Tsuyoshi	Yamaguchi University, Universiti Teknologi Malaysia
15:35～	15:55	26	Research of a page turning operation mechanism using two 2-link manipulators	Masahiko Itoh	National Institute of Technology, Sendai College
15:55～	16:15	36	Development of ball-guidance mechanism and its application to parasports	Kazuma Takemoto, Geunho Lee and Hiroki Yokoyama	University of Miyazaki
16:15～	16:35	45	A prescriptive model of the cognitive design process that promotes highly creative engineering design	Kotaro Yokoi, Yusuke Tsutsui, Yuya Mitake, Naoki Muraoka, Salman Alfarisi, Hanfei Wang and Yoshiki Shimomura	Tokyo Metropolitan University

13:30～	15:00		Parallel Session C1 Chairs	OS3: Kansei/Emotional Design Koichiro Sato and Masato Inoue	
		paper #	Title	Authors	Affiliation
13:30～	13:50	6	Estimation of Ship Powering in Preliminary Ship Design Using Graph Theory and Machine Learning Method	Adi Maimun Abdul Malik, Kazuo Hiekata, Jauhari Khairuddin, Chee Loon Siow and Arifah Ali	Universiti Teknologi Malaysia, The University of Tokyo
13:50～	14:10	22	Aesthetic Preference in Closed Planar Curves by Introducing EVE' Theory	Takemasa Ito, Akihiro Okano and Takeo Kato	Keio University
14:10～	14:30	24	Modeling human recognition of the state of charge	Satsuki Arima, Masafumi Miyamoto and Hideyoshi Yanagisawa	The University of Tokyo
14:30～	14:50	49	A user-oriented Kansei design method based on evaluation grid method	Mamiko Sakuragi, Rimpei Yamaguchi, Tomoya Ishikawa and Masato Inoue	Meiji University
15:15～	16:45		Parallel Session C2 Chairs	OS4: Human Interface and Usability I Muhamad Arfauz A Rahman and Masashi Okubo	
		paper #			Affiliation
15:15～	15:35	2	Design of Charming Greeting Motion for Communication Robot	Akihiro Tatsumi, Mayu Konda and Masashi Okubo	Doshisha University
15:35～	15:55	7	Development of Driving System for a Mobility Robot by using Gesture Recognition Considering Different Cultures	Zhenyu Ta, Jiang Wu, Jiawei Li, Yihang Dai and Yuan Yuan	The University of Tokyo, Kakuchi Co., Ltd
15:55～	16:15	34	Impression test by lecture using 3 types of avatars	Hideo Miyachi, Junko Ichino, Daisuke Okabe and Masahiro Ide	Tokyo City University
16:15～	16:35	54	Multilingual Guide Robot Using Conversation-Based and Smartphone-Based Language Identification	Yuki Kida, Fan Wu, Kei Matsuoka and Tetsuro Ogi	Keio University, Shonan Insitute of Technology

DAY2 (Sept. 4, Sat)

13:00～	14:30		Parallel Session A3 Chairs	OS1: Sustainable Design and Manufacturing II Koji Iwamura and Toshitake Tateno	
		paper #	Title	Authors	Affiliation
13:00～	13:20	17	Elucidating accuracy of 3D printed porous structure by analyzing images of designed and printed structures	Shota Yonehara and Amm Sharif Ullah	Kitami Institute of Technology
13:20～	13:40	8	Design for Motion Range of Joint Braces Using Geometric Patterns and Fabrication by AM	Yuki Yamahashi and Toshitake Tateno	Meiji University
13:40～	14:00	55	Application of Computational Design for creation of novel texture	Sakutaro Miyasaka, Fumio Terauchi and Koichiro Sato	Chiba University
14:00～	14:20	10	Enjoy your life: Explore New Horizons in Manufacturing and Design	Shuichi Fukuda	Keio University
14:45～	16:45		Parallel Session A4 Chairs	OS1: Sustainable Design and Manufacturing III Azrul Azwan Abdul Rahman and Hideyoshi Yanagisawa	
		paper #	Title	Authors	Affiliation
14:45～	15:05	30	Determining optimal robot work cell in manufacturing automation system	Muhamad Arfauz A Rahman, Paul G. Maropoulos, Nor Suriyanti Osman, Azrul Azwan Abdul Rahman, Effendi Mohamad and Mohd Rizal Salleh	Queen's University Belfast, Universiti Teknikal Malaysia Melaka
15:05～	15:25	35	Developing analysis simulator of a supply chain using advance demand information	Hayato Aoki and Akira Tsumaya	Okayama Prefectural University
15:25～	15:45	51	Process Optimization of Metal Stamping Production Line Through Value Stream Mapping (VSM) and Time Driven Activity Based-Costing (TDABC)	Soufhwee Rahman, Effendi Mohamad, Azrul Abdul Rahman, Mohd Rizal Salleh, Mohamad Ridzuan Jamli, Mohd Hamdi Abd Shukor and Teruaki Ito	Universiti Teknikal Malaysia Melaka, University of Malaya, Okayama Prefectural University
15:45～	16:05	52	Enhancing Sustainability Performance by Cleaner Production Value Stream Mapping at Soybean Curd Process	Anuar Ishak, Effendi Mohamad, Hambali Ariff, Mohd Amri Sulaiman, Nor Akramin Mohamad, Teruaki Ito and Muhamad Arfauz A Rahman	Universiti Teknikal Malaysia Melaka, Okayama Prefectural University, Queen's University Belfast
16:05～	16:25	46	A Basic Study on Data-Driven Job Shop Scheduling	Eiji Morinaga, Naoki Otsuka, Hidefumi Wakamatsu, Xuetian Tang, Koji Iwamura and Naoki Hirabayashi	Osaka Prefecture University, Osaka University

13:00～	14:30		Parallel Session B3 Chairs	OS2: Sustainable Design II Takeo Kato and Shuho Yamada	
		paper #	Title	Authors	Affiliation
13:00～	13:20	4	A set based concurrent engineering method for dynamic system using machine learning	Kohei Shintani, Eiji Nakatsugawa and Minoru Tsuchiyama	Toyota Motor Corporation
13:20～	13:40	33	Fundamental Study on Hierarchical Multi-Objective Optimization Method	Yoshiharu Iwata, Satoshi Terada, Takumi Tomomoto and Ryouhei Satoh	Osaka University
13:40～	14:00	44	Development of a product family design method based on overall mechanical modeling and its application for outer wall maintenance device	Hiroki Yamaguchi, Nurhayati Binti Md Issa, Wira Jazair Bin Yahya, Saiful Amri Bin Mazlan and Tsuyoshi Koga	Yamaguchi University, University of Technology Malaysia
14:00～	14:20	53	Upgrade planning and architectural design methods for multi-generational use	Kentaro Fujiwara, Shogo Miyajima, Rina Hasebe, Shuho Yamada, Tetsuo Yamada and Masato Inoue	Meiji University, The University of Electro-communications
14:45～	16:45		Parallel Session B4 Chairs	OS2: Sustainable Design III Tomomi Nonaka and Yuya Mitake	
		paper #	Title	Authors	Affiliation
14:45～	15:05	3	A demand forecasting of lettuces in wholesale markets for trading markets of plant factories	Thinh Quang, Shohei Kohama, Nobuhiro Sugimura, Koji Iwamura, Eiji Morinaga and Naoki Hirabayashi	Osaka Prefecture University, IHI Corporation, Yamato University
15:05～	15:25	23	Demand Estimation for the System Design of a Flying Car as an On-Demand Air-taxi Service in the USA	Yusuke Mihara, Bhhavya Sharma, Tsubasa Nakamura and Masaru Nakano	Keio University, Carnegie Mellon University, Dream On
15:25～	15:45	27	An architecture description method for virtual system-of-systems (SoS) which is open ecosystem	Nobuyuki Kobayashi	Kato Works Co., Ltd.
15:45～	16:05	38	A service structure modelling method for solving receive-provide conflicts in service offerings	Hiroki Yamamoto, Yusuke Tsutsui, Yuya Mitake, Salman Alfarisi, Hanfei Wang and Yoshiki Shimomura	Tokyo Metropolitan University
16:05～	16:25	47	Proposal of Complexity of Mechanical System based on number of Contact Points	Tsuguto Inayama and Seiko Shirasaka	Keio University

13:00～	14:30		Parallel Session C3 Chairs	OS4: Human Interface and Usability II Yoshihiro Sejima and Kenichiro Ito	
		paper #	Title	Authors	Affiliation
13:00～	13:20	32	Suggestions for Efficient Detection and Identification of Sleep Apnea Syndrome of Breath Sounds During Sleep Using Continuous Wavelet Transform	Miyori Shirasuna	National Institute of Technology, Tsuruoka College
13:20～	13:40	48	Preliminary evaluation of an IoT setting method for universal design: a case study of young adults	Sooin Kang, Reina Yoshizaki, Hiroki Kogami, Koki Nakano, Yuriki Sakurai, Daisuke Yoshioka, Jiang Wu, Mahiro Fujisaki-Sueda-Sakai, Ikuko Sugawara, Takahiro Miura, Ken-Ichiro Yabu, Kenichiro Ito, Hiroko Akiyama, Toshio Otsuki and Tohru Ifukube	The University of Tokyo, Tohoku University, National Institute of Advanced Industrial Science and Technology
13:40～	14:00	19	Embedding Programming-Based Virtual Case Studies in Mechanical Engineering Curricula	Khalifa H. Harib and Amm Sharif Ullah	United Arab Emirates University, Kitami Institute of Technology
14:00～	14:20	29	Implementation of an Elderly Person Watching Support System Using a Multi-IoT Sensor	Tomoyuki Ishida and Asan Kondo	Fukuoka Institute of Technology