

DAILY CONFERENCE PROGRAM

DAY 1 (SUNDAY 6 SEPTEMBER 2015)

08.00 am – 09.00 am 3F Lobby

Registration of participants

09.00 am – 9.30 am 5F Crystal palace

Opening Ceremony

Opening Speech: Professor Yasuhiko Kawamura, Dean, Tokushima University

Photo Session

09.30 am – 10.30 am 5F Crystal palace

Keynote Address [1]

Presenter: Professor Tomio Watanabe, Okayama Prefectural University

Chair: Prof. Masashi OKUBO, Doshisha Univ.

10.30 am – 11.00 am

Coffee break

11.00 am – 12.30 pm 3F Conference room <I> <II> <III>

Parallel Session [A]

01.00 pm – 03.00 pm 5F Crystal palace

Panel Discussion & Lunch

Topic:

“How can we utilize our local resources to the maximum?”

Presenter:

Professor Shuichi Fukuda, Keio University

Dr. Hiroshi Kato, Advancesoft Co. Ltd.

Professor Mohd Rizal Bin Salleh, Universiti Teknikal Malaysia Melaka

03.30 pm – 05.00 pm 3F Conference room <I> <II> <III>

Parallel Session [B]

06.00 pm 5F Crystal palace

Officiating Ceremony & Conference Dinner

DAY 2 (MONDAY 7 SEPTEMBER 2015)

09.00 am – 10.30 am 3F Conference room <I> <II> <III>

Parallel Session [C]

10.30 am – 11.00 am

Coffee break

11.00 am – 12.30 pm 3F Conference room <I> <II> <III>

Parallel Session [D]

01.00 pm – 02.00 pm 5F Crystal palace

Keynote Address [2] & Lunch

Presenter: Professor Yoneo Yano, Tokushima Bunri University

Chair: Prof. Tetsuro OGI, Keio Univ.

02.00 pm – 02.30 pm 5F Crystal palace

Closing Remarks by Chairman of iDECON2015

02.30 pm –

walking tour

Parallel Session Schedules

<u>DAY 1 (SUNDAY 6 SEPTEMBER 2015)</u>			
11.00 pm – 12.30 pm			
Parallel Session [A1]	Optimal Design		
Date	Sunday, September 6, 2015		
Time	11.00 – 12.30		
Venue	3F<I>		
Chair(s)	SALLEH Mohd Rizal		
Time	Paper Tittle	Authour(s)	Paper ID
11:00–11:15	Set-Based Design Method Using Vector Evaluated Particle Swarm Optimization	Masatoshi Muramatsu, Tetsuya Ishinari and Takeo Kato.	2
11:15–11:30	A Study on Modeling and its Application to Production Planning of Plant Factories Manufacturing Systems	Narimasa Fukumoto, Nobuhiro Sugimura, Nguyen Quang Thinh, Kousuke Nakai, Koji Iwamura and Tanimizu Yoshitaka.	14
11:30–11:45	Push Position Estimation for Irregular Object in Conveyance Problem using Multiple Mobile Robots System	Purnomo Sejati and Takashi Yasuno.	18
11:45–12:00	Feasible Study on Dental Restoration Using Time Compression Technologies	Hassan Attan, Hambali Boejang, Nurul Hatiqah Harun, Mohd Shahir Kasim, Raja Izamshah and Teruaki Ito.	41
12:00–12:15	Design of Welded Joint based on Transient Thermal Condition	Taufik Roni Sahroni, Li Ying Lau and Teruaki Ito.	44
12:15–12:30	Development of autonomous pesticide spray robot and its driving algorithm for greenhouse horticulture	Takahiro Kitajima, Akinobu Kuwahara, Takashi Yasuno, Tatsuya Fujii, Ken Inoue and Masahiro Inoue.	52
Parallel Session [A2]	Intelligent Machining		
Date	Sunday, September 6, 2015		
Time	11.00– 12.30		
Venue	3F<II>		
Chair(s)	Teruaki Ito		
Time	Paper Tittle	Authour(s)	Paper ID
11:00–11:15	Effect of CNC Milling and EDM Die Sinking Process on Surface Roughness of Core Mould Surface	Mohd Amran Md Ali, Mohd Sanusi Abdul Aziz, Mohd Hadzley Abu Bakar, Mohd Rizal Salleh, Raja Izamshah, Mohd Shahir Kasim and Teruaki Ito.	5
11:15–11:30	Characteristic and Cutting Performance of Alumina-based Cutting Tools Fabricated Using Cold Isostatic Press	Mohd Sanusi Abdul Aziz, Abdul Aziz Adam, Mohd Amran Md Ali, Mohd Shahir Kasim, Muhammad Zaimi and Raja Izamshah.	32
11:30–11:45	Development of Variable Helix Cutter Design for Machining Thin Wall Aerospace Component	Raja Izamshah, Mohd Zulhairi, Mohd Amran Md Ali, Mohd Shahir Kasim, Effendi Mohamad, Mohd Hadzley Abu Bakar, Mohd Sanusi Abdul Aziz and Teruaki Ito.	38
11:45–12:00	Modelling Effect of Cutter Geometrical Feature for Shoulder Milling Of Thin Deflecting Wall	Raja Izamshah, Helmi Affendi, Mohd Sanusi Abdul Aziz, Mohd Shahir Kasim, Mohd Hadzley Abu Bakar, Mohd Amran Md Ali, Mohd Amri Sulaiman and Teruaki Ito.	39
12:00–12:15	Design Analysis of Anti Crimping Roll Position	Taufik Roni Sahroni, Win Ann Loong and Teruaki Ito.	43
12:15–12:30			

03.30 pm – 05.00 pm			
Parallel Session [B1]	Innovation in Design		
Date	Sunday, September 6, 2015		
Time	15.30 – 17.00		
Venue	3F<I>		
Chair(s)	Akira Tsumaya.		
Time	Paper Tittle	Authour(s)	Paper ID
15:30–15:45	Divergent Engineering: Make the Most of Local Resources	Shuichi Fukuda.	3
15:45–16:00	Modelling of the Scene in Daily Life for Extraction of Design Requirements	Yusuke Saiki and Akira Tsumaya.	4
16:00–16:15	Agent–Based Communication in JADE Platform for Manufacturing Processes	Norazlin Nasir, Teruaki Ito and Ahmad Yusairi Bani Hashim.	8
16:15–16:30	Set–based design for obtaining multi–objective satisfactory solutions based on dynamic simulations	Yosuke Takeuchi, Masaki Takahashi, Yoshiaki Murata, Shunsuke Iijima and Masato Inoue.	34
16:30–16:45	A Set–Based Universal Design for Obtaining Diverse Solution Sets for Users with Variability of Physical Characteristics– Case Study of a Train Strap	Wataru Suzuki, Yosuke Takeuchi and Masato Inoue.	35
16:45–17:00	Application of analytical hierarchy process (AHP) in evaluating manufacturing process for pet bottles	Hambali A, Adibah R, Rizal M.S, Soufhwee A.R, Effendi M and Noorli Khamis.	53
Parallel Session [B2]	Materials Management and Materials in Design		
Date	Sunday, September 6, 2015		
Time	15.30– 17.00		
Venue	3F<II>		
Chair(s)	Toshitake Tateno		
Time	Paper Tittle	Authour(s)	Paper ID
15:30–15:45	Surface roughness of common industrial material bars: Analysis of the influence of the feed rate	Mohd Shahir Kasim, Che Hassan C.H., Jaharah A.Ghani, Teruaki Ito, Saiful Bahri Mohamed, Raja Izamshah, Mohd Sanusi Abdul Aziz, Mohd Amran Md Ali and Zabidi Ibrahim.	17
15:45–16:00	Effect of Heat Treatment on Various Electroless Ternary Nickel Alloy Deposition Corrosion Behavior in 3.5wt% NaCl Solutions	Mohamad Noor Azran Bin Mohamad Noor, Zuraida Hamzah, Muhammad Zaimi, Mohd Sanusi Bin Abdul Aziz, Kok Tee Lau, Mohd Shahir Bin Kassim, Mohd Asyadi Azam and T. Joseph Sahaya Anand.	19
16:00–16:15	Effect of fluidized bed granulator operation parameters on urea granules density and hardness	Mohd Fairuz Dimin, Mohammad Anas Zainal Abidin, Md Radzai Said, Se Sian Meng and Azizah Shaaban.	30
16:15–16:30	A Proposal of Wire Bending Mechanism for Dentistry Applications	Abdul Hamid Rahimah and Teruaki Ito.	10
16:30–16:45	Study on Parallel Fabrication in Additive Manufacturing (Reinforcement of Structure by Running Polymer into Hollow Space)	Toshitake Tateno and Shimpei Sakuramoto.	11
16:45–17:00			

<u>DAY 2 (MONDAY 7 SEPTEMBER 2015)</u>			
09.00 am – 10.30 am			
Parallel Session [C1]	Design for Manufacturing Systems		
Date	Monday, September 7, 2015		
Time	09:00-10:30		
Venue	3F<I>		
Chair(s)	Koji Iwamura		
Time	Paper Tittle	Authour(s)	Paper ID
09:00–09:15	Investigation of Tool Wear Characteristics when Machining FC 300 Gray cast iron with Uncoated Carbide End Mill	Mohd Hadzley Abu Bakar, Muhammad Hafiz Samsudin, Mohd Amran Md Ali, Nurul Fatin Mohamad Raffi, Wan Mohd Azahar Wan Mohd Yusoff and Anis Afuza Azhar.	1
09:15–09:30	Analysis of bottleneck process' s impact on the whole processes in the production line	Yong Siang Teoh, Teruaki Ito and Puvanasvaran Perumal.	13
09:30–09:45	A Framework to Identify Operational Factors in Overall Equipment Effectiveness (OEE) towards Lean Manufacturing	Puvanasvaran A.Perumal, Nur Halimah Jamalulil, Yong Siang Teoh and Mohd Syaiful Rizal Abdul Hamid.	27
09:45–10:00	The State of The Art and Future Perspective of Reconfigurable Conveyor Systems in Manufacturing Industry	Nor Rizan Mohamad, Azrul Azwan Abdul Rahman, Bashir Mohamad Bali Mohamad, Muhamad Arfauz A.Rahman and Alzakri Ekhwan.	29
10:00–10:15	A Study on Investment Planning Method of Production Equipment by Using Portfolio	Mai Takaoka, Koji Iwamura, Yoshitaka Tanimizu and Nobuhiro Sugimura.	33
10:15–10:30			
Parallel Session [C2]	Human Interface & Ergonomics Design		
Date	Monday, September 7, 2015		
Time	09:00-10:30		
Venue	3F<II>		
Chair(s)	Tetsuro OGI		
Time	Paper Tittle	Authour(s)	Paper ID
09:00–09:15	Development of Train Cognitive Map Construction Supporting System and Its Validity on Navigation	Shunta Furukawa and Tetsuro Ogi.	7
09:15–09:30	A proposal of ARM-COMS control based on the combination of local and remote interaction	Madihah Maharof, Teruaki Ito, Zamberi Jamaludin and Tomio Watanabe.	12
09:30–09:45	Influence of Unconscious Non-verbal Information on Remote Communication	Masashi Okubo and Haruna Tsujii.	25
09:45–10:00	Ontological descriptions of receiver states for sharing knowledge in learning service design	Keiichi Muramatsu, Koji Kimita, Takatoshi Ishii, Yutaro Nemoto, Eiichirou Tanaka, Keiichi Watanuki, Tatsunori Matsui and Yoshiki Shimomura.	36
10:00–10:15	Applying Poka Yoke Jig in PFMEA to control zero defects and reducing RPN via detection	Soufhwee Rahman, Syahrul Azwan, Hambali Arep and Mohd Rizal Salleh.	50
10:15–10:30			

Parallel Session [C3]			
CAD/CAM/CAE & Modeling Method			
Date	Monday, September 7, 2015		
Time	09:00-10:30		
Venue	3F<III>		
Chair(s)	Eiji Morinaga		
Time	Paper Tittle	Authour(s)	Paper ID
09:00-09:15	Comparison Study on the Effect of Surface Finish Programmed by CATIA V5 and DELCAM CAD/CAM Software Using Scanned Data – Reverse Engineering	Syahrul Azwan Sundi, Mohd Soufhuwee Abd Rahman, Hassan Attan and Muhammad Syafik Jumali.	20
09:15-09:30	The Necessity of PDM system for the Collaborative Digital Process	Hiroshi Katoh.	54
09:30-09:45	A Design for Testability with nMOS Switches to Detect Open Pins in Assembled PCBs	Akihiko Odoriba, Masaki Hashizume, Shoichi Umezu and Hiroyuki Yotsuyanagi.	31
09:45-10:00	A Behavior Modeling Method for Functional Verification of Product Considering Ways of Use	Eiji Morinaga, Hidefumi Wakamatsu, Hijiri Abiru and Eiji Arai.	9
10:00-10:15	Studies on Effective Parameters for FEM Analysis of MQL Cutting	Ahmad Shahir Jamaludin, Akira Hosokawa, Tatsuaki Furumoto and Tomohiro Koyano.	23
10:15-10:30			
11.00 pm – 12.30 pm			
Parallel Session [D1]			
Green Design and Sustainability			
Date	Monday, September 7, 2015		
Time	11.00 – 12.30		
Venue	3F<I>		
Chair(s)	Masato Inoue		
Time	Paper Tittle	Authour(s)	Paper ID
11:00-11:15	Quantitative estimation of the CO ₂ -emissions reduction from reuse automobile parts	Sota Takahashi, Masato Iwasaki, Mitsunobu Fujita, Takao Mori, Motohiro Tamaki, Akihiko Sano, Sigeyuki Suzuki, Kenroku Kobayashi, Hironori Tani, Akihiro Hayakawa and Masato Inoue.	6
11:15-11:30	Urea-impregnated biochar to minimize the leaching of nitrogenous nutrient in paddy soil by porous biochar	Sian-Meng Se, Azizah Shaaban, Fairuz Mohd Dimin, Nona Merry Merpati Mintan, Noorhana Yahya and Zakaria Man.	28
11:30-11:45	Exploratory of Cleaner Production Performance Factors – Response from Malaysian Manufacturers	Wan Hasrulnizam Wan Mahmood, Muhamad Zaki Yusup, Mohd Rizal Salleh, Mohd Razali Muhamad and Adi Saptari.	42
11:45-12:00	DESIGN OF WATER TURBIDITY MEASUREMENT SYSTEM FOR DOMESTIC WATER RECYCLING	Khalid Salah, Mohd Khairul Anuar Mohd Arrifin and Shamsuddin Sulaiman.	46
12:00-12:15	Cylinder Deactivation Impact on Engine Performance and Emission for SI Engine	Noor Affandy Abas, Noreffendy Tamaldin, Ahmad Kamal Mat Yamin and Mohd Fadzli Abdollah.	49
12:15-12:30			

Parallel Session [D2]	Human Interface & Ergonomics Design		
Date	Monday, September 7, 2015		
Time	11.00– 12.30		
Venue	3F<II>		
Chair(s)	Masashi Okubo		
Time	Paper Tittle	Authour(s)	Paper ID
11:00–11:15	Application of Kansei Engineering in Thai ceramic manufacturing	Chaiwat Kittidecha and Ashuboda Marasinghe.	26
11:15–11:30	Analysis of sound absorption properties of spent tea leaf	Qumrul Ahsan, Fiona Shim May Fa, Azma Putra, Sivarao Subramonian, Noraiham Mohamad and Mohd Jailani Moh Nor.	40
11:30–11:45	Developing a braking distance GUI calculator for heavy vehicle using multi-body dynamics simulation software	Airul Sharizli, Rahizar Ramli, Mohamed Rehan Karim, Ahmad Saifizul and Hideo Yamanaka.	47
11:45–12:00	Design process and concept of spectacle type including obstacle detection system for blind person	Anuar Mohamed Kassim, Yasuno Takashi, Mohd Shahrheel Mohd Aras, Hazriq Izzuan Jaafar, Fairul Azni Jafar and Sivarao Subramonian.	48
12:00–12:15	Malay Corpus Design for Articulation Disorder Patient for Early Screening Diagnosis	Mohd Nizam Mazenan, Tian Swee Tan, Sarah Samson Soh, Azran Azhim Noor Azmi, Hirofumi Nagashino, Masatake Akutagawa, Takahiro Emoto, Raja Izamshah, Mohd Shahir Kasim and Teruaki Ito.	51
12:15–12:30			