

iDECOn/MS2019 Parallel Sesshon Schedule (Tentative)

DAY1		23rd Sep.	
13:00~	14:30	Parallel Session A1 Chairs	Advanced Manufacturing System 1 Hironori HIBINO and Muhamad Arfauz A RAHMAN
		paper # Title	Authors Organization
13:00~	13:20	4 Design optimization of variable blank holder force and blank shape for reducing twist springback	Ryoto Ishizuki, Satoshi Kitayama, Kiichiro Kawamoto, Shinji Natsume, Kazuaki Adachi, Takahiro Noguchi and Toshio Ohtani Kanazawa University, Komatsu Industries Corp., Komatsu Ltd.
13:20~	13:40	12 Design optimization of back-pressure profile and slide velocity in precision forging	Tsubasa Higuchi, Satoshi Kitayama, Masahiro Takano, Akio Kobayashi and Kazumasa Fujii Kanazawa University, Industrial Research Institute of Ishikawa, Kaga, INC.
13:40~	14:00	13 A study on process planning for die and mold machining based on shape recognition and deep learning	Mayu Hashimoto and Keiichi Nakamoto Tokyo University of Agriculture and Technology
14:00~	14:20	17 A Study on Tool Path Generation During a Rough Machining Operation Based on Topology Optimization of Workpiece	Hitoshi Kushino, Maho Kumanotani and Keiichi Nakamoto Tokyo University of Agriculture and Technology
15:00~	16:30	Parallel Session A2 Chairs	Lean Manufacturing and Operations Management Effendi bin MOHAMMAD and Teruaki ITO
		paper # Title	Authors Organization
15:00~	15:20	20 An integrated implementation framework of balanced scorecard and lean manufacturing for increasing efficiency and performance of SMEs	Faizuddin Firdaus Zaini, Mohd Rizal Salleh, Md Nizam Abdul Rahman, Muhamad Arfauz A Rahman, Mohd Amri Sulaiman, Nashrullah Setiawan and Teruaki Ito Universiti Teknikal Malaysia Melaka, OKAYAMA Prefectural University
15:20~	15:40	21 A proposal of performance assessment model for sustaining 5S implementation in SMEs manufacturing industry	Nashrullah Setiawan, Mohd Rizal Salleh, Hambali A Ariff, Muhamad Arfauz A. Rahman, Effendi Mohamad, Mohd Amri Sulaiman, Faizuddin Firdaus Zaini and Teruaki Ito Universiti Teknikal Malaysia Melaka, OKAYAMA Prefectural University
15:40~	16:00	31 Enhancing electronic document control approval process through a verification stage	Rashitah Rahmat, Effendi Mohamad, Rosidah Jaafar, Oyong Novareza, Nor Akramin Mohamad and Teruaki Ito Universiti Teknikal Malaysia Melaka, Universitas Brawijaya, Indonesia, Okayama Prefectural University
16:00~	16:20	33 Decision making of single-minute exchange of die (SMED) in setup improvement through a simulation approach	Mohd Soufhwee Abd Rahman, Effendi Mohamad, Azrul Azwan Abd Rahman, Mohd Rizal Salleh, Teruaki Ito, Muhamad Arfauz A Rahman, Mohd Amri Sulaiman and Oke Oktavianty Universiti Teknikal Malaysia Melaka, Okayama Prefectural University, Universitas Brawijaya, Indonesia
16:45~	18:30	Parallel Session A3 Chairs	Advanced Manufacturing System 2 Tatsuhiko SAKAGUCHI and Md Nizam Abdul RAHMAN
		paper # Title	Authors Organization
16:45~	17:05	28 CE 2.0: New World of Concurrent Engineering	Shuichi Fukuda Keio University
17:05~	17:25	36 Manufacturing system simulation to evaluate energy productivity, formulation of specific energy consumption under parallel production line	Shungo Arai, Munehiro Sugiyama, Hironori Hibino, Takamasa Horikawa, Shoutarou Miura and Makoto Yamaguchi Tokyo University of Science, Akita University
17:25~	17:45	38 Multi-objective optimization for nesting scheduling problem in sheet metal processing through coevolutionary genetic algorithm	Tatsuhiko Sakaguchi, Takuto Sugawara, Miyori Shirasuna and Naoki Uchiyama Toyohashi University of Technology
17:45~	18:05	50 Electricity cost optimization method using empty job and simulated annealing algorithm	Hironori Hibino, Yuto Otsuka, Masaki Ishihara and Taku Harada Tokyo University of Science
18:05~	18:25	39 Qualitative Behavior Modelling for Servitizing On-premises ICT System	Shigeru Hosono and Yoshiki Shimomura Tokyo University of Technology, Tokyo Metropolitan University

13:00~	14:30	Parallel Session B1		Affective/Kansei design 1	
		Chairs		Hideyoshi YANAGISAWA and Mohamad Nizam AYOF	
		paper #	Title	Authors	Organization
13:00~	13:20	7	Curved Surface Shape Generation Method Based on "Complexity" Index	Akihiro Okano, Taishi Matsumoto and Takeo Kato	Keio University
13:20~	13:40	10	Quantitative evaluation of sense of discrepancy to operation response using event-related potential	Ueda, Sakai and Yanagisawa	The University of Tokyo
13:40~	14:00	15	A tool for fostering empathy in innovation design based on actor's institutional view visualization	Yuya Mitake, Kenshiro Hiramitsu, Yusuke Tsutsui, Mar'Atus Sholihah and Yoshiki Shimomura	Tokyo Metropolitan University
14:00~	14:20	19	A pilot Study on Estimation of Mental Workload during Automobile Driving using Eye Movements	Takanori Chihara, Fumihiko Kobayashi and Jiro Sakamoto	Kanazawa University
15:00~	16:30	Parallel Session B2		Human Interface	
		Chairs		Tomio WATANABE and Tetsuro OGI	
		paper #	Title	Authors	Organization
15:00~	15:20	5	The effect of muscle modeling to the optimal design of a bicycle pedal	Michihiko Fukunaga, Hisato Okubo and Yusuke Takemoto	Oita University
15:20~	15:40	22	Evaluation of the speech-driven pupil response robot synchronized with burst-pause of utterance	Yoshihiro Sejima, Yoichiro Sato and Tomio Watanabe	Kansai University, Okayama Prefectural University
15:40~	16:00	24	Proposal of fingering detection method for touch typing learning support system	Daichi Kano and Masashi Okukbo	Doshisha University
16:00~	16:20	46	Influence of Regularly Moving Object on User's Time Perception in VR Space	Tong Xin and Ogi Tetsuro	Keio University
16:45~	18:05	Parallel Session B3		Affective/Kansei design 2	
		Chairs		Takeo KATO and Masato INOUE	
		paper #	Title	Authors	Organization
16:45~	17:05	35	A study on the discrimination of eye size using a CNN for the evaluation in the appearance of kawaii	Daichi Hasegawa, Yoshihiro Sejima and Yoichiro Sato	Okayama Prefectural University, Kansai University
17:05~	17:25	41	Generation of diverse curved surfaces by controlling the cross-sectional shape	Koyu Kobayashi, Koichiro Sato and Fumio Terauchi	Chiba University
17:25~	17:45	47	Preliminary study of ontological descriptions of individual differences in emotional responses	Keiichi Muramatsu, Kazunori Kaede and Keiichi Watanuki	Saitama University
17:45~	18:05	49	Design method for deriving non-existent design solutions with diverse user requirements: case study of mechanical pencils	Rimpei Yamaguchi, Masaki Kawaguchi, Shota Yamazaki, Shuho Yamada and Masato Inoue	Meiji University

13:00~	14:30	Parallel Session C1		Green technology	
		Chairs		Rais Hanizam MADON and Juntakan TAWEEKUN	
		paper #	Title	Authors	Organization
13:00~	13:20	42	Rice Husk Silica (SiO ₂) as Green Alternative Catalyst for Steam Methane Reforming (SMR) Process	Rais Hanizam Madon, Nur Hazleen Abd Halil, Muhamad Khairul Ilman Sarwani, Rizamarhaiza Muda and Mas Fawzi	UNIVERSITI TUN HUSSEIN ONN MALAYSIA
13:20~	13:40	44	Effect of Compressed Natural Gas (CNG) Addition on a Diesel Engine for Dual Fuel Engine Application	Muammar Mukhsin and Mas Fawzi	Universiti Tun Hussein Onn Malaysia
13:40~	14:00	51	Regenerating energy through the rainwater down piping system	Muhamad Arfauz A Rahman, Nur Amirah Zainul Abidin, Effendi Mohamad, Azrul Azwan Abdul Rahman, Mohd Rizal Salleh, Mohamad Ridzuan Jamli, Rosidah Jaafar and Hasmuddin Md Zin	Universiti Teknikal Malaysia Melaka, UES International Sdn Bhd
14:00~	14:20	52	Manufacturing system of turbines	Ryo Amano	University of Wisconsin-Milwaukee
15:00~	16:30	Parallel Session C2		Data analysis and knowledge visualization 1	
		Chairs		Miki YAMASAKI and Mohd Rizal SALLEH	
		paper #	Title	Authors	Organization
15:00~	15:20	14	A study on tool life of small radius ball end mills for a nitriding cast iron cutting	Takuya Deguchi and Hirohisa Narita	Meijo university
15:20~	15:40	18	A method for accelerating design innovation using context structuration and visualization	Yusuke Tsutsui, Yuya Mitake, Shigeru Hosono, Yutaro Nemoto, Mar'Atus Sholihah and Yoshiki Shimomura	Tokyo Metropolitan University, Tokyo University of Technology
15:40~	16:00	26	Tensile properties of dissimilar materials pipes welded by GMAW repair welding	Nur Izan Syahriah Hussein, Suraya Laily, Mohamad Nizam Ayof and Mohd Shukor Salleh	Universiti Teknikal Malaysia Melaka
16:00~	16:20	32	Robust design method based on evaluation index in consideration of the designer's intention	Tatsuya Karube, Yuka Mizukura, Nobuki Sato, Yuta Onoda, Zenichi Miyagi and Masato Inoue	Meiji University
16:45~	18:05	Parallel Session C3		Data analysis and knowledge visualization 2	
		Chairs		Hirohisa NARITA and Masashi OKUBO	
		paper #	Title	Authors	Organization
16:45~	17:05	3	Classification method by quantification Taguchi's T-method	Keisuke Nishino, Arata Suzuki and Daisuke Fujita	Wakayama University
17:05~	17:25	6	Detection method of the tool life using cutting sound of endmilling	Kou Taniguchi and Hirohisa Narita	Meijo University
17:25~	17:45	11	Surrogate modeling of vehicle dynamics simulation using feature extraction method	Kohei Shintani, Takao Fujimoto, Masaaki Okamoto, Atsuji Abe and Yasushi Yamamoto	Toyota Motor Corporation
17:45~	18:05	16	Personalized Recommendation of Health Behavior Using Mobile Device Based on Health Log Data	Yuko Kurosaki, Xiangyi Gao, Yawen Sun, Tetsuya Toma and Tetsuro Ogi	Keio University

DAY2 24th Sep.

10:30~	11:30	Parallel Session A4 Chairs	Additive Manufacturing Qumrul AHSAN and Yoshihiro SEJIMA
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	paper #	Title	Authors	Organization
10:30~	10:50	30 Design of Thermal Insulation Infill Structures Fabricated by Metal Material Extrusion in Additive Manufacturing	Koki Jimbo and Toshitake Tateno	Meiji University
10:50~	11:10	34 Estimation Method of Order Quantity of Manufacturer Based on POS Data by Using LSTM Model	Tomoki Komai, Koji Iwamura, Nobuhiro Sugimura, Toshikazu Urade, Kazuki Taketoshi, Michitoshi Yamaguchi and Yoshiyuki Hirahara	Osaka Prefecture University, Ryukoku University, Toshiba Tec Corporation
11:10~	11:30	40 Fabrication and evaluation of auxetic structures with different features generated by additive manufacturing	Akihisa Takahashi, Koki Jimbo and Toshitake Tateno	Meiji University

10:30~	11:30	Parallel Session B4 Chairs	Workshop "How Engineering Will Change: Increasing importance of Self" Shuichi FUKUDA
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	paper #	Title	Authors	Organization
10:30~	11:30	29 Materiality and Self: New Role of Mechanical Engineering	Shuichi Fukuda	Keio University

10:30~	11:30	Parallel Session C4 Chairs	Sustainable technology Shahriman Abu BAKAR and Nur Izan Syahriah HUSSEIN
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	paper #	Title	Authors	Organization
10:30~	10:50	23 Effect of Cold Arc Welding Parameters on Weld Bead Properties of T-Joint Structural Steel	Mohamad Nizam Ayof, Nur Izan Syahriah Hussein and Muhammad Fairu Afandi Mohamad	Universiti Teknikal Malaysia Melaka
10:50~	11:10	37 Investigation of Block Copolymer Effect on the Physical and Mechanical Properties of Retort Cast Polypropylene (RCPP) For Food Packaging Film	Qumrul Ahsan, Sakthivel Shellahmutto and Sian Meng	University Teknikal Malaysia (UTeM), San Miguel Yamamura Plastic Films Sdn. Bhd.