EcoDesign 2025 Detailed Program

Notes OS = Organized Session
[A1-1], [P1-1], etc.: Paper IDs in the Proceedings
[E]: Included in the E-book published by Springer after the symposium
Presenting authors are marked with *.

Wednesday, November 12, 2025

9:40-10:00	Opening Session (Okuma Auditorium)				
10:00-10:45	Plenary Keynote 1: DENSO's Initiatives of Technology Development Required for Next-Generation Mobility Society Dr. Yasuhiko Yamazaki, Vice President of DENSO Corporation				
10:50-11:35	Plenary Keynote 2: Opportunities & Innovation in Unlocking Recycled Material Supply Ms. Susannah Calvin, Director of Environment & Supply Chain Innovation at Apple Inc.				
11:35-11:50	Short Break				
11:50-13:10	Registration & Lunch (RIHGA Royal Hotel Tokyo, 2nd and 3rd Floor)				
	Parallel Sessions (RIHGA Royal Hotel Tokyo)				
	Room A (Royal Hall I)	Room B (Royal Hall II)	Room C (Garden Terrace)	Room D (Sapphire)	Room E (Diamond)
13:10-14:30	[A-1] OS: Designing Circular Economy Business (1)	[B-1] OS: Leveraging EcoDesign and Environmental Literacy towards the SDGs and Beyond (1)	[C-1] OS: JIEP Workshop -Materials and Environmental Technology- (1)	[D-1] EoL Management and Process Technologies (1)	[E-1] OS: Regenerative Paradigm Shift: From Doing Less Bad to Doing Good (1)
	Chair: Eri Amasawa (Waseda University, Japan)	Chair: Shinya Matsumoto (Yokohama National University, Japan)	Chair: Hirokatsu Sakamoto (DAICEL corporation, Japan)	Chair: Winifred Ijomah (The University of Strathclyde, Scotland)	Chair: Mélanie Despeisse (Chalmers University of Technology, Sweden), Johannes Matschewsky (Linköping University, Sweden)
	Overview of the session Yusuke Kishita(1) 1. The University of Tokyo	[B-1-01] A Social position of Environmental Physics in the case of facing Social Issues *Makoto Kano(1) 1.Tokyo University of Science	[C-1-01][E] Climate Impact of Continuous and Intermittent Operation Motor in Waste-to-Energy Hoisting Application Paige Nguyen(1), Devi Nair(1), *Kimmo Aarnio(1), Mika Horttanainen(2) 1.Konecranes Global Corporation, 2.Lappeenranta-Lahti University of Technology	[D-1-01][E] Premium Pricing Factors of Luxury Wallets in the Eco-Friendly Secondary Market Keisuke Okahara(1), *Shin'ya Nagasawa(1) 1.Waseda University	[E-1-01] Beyond Bans and Bags: A Typology of Plastic Policies and Their Transformative Promise *Tianhui Fan(1), Gregory Patrick Trencher(1), Misuzu Asari(2) 1.Kyoto University, 2.Research Institute for Humanity and Nature
	[A-1-01] Setting up a remanufacturing business - tools and methods for industrial support *Erik Sundin(1) 1.Linköping University	[B-1-02] Enhancing Sustainability Performance in Manufacturing SMEs through Strategic Actions *Huan-Yu SHIU(1) 1.National Kaohsiung University of Science and Technology	[C-1-02][E] Material and Jisso Thechnologies to Enhance Sustainability of Electronic Systems *Hidetaka Hayashi(1), Hirokatsu Sakamoto(2), Norihiro Shimoi(3) 1.EcoDesign Promotion Network, 2.Daicel Corp, 3.Tohoku Institute of Technology	[D-1-02][E] Recycling Post-Industrial and Post-Consumer Scrap is Essential for Resource Conservation and Decarbonization Dragancho Veljanovski(1), *Olivia Waldon(2), Irina Oswald(1), Lalit Darunte(2), Graeme Paul(2), Emre Cilem(2), Aidan Turnbull(3), Susannah Calvin(2), Jonas Dreger(5) 1.Apple GmbH, 2.Apple Inc., 3.Apple UK, 4.Apple Belgium	[E-1-02] Eco-design of Flexible and Printed Electronics - Utilizing LCA to Develop Circular Products and Business Models *Max Marwede(1), David Sánchez-Fernandez(1), Fatemeh Abedi(2), Ulla Saari(2), (3) 1.Environmental and Reliability Engineering Department, Fraunhofer IZM, Berlin, Germany, 2.Industrial Engineering & Management Unit, Tampere University, Tampere, Finland, 3.Green Transformation and Innovation Research Unit, Institute for Future Initiatives, The University of Tokyo, Japan
		[B-1-03][E] Functional Study of a Design Support Tool Considering Environmental , Cost, and Performance Criteria *Takashi Matsunaga(1), Yasuaki Kedo(1), Yuki Murasato(1), Younjeong Hong(1) 1.Hitachi, Ltd	[C-1-03] Fabrication of Oxygen Evolution Anode for Seawater Electrolysis for Hydrogen Production to Realize Sustainable Energy Systems *Soma Takahashi(1), Yuki Kowata(1), Mohamed Mubark(1), Koji Hashimoto(1), Zenta Kato(1) 1.Tohoku Institute of Technology	[D-1-03][E] Material Flow Analysis of Polypropylene in Japan: Toward Enhanced Material Recycling Strategies *Taiyo Nakao(1), Yuna Seo(1) 1.Tokyo University of Science	[E-1-03] From Nature to Innovation: A Design Perspective on Biobinders,Biofibers, Bio-additives and Biocomposites *Bert Vuylsteke(1), Pieter Beerten(1), Jan Detand(1), Francesca Ostuzzi(1) 1.Ghent University
	[A-1-02] Improvement support method for service-oriented circular economy business using scenario analysis *Yusei Sawada(1), Koji Kimita(1), Eri Amasawa(2), Osamu Suzuki(3), Yusuke Kishita(1) 1.The University of Tokyo , 2.Waseda University, 3.CLAS Inc	[B-1-04] Enhancing Green Technical Knowledge and Skills Training Through Technology Readiness and Top Management Support. *Yu-Hua Chang(1), Ching-Hsun Chang(1) 1.Department of Technology Application and Human Resource Development, National Taiwan Normal University, Taipei ,Taiwan	[C-1-04] Off-grid System Using Decommissioned Drive Lithium-ion Batteries for Local Energy Production and Consumption *Hiroshi Mogi(1), Norihiro Shimoi(1), (2), Kazuyuki Tohji(1) 1.Mogee Co., Ltd., 2.Tohoku Institute of Technology	[D-1-04] A Novel Technique to Recover Ni(bpy)3 Complex from Spent Catalyst by Hydrophobic Ion-pair Formation *Hisanori Iwai(1), Yutaro Takaya(2), Naoki Yokota(3), Yuko Takahashi(3), Chiharu Tokoro(1), (2) 1.Waseda University, 2.The University of Tokyo, 3.TAKAHATA PRECISION Co., Ltd.	[E-1-04][E] Measuring regenerative sustainability *Mélanie Despeisse(1), António J. Baptista(2), Maria Holgado(3) 1.Chalmers University of Technology, 2. Institute for Systems and Computer Engineering, Technology and Science (INESC TEC), 3. University of Sussex
	[A-1-03] Environmental Impact Assessment of Hybrid Clothing Consumption Based on Consumer Analysis *Eiji Yoshiki(1), Yudai Tsurusaki(1), Eri Amasawa(2), Koji Kimita(1) 1.The University of Tokyo, Tokyo, Japan, 2.Waseda University, Tokyo, Japan			[D-1-05] Lithium Recovery from End-of-life Lithium Ion Batteries Using the Nano-filtration Membrane Process *Ryoma Miyamoto(1), (2), Tomoya Yoshizaki(1), Hisanori Iwai(2), Yutaro Takaya(3), Chiharu Tokoro(3) 1.Global Environment Research Laboratories, Toray Industries, Inc., 2.Waseda University, 3. The University of Tokyo	
14:30-14:45	Coffee				

14:45-16:05	[A-2] OS: Designing circular economy business (2)	[B-2] OS: Leveraging EcoDesign and Environmental Literacy towards the SDGs and Beyond (2)	[C-2] OS: JIEP Workshop -Materials and Environmental Technology- (2)	[D-2] EoL Management and Process Technologies (2)	[E-2] OS: Regenerative Paradigm Shift: From Doing Less Bad to Doing Good (2)
	Chair: Yusuke Kishita (The University of Tokyo, Japan)	Chair: Makoto Kano (Tokyo University of Science, Japan)	Chair: Norihiro Shimoi (Tohoku Institute of Technology, Japan)	Chair: Kiyoshi Dowaki (Tokyo University of Science, Japan)	Chair: Mélanie Despeisse (Chalmers University of Technology, Sweden), Cadence Hsien (Singapore Institute of Manufacturing Technology, Singapore)
	[A-2-01] Circular Economy Business Models and their Practical Application in different industrial sectors *Bernd Kopacek(1) 1.Kopacek KG	[B-2-01] Fostering Future Green Engineering Leaders: Green Engineering Interdisciplinary Talent Development Program *Chon Man Tam(1), I-Yun Lisa Hsieh(1)1.Taiwan University	[C-2-01][E] MILD PLASMA®: Enabling Innovative Surface Modification of Fluoropolymers for Next-Generation Electronics *Naoto Imawaka(1), Hiroko Furuta(1), Aya Katsube(2), Wonhwan Choi(2), Tomoya Nakago(3), Kohei Shiraishi(3) 1.Shimane Institute for Industrial Technology , 2.Stec Co., Ltd., 3.Kindai University	[D-2-01] Polyimide Film Removal from Enameled Copper Wire by High-voltage Electric Pulse Method with Pre-treatment grinding and Analysis of Removal Mechanism *Takuji Kirihara(1), Asako Narita(1), Chiharu Tokoro(1), (2) 1. Waseda University, 2. The University of Tokyo	[E-2-01][E] Methodology for Calculating CO2 Absorption by Tree Planting for Greening Projects *Kento Ichii(1), Nobumichi Shinohara(1), Misa Iwamoto(1), Daikichi Seki(1), Alexander Ryota Keeley(1), Shunsuke Managi(1), Shutaro Takeda(1) 1.Kyushu University
	[A-2-02] Agent-based Simulation of Circular Business Models: A Scenario Discovery Approach *Ryu Koide(2), (1), Patrick Steinmann(2), Gabriel Sher(2), Shinsuke Murakami(1), Jaco Quist(2), Emile Chappin(2) 1. The University of Tokyo, 2.Delft University of Technology	[B-2-02] Sustainable Ceramic Modular Artificial Reef Restoration: A Community-Driven Ecosystem Design Approach. *Oren Arbel(1), Ezri Tarazi(1)1.Department of Design, Technion – Israel Institute of Technology	[C-2-02][E] Natural Capital Dependency and Risk Exposure in Taiwan's Panel Industry: Implications for WIO-LCA *Chon-Ip Long(1), Yuh-Ming Lee(1) 1.National Taipei University	[D-2-02] Seismic Performance Evaluation of Concrete Modular Columns with Replaceable Steel Box-Type Connections *JinHo Park(1), Ju Ho Ham(1), Min Sook Kim(1), Young Hak Lee(1) 1.Kyung Hee University Structural Engineering Lab. (KHUSEL)	[E-2-02] The Challenge of Promoting Smartphone Reuse Towards Enhanced Circularity in Japan *Dami Moon(1), Kentaro Teramoto(1), Kiyo Kurisu(2), Kiyotaka Tahara(3) 1.Mercari, Inc., 2.The University of Tokyo, 3.National Institute of Advanced Industrial Science and Technology
	[A-2-03] Environmental Performance Indicators for Circular business models based on Eco-efficiency: Cases on New business models and Product-service systems *Lars Gunnar Furelid Tellnes(1), (2), Ramon Pamies(2), Anna-Lena Kjø niksen(1) 1.Østfold University College, Fredrikstad, Norway, 2.Technical University of Cartagena, Cartagena, Spain	[B-2-03] Case Study on the Application of Small Hydropower in Climate Change Adaptation *Lin Yu-Chi(1), Lee Yuh-Ming(1)1.National Taipei University		[D-2-03] Recovery of Carbon Fibers from Unidirectional CFRP laminates Using Electrical Pulsed Discharge *Keita Sato(1), Manabu Inutsuka(1), Chiharu Tokoro(1), (2) 1. Waseda University, 2.The University of Tokyo	[E-2-03][E] Assessing Legislative Readiness for Renewable Energy Equipment waste: a Systematic Review of China, the EU, the US, Brazil, India and Japan *Lillian Manning(1), Farzaneh Fakhredin(2) 1.MBA graduate, University of Bradford, 2.Lecturer in Circular Economy and Innovation
	Panel discussion Moderator: Koji Kimita(1) 1.The University of Tokyo	[B-2-04][E]Development of an Environmentally-Friendly Portable Lifeline Support System for Disaster Response and Underdeveloped Regions *Takeshi Ito(1), Naoki Kurata(1), Masumi Fukuma(2), Yukito Fukushima(2), Kotaro Mori(1)1.National Institute of Technology, Yuge College, 2.National Institute of Technology, Matsue College		[D-2-04] Promising Reform Strategy for Nd-Fe-B Anisotropic Magnets Using Back-Extrusion Process *Harim CHOI(1), (2), Makoto Kobashi(1), Yusuke Hirayama(2) 1.Nagoya university, 2.AIST (National Institute of Advanced Industrial Science and Technology)	
				[D-2-05][E] Exploring Ultrasonic Scalpels Remanufacturing in the UAE: Current Status, Challenges, and Next Steps *Ahmed ElHetamy(1), Farzaneh Fakhredin(2) 1.Senior Territory Manager- Clinical Education Manager Johnson and Johnson Medtech/ MBA Graduate, University of Bradford., 2.Lecturer in Circular Economy and Innovation	
16:05-16:20	Coffee				

16:20-17:40	[A-3] OS: Sufficiency, regenerative business, degrowth – The next frontier for our community?	[B-3] OS: Leveraging EcoDesign and Environmental Literacy towards the SDGs and Beyond (3)	[C-3] Sustainable Finance and Design for Environmental Responsibility	[D-3] Sustainability Indices	[E-3] Life Cycle Management
	Chair: Johannes Matschewsky (Linköping University, Sweden)	Chair: Hidetaka Hayashi (Eco Design Promotion Network, Japan)	Chair: Hitoshi Komoto (National Institute of Advanced Industrial Science and Technology, Japan)	Chair: Hiroyuki Hiraoka (Chuo University, Japan)	Chair: Yuh-Ming Lee (National Taipei University, Taiwan)
	[A-3-01] ManufacturingWellbeing *Johannes Matschewsky(1) 1.Linköping University	[B-3-01] Sustainable Product Teaching Model for Tableware Design Utilizing SCAMPER and Design for Environment (DfE) Jui-che Tu(1), *Ya-Yu Huang(2), (1)1.National Yunlin University of Science and Technology, Yunlin, Taiwan, 2.Asia University, Taichung, Taiwan	[C-3-01] The Influence of Country Factors on the Relationship Between ESG and Misvaluation *Xinyu Wang(1), Hidemichi Fujii(1) 1.Kyushu University	[D-3-01] Sustainability Assessment of Shared Energy Storage Facilities *Guei Wen Yi(1), Yuh Ming LEE(1) 1. Institute of Natural Resource Management, National Taipei University	[E-3-01] Exploring Recycling and Treatment Strategies for Waste Wood Derived from Street Trees. *Yu Hsiu Ke(1), Yuh Ming Lee(1) 1. National Taipei University
	[A-3-02] Sufficiency Policies for a Circular Economy Transition in the Fashion Industry Hedda Roberts(1), Luca Coscieme(1), *Leonidas Milios(2) 1.Hot or Cool Institute, 2.UNESCO Chair in Life Cycle and Climate Change ESCI-UPF	[B-3-02] Use of Life Cycle Thinking in Inquiry-Based Learning in Japanese High Schools *Shinya Matsumoto(1)1.Yokohama National University	[C-3-02] Is Financial Materiality for Environmental Issues Shaping the Cost of Capital across National Contexts? *Siyu Shen(1), Hidemichi Fujii(1) 1.kyushu university	[D-3-02] The need for an energy poverty prediction framework *Takako Mochida(1), Andrew Chapman(2), Benjamin McLellan(1) 1.Kyoto University, 2.Kyushu University	[E-3-02][E] The Opportunities and Challenges of Allocating Benefits and Burdens of Recycling in LCA: Streamlining and Standardising a Certification Approach *Malina Nikolic(1), Laura Garcia Fosado(1), Jana Gerta Backes(2) 1.Meo Carbon Solutions GmbH, Cologne, Germany, 2.RWTH Aachen University, Aachen, Germany
		[B-3-03] Teaching engineering students in ecodesign using AI and machine learning methodologies *Nina Tvenge(1), Morten Sagstuen(1), Carla Susana Assuad(1), Kristian Martinsen(2)1.Norwegian University of Science and Technology, NTNU, 2.SINTEF Manufacturing AS	[C-3-03][E] Use Context Knowledge and its Relevance for Problem Formation in Postmodern Innovation supporting Sustainable Development *Harald E. Otto(1) 1.Polytechnic University of Marche	[D-3-03] Pathways to Reduced Carbon Emissions: A Configurational Study of Nordic Manufacturing Firms *Jouni K Juntunen(1), Aava Isotalus(2) 1.University of Vaasa School of Technology and Innovations, 2.Wärtsilä Oyj , Vaasa, Finland	[E-3-03] Lower Carbon Development: A Case Study of Semiconductor Manufacturing based EcoDesign *Tsai Chi Kuo(1), Yen-Ching Lin(1), Chih Hsiang Wu(2), Yu–Chen Lee(1), Yu-Chin Huang(1), Ping-Hsuan Lai(1), Liang-Chen Huang(1), Wei-Cheng Chen(1), Chi-Chu Chang(2), Wei-Te Chen(2), Chung-Yao Wu(2) 1.National Taiwan University of Science and Technology, 2. Nanya Technology
			[C-3-04][E] Calculating Carbon Footprint of University Using Big Data: A Case Study of Waseda University *Genta Sugiyama(1), Norihiro Itsubo(1) 1.Waseda University		[E-3-04] Developing A Tool for Assessing the Contribution of SDG 14 and 15 based on Life Cycle Assessment- A Case Study of the Agricultural Sector in Taiwan *Chien Hung Kuo(1), Yu-Hsien Chan(1), Lance HongWei Huang(1), Allen H. Hu(1), (2) 1.Institute of Environmental Engineering and Management National Taipei University of Technology, 2.Department of Industrial Design, Faculty of Architecture Chulalongkorn University
					[E-3-05][E] Policy, Infrastructure, and Consumer Perceptions in Sustainable EV Transitions: Insights from Japan, Thailand, Taiwan, and Germany Kenichiro Chinen(1), Mitsutaka Matsumoto(2), *Ai Chinen(3), Malte Besler(4), Sabine Langkau(4), Antonia Loibl(4) 1. California State University, Sacramento, 2. National Institute of Advanced Industrial Science and Technology (AIST), 3. Waseda University , 4. Fraunhofer ISI, Karlsruhe, Germany
	Short Break				
18:00-19:30	Welcome Reception (Okuma Garden House)				

Thursday, November 13, 2025

9:00-9:45	Plenary Keynote 3: Towards the Circular Economy Ms. Yumiko Noda, Chairperson and Director of Veolia Japan, Vice President of KEIDANREN (Japan Business Federation) (Okuma Auditorium)				
9:45-10:10	Registration (RIHGA Royal Hotel Tokyo, 2nd Floor)				
	Parallel Sessions (RIHGA Royal Hotel Tokyo)				
	Room A (Royal Hall I)	Room B (Royal Hall II)	Room C (Crystal)	Room D (Sapphire)	Room E (Emerald)
10:10-11:30	[A-4] Life Cycle Evaluation (1)	[B-4] OS: Future Design (1)	[C-4] OS: Circular Manufacutimg (1)	[D-4] OS: Design for X toward Sustainable Communication (1)	[E-4] Circular Business Model (1)
	Chair: Yuji Mizuno (The Institute of Applied Energy, Japan)	Chair: Yutaka Nomaguchi (The University of Osaka, Japan)	Chair: Kentaro Shinoda (National Institute of Advanced Industrial Science and Technology, Japan)	Chair: Kazutoshi Sakaguchi (Yamaguchi University, Japan)	Chair: Koji Kimita (The University of Tokyo)
	[A-4-01][E] Advancing Footwear Sustainability through Carbon Footprint Analysis and Eco-Design Strategies *Siyu Liu(1), Zehua Pan(2) 1.Certification & Audit Center , Shenzhen Academy of Metrology & Quality Inspection, Shenzhen,China, 2.School of Science , Harbin Institute of Technology, Shenzhen, Shenzhen,China	[B-4-01][E] Proposing Effective Future Adaptation Strategies Against Sea Level Rise in Japanese Coastal Areas *Makoto Tamura(1), Hiromune Yokoki(1) 1.Ibaraki University	[C-4-01][E] Ease of human-robot cooperative disassembly metric and related ecodesign guidelines: A case study on redesigning a robotic vacuum cleaner *Núria Boix Rodríguez(1), (2), Terrin Pulikottil(1), (2), Joren Van den Bosch(1), (2), Jef R. Peeters(1), (2) 1.Department of Mechanical Engineering, KU Leuven, 2.Flanders Make @ KU Leuven	[D-4-01][E] A Food Substitution and Purchasing Support Model Considering Nutritional Target Values in School Meal Services *Tomoya Ishizuka(1), Tomomi Honda(2), Tomomi Nonaka(1) 1.Waseda University, 2.Department of Innovative Food Sciences School of Food Sciences and Nutrition, Mukogawa Women's University	[E-4-01] Roadmapping for circular business model implementation *Cadence Hsien(1) 1.Singapore Institute of Manufacturing Technology
	[A-4-02][E] Analysis of Business Feasibility for Introduction of Retread Tires in Passenger Cars at Indian Market *Tomiya Kimura(1), Midori Sugihara(2) 1.Fukuoka Institute of Technology , 2.University of Tsukuba	[B-4-02] How do the Propensities to Care About Future Generations Associate with the Perceptions of Climate Change? *Takehiko I Hayashi(1) 1.National Insititute for Environmental Studies	[C-4-02] Repair or Replace? A Decision Framework for Sustainable Smartphone Design *Shang-Lin Jiang(1), Hsin-Tien Lin(1) 1.National Taiwan University	[D-4-02] Development and Improvement of an Afforestation Support Tool toward Lower Carbon Footprint by Taguchi Experiment Hsiang-Tang Chang(1), *Yong-Zhi Cheng(1) 1.National Kaohsiung University of Science and Technology (NKUST)	[E-4-02] A Review of Ecological Concepts for the Design of Bags from Textile Waste *Kittikul Sirimeungmoon(1), Aurathai Mahawun(1), Nachawit Tikul(1) 1.Maejo University
	[A-4-03][E] The Pros and Cons of Combining Mass Balance Chain of Custody and LCA Methodology and Practices Patrick Ober(1), *Malina Nikolic(2), Jana Gerta Backes(3), Stefan Majer(4) 1.ISCC System GmbH, Cologne, Germany, 2.Meo Carbon Solutions GmbH, Cologne, Germany, 3.RWTH Aachen University, Aachen, Germany, 4.DBFZ, Leipzig, Germany	[B-4-03] Planning and Evaluation of Climate Change Mitigation and Adaptation Measures from the Perspective of Imaginary Future Generations Kazuma Hirota(1), Akihiko Kotera(2), Makoto Tamura(2), *Keishiro Hara(1) 1.The University of Osaka, 2.Ibaraki University	[C-4-03] Case Study on Circularity of Ship Components at a Norwegian Shipyard *Jimmy Kåla(1) 1.Norwegian University of Science and Technology	[D-4-03] Exploring Degrowth Communism with a Focus on the Collective Wealth of Local Communities *Naoko Fujii(1), (2), Kazutoshi Sakaguchi(1) 1.Faculty of Global and Science Studies, Yamaguchi University , 2.Local Vitalization Cooperator, Kamagari-town, Kure-city, Hiroshima	[E-4-03] Circular Plastic Entrepreneurship Typology in the Global South *Curie Park(1), Simon J Ford(2), Thibault Roudier(3), Pallab Shrestha(4), (5), Shashank Dewan(4), (5), Steve Evans(1), Padmakshi Rana(4) 1.University of Cambridge, 2.Simon Fraser University , 3.Plastic Odyssey, 4.Impact Hub Kathmandu, 5.FabLab Nepal
	[A-4-04] A Cradle-to-Gate Comparative Environmental Impact Analysis of Brewed Protein (TM) and Cashmere Fibers *Moe Thiri Zun(2), (1), Sunita Darbe(2), Juanita Barrera(3), Caroline Taylor(3), Lise Laurin(3) 1.Kyoto University, 2.Spiber, Inc, 3.EarthShift Global, LLC	[B-4-04] Retrospective Analysis and its Application to Future Design for Research and Development ~A Case Study of CO2 Resource Utilization Technologies~ *Kenichiro Takenaga(1), Hiro Tabata(1), (2), Shuji Nakanishi(1), Keishiro Hara(1) 1.The University of Osaka, 2.The University of Tokyo	[C-4-04] Resource-Efficient Manufacturing through Hybrid Additive Manufacturing: Case Studies and Applications Venkata Reddy(1), Kristian Martinsen(2), Sverre Gulbrandsen-Dahl(2), Mitsutaka Matsumoto(3), Kentaro Shinoda(3), *Suryakumar Simhambhatla(1) 1.Indian Institute of Technology Hyderabad, 2. SINTEF Manufacturing , 3.National Institute of Advanced Industrial Science and Technology (AIST)	[D-4-04] Conceptual Design of a Workshop Approach to Educating System and Service Designers for Supporting Human Comfort in Space *Tomomi Nonaka(1), Seiko Shirasaka(2), Masato Sakurai(3), Kazutoshi Sakaguchi(4) 1.Waseda University, 2.Keio University, 3.JAXA(Japan Aerospace Exploration Agency), 4.Yamaguchi University	[E-4-04] Research on circular ecosystem design for production systems towards a circular economy *Nagi Sato(1), Hiroyuki Sekiguchi(2), Akira Tanabe(2), Yusuke Kishita(1) 1.The university of Tokyo, 2.Mitsubishi Electric
	[A-4-05][E] Precision and Scale in Electronic Carbon Data: Generative LCAs for Green BOMs Sandeep Chinchali(1), Sridhar Nagarajan(2), Susan Monroe(3), John Archer(4), Elmar Tang Kert(5), *Emi Ayada(5), Piriya Sugumaar(5), Mrinalini Iyer(2), Sarah Tang(5) 1. The University of Texas at Austin, 2. Western Digital, 3. Vishay Intertechnology, 4. TTI, a Berkshire Hathaway company, 5. Sluicebox AI		[C-4-05] Development of a Color-Robust Estimation Method for Recycled Content in Plastic Using Fluorescence Fingerprint Analysis *Daisuke Yagi(1), Shimpei Amasaki(1), Takuya Kambayashi(1) 1.Hitachi, Ltd.		[E-4-05] Study on Material Labelling of Portable LIBs in Japan *Yuko Saito(1), Toshikazu Shiratori(1), Atsuko Saito(1), Toru Nishiyama(2), Toshiaki Yoshioka(1) 1.Tohoku University, 2.DOWA ECO-SYSTEM CO., LTD.
11:40-13:40	Lunch & Poster Session (Royal Hall & Lobby)				

13:40-15:00	[A-5] Life Cycle Evaluation (2)	[B-5] OS: Future Design (2)	[C-5] OS: Circular Manufacutirng (2)	[D-5] OS: Design for X toward Sustainable Communication (2)	[E-5] Circular Business Model (2)
	Chair: Tomomi Kito (Waseda University, Japan)	Chair: Yusuke Kishita (The University of Tokyo, Japan)	Chair: Suryakumar Simhambhatla (Indian Institute of Technology Hyderabad, India)	Chair: Kazutoshi Sakaguchi (Yamaguchi University, Japan)	Chair: Bernd Kopacek (Kopacek KG, Austria)
	[A-5-01][E] Development of Malaysia-specific emission factor database for the iron and steel industry Meng Soon Chiong(1), (2), *Hui Chi Phua(1), Yoon-Young Chun(3), Kiyotaka Tahara(3), Meenachi Muniandy(4) 1.Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia, 2.Institute for Sustainable Transport, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia, 3.Research Laboratory for IDEA, National Institute of Advanced Industrial Science and Technology (AIST), 16-1 Onogawa, Tsukuba, Ibaraki, 305-8569, Japan, 4.School of Economics, University of Nottingham Malaysia, 43500 Semenyih, Selangor, Malaysia	[B-5-01] Future Design Practice for Creating an Action Plan toward Carbon Neutrality in a Local City: A Case Study of the Kyoto Miraimon Project *Yutaka Nomaguchi(1), Takuro Kobashi(2), Keishiro Hara(1) 1. The University of Osaka, 2. Tohoku University	[C-5-01][E] Implementing a Circular Business Model for Reusable Wall Panels in the Norwegian Wood Industry *Carla Susana A Assuad(1), Shinichi Fukushige(2) 1.Norwegian University of Technology, 2.Waseda University	[D-5-01] Shipment Forecasting for Yellowtail Aquaculture using Monte Carlo simulation *Yuki Kimura(1), Tomomi Nonaka(1) 1.WASEDA University	[E-5-01] Manufacturer Strategies for Certified Used Goods under Third-Party Competition from a Game-Theoretic Perspective *Xinmeng Li(1), Yasushi Kawase(1), Koji Kimita(1) 1.The University of Tokyo
	[A-5-02] Enhancing Sustainability in Logistics: Life Cycle Assessment of Structurally Reinforced Modular Plastic Pallets *Cheng Hsiang Shei(1), Jo-En Ma(1), Pei Ci Chen(1), I-Yun Lisa Hsieh(1) 1. National Taiwan University	[B-5-02] ViSoR: A Comprehensive Framework for Strategic Sustainability Planning *Yusuke Kishita(1), Robert Phaal(2) 1. The University of Tokyo, 2. University of Cambridge)	[C-5-02] Incremental Sheet Metal forming of Recycled Aluminium Alloys Kristian Martinsen(1), Sverre Gulbrandsen-Dahl(1), *N Venkata Reddy(1), (2) 1.SINTEF Manufacturing AS, Raufoss, Norway, 2. Indian Institute of Technology Hyderabad India	[D-5-02] Fostering EcoDesign Awareness Across Generations: Scalable Education Formats and Key Learnings for Sustainable (Micro)electronics *Alexandra Morozov(1), Nils F. Nissen(1) 1.Fraunhofer IZM	[E-5-02] Data-Driven Simulation for Evaluating Profitability and Environmental Impact During the Growth Phase of Use-oriented PSS *Yudai Tsurusaki(1), Yongsil Hwangbo(2), Shinichiro Matsushima(2), Koji Kimita(1) 1.The University of Tokyo, 2.SS Market Co., Ltd.
	[A-5-03] Material flow analysis of Smartphones in Finland: Quantifying Stocks and Flows to Enhance Sustainability Assessments and to Support Reuse and Recycling Practices *Winnie Ruismäki(1), Malin zu Castell-Rüdenhausen(1), Minna Räikkönen(1) 1.VTT Technical Research Centre of Finland		[C-5-03][E] Proposal ofaModel Update Method for Product InspectionAI in Long-Term Operation of Manufacturing Systems *Sota Hosaka(1), Hiroshi Yamakawa(1), Kousuke Okuno(2), Noritsugu Hamada(2), Yasushi Umeda(1)1.The University of Tokyo, 2.Sumitomo Electric Industries, Ltd.	[D-5-03] A Proposal for a Training Program Design Method Targeting Employees in the Transitional Phase of Generative AI Adoption *Tsubasa Ito(1), Tomomi Nonaka(2), Masami Oginuma(3), Seiko Shirasaka(1) 1.Keio University, 2.Waseda University, 3.The Asahi Shimbun Company	[E-5-03] Evaluating Biomass Energy Deployment with Life Cycle Assessment and Regional Analysis in Taiwan *Hsiu-Ying Lin(1), Hsin-Tien Lin(1) 1.National Taiwan University
	[A-5-04] Ecotoxicity Impact Assessment of Chemicals Reflecting Species Sensitivity Distributions *Marika Muramoto(1), Wataru Naito(2), Masaharu Motoshita(2), Longlong Tang(3), Norihiro Itsubo(1) 1.Waseda University, 2.National Institute of Advanced Industrial Science and Technology, 3.National Agriculture and Food Research Organization	Discussion	[C-5-04][E] Image Processing-Based Feature Extraction of Marble-Like Patterns in Injection Molding *Kazuki Hattori(1), Ryotaro Shimada(1), Yasuko Yamada(1), Koichiro Oishi(1), Daisuke Yagi(1) 1.Hitachi, Ltd.	[D-5-04] Opportunities, Challenges, and Strategic Pathways of Fuel Cell Vehicle (FCV) for the Sustainability in the Transportation Sector. *Md Imrul Quaeas(1), Hikaru Ikuta(1), Shoki Kosai(1), Shunsuke Kashiwakura(1), Eiji Yamasue(1) 1.Ritsumeikan University	[E-5-04] Reused over Refurbished? Exploring Smartphone Life Extension in Thailand's Informal Market *Kwanmanas Meethavorn(1), Chanathip Pharino, Aksornchan Chaianong(2) 1.Chulalongkorn University, 2.Friedrich - Alexander - Universität Erlangen - Nürnberg
			[C-5-05] Optimization of Metal Recovery in Small Home Appliance Recycling: A Field-Based Evaluation of Sorting Processes *Ryuki Yamada(1), Yutaro Takaya(1), (2), Chiharu Tokoro(1), (2) 1.The university of Tokyo, 2.Waseda university	[D-5-05][E] Engineering of Bio-Transformed Products to Foster Sustainable Manufacturing *Rainer Stark(1), Magda Tams-Berkhahn(1), Helena Ebel(1) 1.Technische Universität Berlin	[E-5-05] Integrating eco-design principles into engineering education: a KTH perspective *Sergei Glavatskih(1) 1.KTH Royal Institute of Technology
15:00-15:15	Coffee				

15:15-16:35	[A-6] Life Cycle Evaluation (3)	[B-6] OS: Future Design (3)	[C-6] OS: Circular Manufacutirng (3)	[D-6] OS: Design for X toward Sustainable Communication (3)	[E-6] OS: Designing Battery Value Chains towards Circular Economy (1)
	Chair: Lisa Hagedorn (Technische Universität Berlin, Germany)	Chair: Makoto Tamura (Ibaraki University, Japan)	Chair: Carla Susana A Assuad (Norwegian University of Technology, Norway)	Chair: Tomomi Nonaka (Waseda University, Japan)	Chair: Yusuke Kishita (The University of Tokyo, Japan)
	[A-6-01] Assessing the Impact of Climate Change on Winter Road Maintenance and Its Environmental Implications *Shuhao Huo(1), Hexin Ban(1), Zhi Cao(1)1.Nankai University	[B-6-01] Mangrove forest coverage and debris issues in Thanh Hoa Province, Vietnam: GIS and Remote sensing and residents' perceptions. *Vu Thi Hong Nhung(1), Takaaki Kato(1) 1.The University of Kitakyushu	[C-6-01] Distributed Manufacturing Systems for Recycling: Assessing the Viability of Low-Tech Solutions in Nepal *Palistha Manandhar(1), Curie Park(2), Pallab Shrestha(1), Padmakshi Rana(1), Shashank Dewan(1) 1.Impact Hub Kathmandu, 2.Cambridge University	[D-6-01] The Impact of Manufacturing Experience on Craftsmen's Conceptual Structures *Kenji Kuwahara(1), Ryuzo Furukawa(1) 1.Tokyo City University	[E-6-01] Analyzing the Impact of Resilience Measures in Supply Chains within the Dynamic Business Environment *Proff M(1), Schmidt K(1), Spengler Stefan TS(1) 1.Institute of Automotive Management and Industrial Production, Technische Universität Braunschweig, Braunschweig, Germany
	[A-6-02] Environmental Trade-offs of Steelmaking Transition: A System Life Cycle Assessment Considering By-product Compensation *Adesola Simeon Adeniyi(1), Shunsuke Kashiwakura(1), Shoki Kosai(1), Eiji Yamasue(1) 1.Graduate school of science and engineering, Ritsumeikan University	[B-6-02] Designing Electrical Energy Storage Systems for Sustainable Energy Grids-guidance from IEC 62933 *King Jet Tseng(1) 1.Singapore Institute of Technology	[C-6-02][E] Rethinking Plastic Sustainability: Environmental Impacts of PS vs. PET in Closed-Loop Recycling Takahiro Oda(3), Daikichi Seki(1), (3), Kento Ichii(1), (3), Misa Iwamoto(1), (3), Shunsuke Managi(1), (3), *Shutaro Takeda(1), (2) 1.Urban Institute, Kyushu University, 2.Graduate School of Media Design, Keio University, 3.aiESG, Inc.	[D-6-02] Flood Vulnerability Mapping for Road Network Using GIS-AHP Analysis Technique: Case Study Sylhet, Bangladesh *Choudhury Kashfia Nowrin(1), Helmut Yabar(2) 1.Graduate Student, University of Tsukuba, Japan., 2.Faculty, University of Tsukuba, Japan.	[E-7-02] The EU Battery Regulation: Industry Concerns Regarding Design for Repairability Requirements *Carl Dalhammar(1), Matilda Sandgren Watz(2), Jesko Schulte(2), Emil Andersson(1) 1.Lund University, 2.Blekinge Institute of Technology
	[A-6-03] Enhancing product life cycle design with probabilistic LCA software *Kiyotada Hayashi(1), Lise Laurin(2), Amalia Sojo(2), Ismael Velasco(2) 1.EarthShift Global, Asia G.K., 2.EarthShift Global LLC.	[B-6-03][E] Design Patterns for Embedding Circular Economy Strategies in Cyber-Physical Systems *Jan Luca Twardzik(1), Lynn Humpert(1), Ulf Könemann(1), Anja Maria Schierbaum(1), Roman Dumitrescu(2) 1.Fraunhofer Institute for Mechatronic Systems Design, 2.Paderborn University	[C-6-03] Dynamic Sustainability Assessment of Remanufactured Perovskite Solar Cells within a Circular Economy Framework *Tomohiko Nakajima(1), Yuuki Kitanaka(1), Masayuki Fukuda(1) 1.National Institute of Advanced Industrial Science and Technology	[D-6-03] Beyond the Laboratory: How Nature Boosts Creativity and Well-Being in Research *Kazutoshi Sakaguchi(1) 1.Yamaguchi University	[E-6-03][E] User Perspectives towards Repurposing EV LiBs for theHousehold Context in Norway *Leander Pantelatos(1), Casper Boks(1), Elli Verhulst(1) 1.Norwegian University of Technology and Science
	[A-6-04] A Performance Analysis Considering the Environmental Impact of the Data Center Facility through a Biomass-combined CCHP and Power System *Hikaru Furugori(1), Daichi Terasawa(1), Shan Miao(1), Kiyoshi Dowaki(1) 1.Tokyo University of Science	[B-6-04] Grand Design of Circular Economy Society Using Future Scenario Simulation *Keijiro Masui(1), Masahide Ban(2), Masakazu Yagi(2), Takashi Fukumoto(2), Yukiko Motimoto(2) 1.National Institute of Advanced Industrial Science and Technology, 2.Hitachi, Ltd.	[C-6-04] Use of cold spray technology for low-temperature repair towards remanufacturing *Kentaro Shinoda(1), Shivaprasad Cherukupally(2), Tina Ghara(1), Takashi Nagoshi(1), Venkata Reddy(2), Suryakumar Simhambhatla(2), Koji Miyake(1), Mitsutaka Matsumoto(1) 1.National Institute of Advanced Industrial Science and Technology (AIST), 2.Indian Institute of Technology Hyderabad (IITH)	[D-6-04][E] A Generic Circular Business Simulation Tool Based on Life cycle Assessment Methodology and Data Tatiana Nevzorova(1), *Raul Carlsson(1) 1.RISE Research Institutes of Sweden	[E-6-04] Evaluating Social Impact in Battery Recycling System using a Reference-scale Social Life Cycle Assessment *Heng Yi Teah(1), Suyi Yang(1), Jiaqi Yang(3), Eri Amasawa(2), Yasunori Kikuchi(1) 1.The University of Tokyo, 2.Waseda University, 3.Sustainable Lab Inc.
	[A-6-05] Life Cycle Assessment of GHG Emissions from Conventional, Alternative, and Recycled Aluminum Production in South Korea *Inyoung Ko(1), Wonjae Choi(1) 1.Ewha Womans University	[B-6-05][E] Circular Digital Product Passport Aspect Model: Enabling Circular Economy Decision-making at End-of-life in the Automotive Industry Janine Mügge(1), Noah Czorny(1), Malina Wiesner(1), Joanna Steiner(1), *Theresa Riedelsheimer(1), Kai Lindow(1) 1.Fraunhofer IPK	[C-6-05] Defining Remanufacturing– How does it affect Industry? *Erik Sundin(1), Jennifer D Russell(2), Carl Dalhammar(3) 1.Linköping University, 2.Virginia Polytechnic Institute & State University, 3.Lund University		[E-6-05][E] Investigating Sustainable Business Model Interactions in the Emerging Norwegian EV Lithium-ion Battery Ecosystem *Saad Ahmed(1), Elli Verhulst(1), Casper Boks(1) 1.Norwegian University of Science and Technology
16:35-16:55	Coffee				

16:55-18:15			[C-7] OS: Circular Manufacutirng (4)	[D-7] OS: Software Sustainability	[E-7] OS: Designing Battery Value Chains towards Circular Economy (2)
			Chair: N Venkata Reddy (SINTEF Manufacturing AS, Raufoss, Norway)	Chair: Osamu Namikawa (Hitachi Ltd., Japan)	Chair: Thomas Stefan Spengler (Technische Universität Braunschweig, Germany)
			[C-7-01] An Integrated CAD for Multi Generation Product Life Cycle Design Based on Voxel Modeling Environment *Kanta Hoshiba(1), Sougo Hirata(1), Shinichi Fukushige(1) 1.WASEDA UNIVERSITY	[D-7-01][E] A Case Study on the Estimation of Life-Cycle CO2 Emissions in Software *Ouri Yamaguchi(1), Machiko Shinozuka(1), Tsuyoshi Oshima(1), Takuya Iwatsuka(1), Yukihisa Nishizawa(1), Yuriko Tanaka(2), Yoshie Takeuchi(2), Shiro Nishi(2) 1.NTT Computer and Data Science Laboratories, 2.NTT Advanced Technology Corporation	[E-7-01] Circular Battery Value Chain Design in the EU – Linking Market Dynamics and Environmental Impacts *Spengler TS(1), Ginster R(1), Blö meke S(1), Popien J-L(1), Scheller C(1), Cerdas F(1), Herrmann C(1) 1.Technische Universität Braunschweig
			[C-7-02] Analysis of the Truck Disassembly Process and Assessment of the Environmental Impact Reduction Potential of Reused Parts *Aoba Nohmura(1), Yusuke Nagai(1), Tatsuki Yamada(1), Akihiro Hayakawa(2), Shundai Nezu(2), Yuichi Takenaka(3), Mitsunobu Fujita(2), Masato Inoue(4), Takao Mori(1), Shuho Yamada(1) 1.Toyama Prefectural University, 2.NGP Co.,Ltd, 3.Japan Truck Refineparts Association, 4.Meiji University	[D-7-02] Proposing a Framework for Data-Driven Environmental Assessment and Design of AI Ecosystems *Christian Clemm(1), Kishan Wimalawarne(2), Lutz Stobbe(3), Chris Eckstein(3) 1.The University of Tokyo, 2.Kyoto University, 3.Fraunhofer IZM	
			[C-7-03] Estimation of GHG Emission Reduction Effect by Utilizing Remanufactured Parts of Automobile Engine Auxiliaries *Tatsuki Yamada(1), Akihiro Hayakawa(2), Shundai Nezu(2), Mitsunobu Fujita(2), Masato Inoue(3), Takao Mori(1), Shuho Yamada(1) 1.Toyama Prefectural University, 2.NGP Corporation, 3.Meiji University	[D-7-03][E] Development of Digital Twins for Sustainability in an End of Life Use Case *Theresa Riedelsheimer(1), Janine Mü gge(1), Joanna Steiner(1), Sebastian Wehking(1), Philip Staufenbiel(2), Kai Lindow(1) 1.Fraunhofer IPK, 2.LRP-Autorecycling Leipzig GmbH	[E-7-02] Designing circular battery value chains in Japanese context *Yusuke Kishita(1) 1.The University of Tokyo
			[C-7-04] Design Thinking and Design for Circularity: A Norwegian case *Carla Susana A Assuad(1), Morten Sagstuen(1) 1.Associate Professor NTNU	Panel Discussion	[E-7-03] The Influence of Network Structures on Production Planning in European Closed-loop Supply Chains of Lithium-ion Batteries *Schmidt K(1), Scheller C(1), Spengler Stefan TS(1) 1.Technische Universität Braunschweig
18:30-20:30	Banquet (RIHGA Royal Hotel Tokyo, Royal Hall I&II)				

Friday, November 14, 2025

9:00-9:45	Plenary Keynote 4: Green Steel Production in Europe—Perspectives and Challenges Dr. Thomas S. Spengler, Professor of Technische Universität Braunschweig (Okuma Auditorium)				
9:45-10:10	Registration (RIHGA Royal Hotel Tokyo, 2nd Floor)				
	Parallel Sessions (RIHGA Royal Hotel Tokyo)				
	Room A (Royal Hall I)	Room B (Royal Hall II)	Room C (Crystal)	Room D (Sapphire)	Room E (Diamond)
10:10-11:30	[A-8] Environmentally Conscious Design of Products and Services (1)	[B-8] Sustainable Consumption and Production (1)	[C-8] Circular Business Model (3)	[D-8] Sustainable Social Infrastructure (1)	[E-8] Life Cycle Evaluation (1)
	Chair: Shozo Takata (Waseda University, Japan)	Chair: Shinya Nagasawa (Waseda University, Japan)	Chair: Sergei Glavatskih (KTH Royal Institute of Technology, Stockholm)	Chair: Carl Dalhammar (Lund University, Sweden)	Chair: Hidenori Murata (The University of Osaka, Japan)
	[A-8-01][E] Aluminum based multifunctional housing for circular electronic devices *Lutz Stobbe(1), Paul Schuster(1), Tapani Jokinen(1), Thomas Mager(1), Bruno Mecke(2), Marek Koscielski(3), Wojciech Szymański(4) 1.Fraunhofer IZM, 2.Fraunhofer IEM, 3.Lukasiewicz ITR, 4.Lukasiewicz IMN	[B-8-01] Understanding key determinants of consumers' intention to purchase sustainable fashion apparel *Eri Amasawa(1), Aika Okada(2), KyongOk Kim(2) 1.Waseda University, 2.Shinshu University	[C-8-01][E] Evaluation of ATM Part Reuse Business Using Life Cycle Simulator *Ippei Kono(1), (3), Sanae Nakao(1), Hideki Sato(1), Akio Koketsu(2), Yoshiyuki Furukawa(3), Keijiro Masui(3) 1.Hitachi, Ltd., 2.Hitachi Channel Solutions, Corp., 3.National Institute of Advanced Industrial Science and Technology	[D-8-01][E] An Analysis of Hammering Inspection Skills for Road Tunnel Maintenance *Rinya Inaba(1), Shinichi Fukushige(1), Takashi Michikawa(2), Takafumi Sassa(2) 1.Waseda University, 2.RIKEN	[E-8-01] LifeCycle GHG Emissions Analysis for the Transition from Conventional to SmartFarming in Japan *Jun Taguchi(1), Hiroki Hondo(1), Yue Moriizumi(1) 1.Yokohama National University
	[A-8-02] Regulating design for recycling: Defining recyclability criteria for plastic packaging *Leonidas Milios(1), Ilija Sazdovski(1), Marta Santamaria(1), Alba Bala(1), Pere Fullana-i-Palmer(1) 1.UNESCO Chair in Life Cycle and Climate Change ESCI-UPF	[B-8-02] How Demographics Shape Consumer Behavior: Insights from a National Survey *Jiazhen Yap(1), Andrew Chapman(1) 1. Kyushu University	[C-8-02][E] Circular Business Design for Mobility Industry Using Multi-Agent Simulation *Masahiro Yamamoto(1), Shinichi Fukushige(1) 1.Waseda University	[D-8-02][E] Resource Circulation and Educational Practice through "Bamboo Cascade Utilization" in Remote Island Area *Kotaro Mori(1), Takeshi Ito(1), Takahiro Makiyama(1), Haruka Toyoda(2) 1.National Institute of Technology, Yuge College, 2.Kamijima Town, Tourism Strategy Division	[E-8-02] Integrating Degradation and Climate Variability into Comparative Life Cycle Assessment of Lithium-Ion Batteries *Xin Chen(1), Zhi Cao(1), Chunli Chu(1) 1.Nankai University
	[A-8-03] Beyond the Car: Designing for Sustainable Commuting *Simon Schütte(1), Micael Derelöv(1), Laila Adelsson 1.Linköping University	[B-8-03] Exploring the Influence of Green Consumption Awareness and Values on the Purchase of Bamboo Cultural Creative Products *Pei Chi Chen(1), Jui Che Tu(1), Pei Chi Huang(1) 1.National Yunlin University of Science and Technology	[C-8-03][E] Ecosystem Orchestration to Promote Circular Innovations :The Role of Advocacy Mechanisms *Patrick M. Frey(1), Julia C. Schmitt(1), Erik G. Hansen(1) 1.Johannes Kepler University Linz	[D-8-03][E] Bridging the Gap: From Challenges to Opportunities in the Hydrogen Supply Chain in the Sultanate of Oman *Meilinda F.N. Maghfiroh(1), (2), Fatma Al Barwani(1), Fatma Al Balushi(1), Abdullah Al Rahbi(1) 1.Muscat University, 2.Universitas Islam Indonesia	[E-8-03] Development of Life cycle Simulation Model Considering Carbon Lock-in for Heating, Cooling and Hot water Systems *Haruto Katayama(1), Jin Akita(1), Hidenori Murata(1), Hideki Kobayashi(1) 1.The University of Osaka
	[A-8-04] Designing Sustainable Performance Footwear *Ye Yi-Lin(1), Lee Yuh-Ming(1) 1.National Taipei University	[B-8-04][E] Learning to Act, Acting to Change: Configuring Sustainable Behaviour Interventions Through Bloom's Taxonomy and Activity Theory *Elena Jiménez Romanillos(1), Renee Wever(1) 1.Linköping University	[C-8-04][E] Rethinking Consumer Roles in Circular Economy: Industry 4.0 and the Democratization of Waste Repurposing *Daisuke Nagatomo(1) 1.National Taiwan Normal University	[D-8-04][E] Simulation and Evaluation Tool for Use with Regional Energy Management Plans Incorporating Electric Vehicles and Renewable Energy *Yujiro Hirano(1), Takahiro Yoshida(2), Daisuke Murakami(3), Hajime Seya(4), Yoshiki Yamagata(5) 1.National Institute for Environmental Studies, 2.The University of Tokyo, 3.The Institute of Statistical Mathematics, 4.Kobe University, 5.Keio University	[E-8-04] Evaluation of Circular Strategies: Simulation of Circular Economy of Home Appliances *Bumbunoshin Yoshimura(1), Shinsuke Murakami(1) 1.Dept. of Systems Innovation, Grad. Sch. of Eng., The Univ. of Tokyo
	[A-8-05] Rethinking Durability: The Missing Link in Sustainable Footwear Design *Chiehhua Lu(1), Yeh-Ming Lee(1) 1.National Taipei University	[B-8-05] Eco-Innovation in Abu Dhabi: Transforming leaf waste into sustainable solutions for environmental preservation *Jacqueline Soghman(1), Imane Belyamani(1) 1.Zayed University	[C-8-05][E] Breakdown Technology &Business Readiness Level Assessment: A Novel Evaluation Framework for Assessing Technology Social Implementation and Innovation Potential in the Field of Carbon Neutrality *Gen Kudo(1), Andante Hadi Pandyaswargo(1), Hiroshi Onoda(1) 1.Waseda University	[D-8-05][E] Co-Designing Zero-Waste Solutions for Urban Furniture *Cagri G Varli(1), Suhendan F Eroglu(1), L.N. Ece Ariburun Kirca (1) 1.Istanbul Technical University	[E-8-05] Well-to-Wake Greenhouse Gas Emission Analysis of Sustainable Aviation Fuels (SAF) in South Korea *Hyo young Kim(1), Wonjae Choi(1) 1.Ewha Womans University
11:30-11:40	Coffee				

11:40-13:00	[A-9] Environmentally Conscious Design of Products and Services (2)	[B-9] Sustainable Consumption and Production (2)	[C-9] Circular Business Model (4)	[D-9] Sustainable Social Infrastructure (2)	[E-9] Life Cycle Evaluation (2)
	Chair: Lutz Stobbe (Fraunhofer IZM, Germany)	Chair: Aya Ishigaki (Tokyo University of Science, Japan)	Chair: Keijiro Masui (National Institute of Advanced Industrial Science and Technology, Japan)	Chair: Kenichiro Chinen (California State University, Sacramento)	Chair: Kristian Martinsen (SINTEF Manufacturing, Norway)
	[A-9-01] Circular Product Design for Life Cycle Industries *Mamoru Kondo(1), Shinichi Fukushige(1) 1.Waseda Univesity	[B-9-01] Simulation Tool to Incentivize Consumers to Act in Line with Circular Business Models *Raul Carlsson(1), Tatiana Nevzorova(1) 1.RISE - Research Institutes of Sweden	[C-9-01][E] Application of Breakdown Technology & Business Readiness LevelAssessment to Carbon Capture Technology: A Case Study on AdvancingSocial Implementation Assessment *Gen Kudo(1), Andante Hadi Pandyaswargo(1), Hiroshi Onoda(1) 1.Waseda University	[D-9-01] Remediating sidewalk and tree root conflicts: A case study of the rain trees at Chulalongkorn University, Bangkok, Thailand *Suphichaya Suppipat(1), Chomchon Fusinpaiboon (1), Nuttapong Sirisompornkong (1), Pavinee Inchompoo (1), Phatsaphan Charnwasununth (1) 1.Chulalongkorn University	[E-9-01] Designing Greener Warehouses: Quantifying Component-Level Embodied Carbon Using Real-World BIM Data *Yeoh Jian Hern(1), I-Yun Lisa Hsieh(1) 1.National Taiwan University
	[A-9-02] Combining Ecodesign and Reliability Engineering into Eco-Reliability *Nils F. Nissen(1), Leo Saillenfest(1), Stefan Wagner(1), Daniel Hahn(1), Martin Schneider-Ramelow(1), (2) 1.Fraunhofer-Institut für Zuverlä ssigkeit und Mikrointegration (IZM), Berlin, Germany, 2.Technische Universität Berlin, Berlin, Germany	[B-9-02] Current Applications of Plant-Based Filtration in Household Water Treatment *Pooritat Kunurat(1), Nachawit Tikul(1) 1.Maejo University	[C-9-02][E] Raising the Potential of the Circular Economy by Applying BSF Farming in Food Waste Management in the Hotel Industry Nikorn - Mahawan(1), *Wanpen Charoentrakulpeeti(2), Chokanan Wanitlertthanasarn(1), Tanwutta Thaisuntad(1) 1.Maejo University, 2.Chiang Mai University	[D-9-02] Rethinking the Viability of Passive Ventilation Design for Buildings in Hot-Humid Climates Amidst Extreme Weather *Phichayapa Tammikakul(1), (2), Tullachai Bosup(2), Nachawit Tikul(1), (2) 1.Design Innovation for Sustainability, 2.Faculty of Architecture And Environmental Design,Maejo Universit	[E-9-02] Developing Eco-Friendly Strategies for Khunpae Coffee in Chiang Mai Through LCT. *Aurathai Mahawun(1), Kittikul Sirimeungmoon(1), Nachawit Tikul(1) 1.Maejo University
	[A-9-03] Cocreation of Sustainable Packaging *Yoshinori Kobayashi(1), Yuki Kabe(1), Yuri Carvalho(2), Tarcio Borgo(2) 1.Braskem Netherlands B.V., 2.CAZOOLO	[B-9-03] Sustainable Mobility Through Circular Economy: Understanding Consumer Choices in the Automotive Sector *Yi Gao(1), Ryu Koide(1), (2), (3), Shinsuke Murakami(1) 1.The University of Tokyo, 2.National Institute for Environmental Studies (NIES), 3.Delft University of Technology	[C-9-03][E] Evaluation for Horizontal Recycling of Magnets in Motors Using Life Cycle Simulation *Hideki Sato(1), Ippei Kono(1), Takeshi Nemoto(1), Yousuke Tanaka(1), Tatsuya Morikawa(1) 1.Hitachi Ltd.,	[D-9-03] Developing a Model to Optimize Bike-Sharing Redistribution Strategies: A Case Study of Taipei's YouBike System *Wei En Huang(1), Hsin Tien Lin(1) 1.National Taiwan University	[E-9-03] Life Cycle Assessment of Offshore Wind-Coupled SOEC Hydrogen Production Based on the Geographic and Environmental Context of South Korea *Yujin Jung(1), Wonjae Choi(1) 1.Ewha Womans University
	[A-9-04] Observation of Sea Surface Temperature, Chlorophyll-a, and Total Suspended Material Using Remote Sensing Data in Nijhum Dwip MPA *Md Shamim Raze(1), Helmut Yabar(1) 1.University of Tsukuba	[B-9-04][E] Organic vs Recycled vs Eco Materials: Understanding Consumer Attitudes toward Eco-Labels in Sustainable Clothing *Raka Nusrat J(1), Chankov Stanislav M(1) 1.Constructor University Bremen, Germany	[C-9-04][E] Navigating System Inertia – Pathways and Barriers for Circular and Electrified Socio-technical Transitions *Mattias Lindahl(1), Henrik Nehler(1), Josefine Rasmussen(1), Herbert Jacobson(1), Jan Kellgren(1), Annelie Carlson(1) 1.Linköping University	[D-9-04][E] Constraint Power Routing Based on Discontinuous Modulation for Lifetime Balancing of Cells in Cascaded H-bridge Converter Anas Ibrahim(1), *Mohamed Salem(1), Amy Poh Ai Ling(2) 1.Universiti Sains Malaysia (USM), 2.The University of Tokyo	[E-9-04] Rethinking the Carbon Impact of Bearings in EcoDesign *Sergei Glavatskih(1) 1.KTH Royal Institute of Technology
	[A-9-03][E] Utilizing Microcellular Injection Molding for Plastic Enclosures in Customer Premises Equipment to Achieve Lightweight Design and Reduce Environmental Impacts Yung Yu Chen(1), *Yi Chun Jin(1), Yi Chieh Lin(1), Han Chang Pan(1), Shin Hong Chen(1), Zhi Sheng Su(2), Hsin Tien Lin(2) 1.Wistron NeWeb Corporation, Taiwan, 2.Department of Mechanical Engineering, National Taiwan University, Taiwan	[B-9-05] The Metabolic Kitchen: Human Agency in Domestic Cooking Practices and Urban Sustainability *Rudi Meyer(1) 1.NSCAD University		[D-9-05][E] Research on Improving the Practical Energy-Saving Effects of Air Lubrication Systems by Constructing an IoT-based Energy-saving Effect Monitoring System in Actual Sea Areas *Hideki Kawashima(1), Daijiro Arakawa(1), Koichiro Shiraishi(1), Tatsuya Hamada(1), Takamichi HIROI(1), Keita Fujii(2) 1.National Institute of Maritime, 2.Nakashima Propeller Co., Ltd.	[E-9-05] An Instant Tool for Carbon Footprint Assessment with 3D CAD Modeling *Hsiang-Tang Chang(1), Fa-Ming Hsieh(2) 1.National Kaohsiung University of Science and Technology (NKUST), 2.Industrial Technology Research Institute (ITRI)
13:00-14:00	Lunch (Royal Hall I&II)				

14:00-15:20	[A-10] Environmental Conscious Design of Products and Services (3)	[B-10] Sustainable Consumption and Production (3)	[C-10] Policy, Legistlation and Social Activities (1)	[D-10] Digital Technologies for Sustainability (1)	[E-10] OS: Towards Building a Carbon-Neutral Local Circular Economy (1)
	Chair: Sverre Gulbrandsen-Dahl (SINTEF Manufacturing AS, Norway)	Chair: Allen H. Hu (National Taipei University of Technology, Taiwan)	Chair: Hideki Kobayashi (The University of Osaka, Japan)	Chair: Mattias Lindahl (Linköping University, Sweden)	Chair: Yudi Liu (Waseda University, Japan)
	[A-10-01][E] Utilizing the Flexible Die-Cutting Circuit to Develop a Low-Carbon Antenna Product -- The Case of Antenna Production in WNC Corporation Jing Wen Chen(1), *Yi Chun Jin(1), Yi Chieh Lin(1), Han Chang Pan(1), Shin Hong Chen(1), Pin Lung Hsu(2), Hsin Tien Lin(2) 1.Wistron NeWeb Corporation, Taiwan, 2.Department of Mechanical Engineering, National Taiwan University, Taiwan	[B-10-01] Eco-Driven Growth: A Sustainable Business Model for Quinoa Farming in Peru *Diego Naoki Kawanishi Ramos(1), Helmut Yabar(1), Takeshi Mizunoya(1) 1.University of Tsukuba	[C-10-01][E] Youth perceptions of economic instruments for climate policies and willingness to pay: Insights for Japan's policy *Thu Anh Mai(1), Takaaki Kato(2) 1.Graduate School of Environmental Engineering, the University of Kitakyushu, Kitakyushu, Fukuoka, Japan, 2.Institute of Environmental Science and Technology, the University of Kitakyushu, Kitakyushu, Fukuoka, Japan	[D-10-01][E] Digitalization in Waste Banks: Implications for Customer Management and Operational Performance Sari Wulandari(1), *Andante Hadi Pandyaswargo(2), Meilinda Fitriani Nur Maghfiroh(3), (4), Bambang Suwerda(4), Hiroshi Onoda(2) 1.Telkom University, 2.Waseda University, 3.Muscat University, 4.Universitas Islam Indonesia	[E-10-01] Voluntary Credits for Building a Social and Solidary Circular Economy *Ayu Washizu(1), Yasuko Nomura(2), Takashi Nozu(1) 1.Waseda University, 2.Linkhola Inc.
	[A-10-02][E] A Method for Deriving Remanufacturing Design Guidelines Based on Product Information and Lifecycle Scenarios *Junzhe XU(1), Yuya MITAKE(1), Mitsutaka MATSUMOTO(2), Naoya MIYAJI(3), Shingo HAMADA(4), Genichiro MATSUDA(4), Akio TAJIMA(4), Yasushi UMEDA(1) 1.the University of Tokyo, 2.National Institute of Advanced Industrial Science and Technology, 3.Panasonic Corporation, Osaka, Japan, 4. Panasonic Holdings Corporation	[B-10-02] Analyzing the Evolution of User Intention of Continued Product Use: A Quantitative Approach *Haruhisa Yamamoto(1), Shinsuke Murakami(2) 1.National Institute for Environmental Studies, 2.The University of Tokyo	[C-10-02][E] Bridging Theory and Practice: Problem-Based Learning for Sustainable Engineering *Lisa Hagedorn(1), Rainer Stark(1) 1.Technische Universität Berlin	[D-10-02][E] Assessing the Readiness of Automated Waste Sorting Technologies for Advancing Circular Economy *Andante Hadi Pandyaswargo(1), Tianhao Cheng(1), Hao Hu(2), Hiroshi Onoda(1) 1.Waseda University, 2.Environmental Intelligence and Innovation Co., Ltd.	[E-10-02] Regional Circular Economy under Transport Restructuring:Nishi Kyushu Shinkansen and the Changing Time-space Compression of Kashima City *Yudi Liu(1), Ayu Washizu(1), Osamu Soda(1) 1.Waseda University
	[A-10-03][E] Discussion of the Energy-Saving Performance Using the Hydrocarbon Refrigerant (GF-08) Considering the Well-being of Air Conditioning *Hiroya Takeda(1), Kengo Fujiwara(1), Tomohiko Ihara(2), Kiyoshi Dowaki(1) 1.Tokyo University of Science, 2.The University of Tokyo	[B-10-03] A Case Study: Using Waste Vegetable Oil (WVO) as a Local Carbon Neutral Car Fuel *Iain Davey(1) 1.Department of English Studies for Careers, Kyoto University of Foreign Studies	[C-10-03][E] Defining Key data for Digital Product Passports Through Stakeholder Consultation Across Electronics and Textiles *Eduard Wagner(1), Andreas Schneider(2), Konrad Bendzuck(3) 1.Fraunhofer IZM, 2.Global Textile Scheme GmbH, 3.EIT InnoEnergy	[D-10-03][E] PerceptionsTowards Eco-Feedback Within the Shipping Industry inNorway *Amalie Buvarp(1), Mari Hegrenes Ø vrebø(1), Taufik Akbar Sitompul(1) 1.Department of Design, Norwegian University of Science and Technology	[E-10-03] Conditions for the Success of the Regional Circular and Ecological Spheres Initiative: The Roles of Preferences, Technology, and Institutions in Its Achievement *Kenichi Akao(1) 1.Waseda University
	[A-10-04][E] From Use to Obsolescence: Mapping Student Relationships with Electronic Devices *Betul Sahin(1), Nikki Clark(1), Debra Lilley(1) 1.Loughborough University	[B-10-04] Decarbonizing Nitrogen Use in China's Food Systems: IntegratedProduction-, Application-, and Demand-Side Strategies *Huwei Cui(1), zhi Cao(1), Chunli Chu(1) 1.Nankai University	[C-10-04][E] Right to Repair as a Lever for Circular Economy: Comparative Insights from Global Policy Frameworks Kook Pyo Pae(1), Ji Hwan Park(1), *Ji Hye Jo(1) 1.Korea Environment Institute	[D-10-04][E] Enhancing Quality Control in Cashew Nut Production through Deep Learning: A Case of the M23 Variety *Kenya Yamate(1), Takaaki Kato(1) 1.The University of Kitakyushu	[E-10-04][E] Building Sustainable Cities through Zero Waste Certification: A Strategic Framework from Asia to the World *Hanbi Kim(1), Yukyeong Kim(1), Noh-hyun Lim(1) 1.IGSC Inc.
	[A-10-05] Product Design Evaluation from an Integrated Viewpoint of Repairability and Failure Risk *Haruka Shinke(1), Yuya Mitake(1), Yasushi Umeda(1) 1.University of Tokyo	[B-10-05][E] Realization of Sustainable Production based on Backcasting Approach – Application and Verification of Effects in Automotive Parts Manufacturing – *Atsushi Yamada(1), Kazutoshi Kodama(1), Koichiro Yasuda(1), Yoshihide Segawa(1), Masaaki Enami(1) 1.DENSO CORPORATION	[C-10-05] Hopeless Environmental Cooperation? Case Study: Environmental Governance - Peruvian Fishing Sector *Jaramillo Abad Gleymang Yubert(1), Uwasu Michinori(1) 1. The University of Osaka		[E-10-05][E] Context-Building Support for Regional Circular and Ecological Spheres: Visualizing Social Nexus and Shared Narratives through the "Local Mandala" Approach *Osamu Soda(1), Toshihiko Eto(2), Akira Yoshida(1), Yudi Liu(1), Kensuke Eguchi(3), Miho Hiruma(3), Ayu Washizu(1) 1.Waseda University, 2.Nihon Business Data Processing Center Co., Ltd., 3.Global Environmental Outreach Centre (GEOC)
15:20-15:35	Coffee				

15:35-16:55	[A-11] Sustainable Supply Chain Management	[B-11] Sustainable Manufacturing	[C-11] Policy, Legistlation and Social Activities (2)	[D-11] Digital Technologies for Sustainability (2)	[E-11] OS: Towards Building a Carbon-Neutral Local Circular Economy (2)
	Chair: Shunichi Ohmori (Waseda University, Japan)	Chair: Tomohiko Nakajima (National Institute of Advanced Industrial Science and Technology, Japan)	Chair: Yuya Mitake (The University of Tokyo, Japan)	Chair: Christian Clemm (The University of Tokyo, Japan)	Chair: Yudi Liu (Waseda University, Japan)
	[A-11-01][E] Optimization of CCUS Implementation Plan Considering Instability in Renewable Energy Power Generation *Takuma Terasaki(1), Jundai Koketsu(1), Shinichirou Morimoto(2), Aya Ishigaki(1) 1.Tokyo University of Science, 2.National Institute of Advanced Industrial Science and Technology	[B-11-01] Novel Process of Cu Removal and Recovery from Steel Scraps for CN Steelmaking *Takuro Ushikubo(1), Christopher Miyazaki(1), Taiki Yoshinari(1), Hiroshi Fukaya(1), Takahiro Miki(1) 1.Tohoku University	[C-11-01] Exploring Audio Recording and Podcast Initiatives to Foster Local Identity and Cultural Heritage in Nan-mei Village for an Eco-Museum Approach *Fu Chuang(1) 1.National Cheng Kung University	[D-11-01] Digital twin spaces for tele-collaboration with smart robots in multiple job sites *Mizuki Kawakami(1), Sawa Yoshioka(1), Kohta Seki(1), Shinichi Fukushige(1) 1.Waseda University	[E-11-01] Exergy Analysis in Electric Vehicles *Chun-Chiao Chang(1), Yuh-Ming LEE(1) 1.National Taipei University
	[A-11-02] Recognition Method of Aluminum Alloys Using Thermal Behavior as Detection Probe and Its Application for Recycling *Asako Narita(1), Xianyi Gou(1), Hidehiro Kamiya(1), Chiharu Tokoro(2), (1) 1.Waseda University, 2.The University of Tokyo	[B-11-02][E] A More Intuitive Approach forDesign Optimization of SustainableInter-plant Waste Heat Exchange Networks *La Verne Ramir D.T. Certeza(1) 1.National University of Singapore	[C-11-02] Decarbonizing the Baking Industry: Developing a Carbon Neutral Pathway for Toast *Pei-Chen Wu(1), Kuang-Ly Cheng(1) 1.Chang Jung Christian University	[D-11-02][E] Sustainable Shipping Solutions: Integrating Smart Transportation for Greener Logistics Taher Al Jabri(1), *Meilinda F.N. Maghfiroh(1) 1.Muscat University	[E-11-02] Modeling the Evolution of Electric Vehicle Market: An Integrated Approach to Forecasting and Sustainability Chin-Chuan Huang(1), *Wu-Hsun Chung(1) 1.National Taiwan Ocean University
	[A-11-03] Impact of Energy Transition Policies on Electricity Emission Factors regarding Location and Market-based and Carbon Emissions within Taiwan's Industrial Value Chains *Lance Hongwei Huang(1), Chia - Wen Li(1), Cheng Ray Yu(1), Meng - Chi Lin(1), Allen H. Hu(1), (2) 1.Institute of Environmental Engineering and Management, National Taipei University of Technology, 2.Department of Industrial Design, Faculty of Architecture, Chulalongkorn University	[B-11-03] Energy-Efficient Production Scheduling with Peak Power Reduction in Robotic Flexible Manufacturing Systems *Ryo Yonemoto(1), Haruto Shimizu(2), Haruhiko Suwa(1) 1.Setsunan University, 2.Kiuchi Instruments Maintenance Corporation	[C-11-03] Upcycled Product Certification: Towards Regional Harmonization through Comparative Standard Analysis *Yukyeong Kim(1), Hanbi Kim(1), Noh-hyun Lim(1) 1.IGSC Inc.	[D-11-03][E] Jump Aboard the Eco-Feedback Ship: How Can Eco-Feedback Make Work Towards Energy Efficiency on FerriesMore Engaging? *Mari Hegrenes Øvrebø(1), Amalie Buvarp(1), Taufik Akbar Sitompul(1) 1.Department of Design, Norwegian University of Science and Technology	[E-11-03] Feasible supply of Global Synthetic Rubber May Fall Short of Meeting Passenger Vehicle Demand Despite Material Efficiency Efforts *Kaiwei Huang(1), Zhi Cao(1), Chunli Chu(1) 1.Nankai University
		[B-11-04][E] Transient Entanglements: Comparative Characterisation of Knitted and Woven Textile Scaffolds for Bacterial Cellulose Composites with Subsequent Speculative Functionalisation as Transient Installations *Carolina De Lara(1), Leonie Burkhardt(2), Daijiro Mizuno(1) 1.Kyoto Institute of Technology, 2.The Swedish School of Textiles	[C-11-04] Bridging Knowledge and Action: How Training Fuels the Circular Economy Transition *Irene Pellucchi(1), Claudio Sassanelli(2), Sergio Terzi(3), Federica Acerbi(3), Adriana Hoffman Trevisan(4) 1.Erion Compliance Organization scarl, 2.Politecnico di Bari, 3.Politecnico di Milano, 4. University of São Paulo	[D-11-04] A Preliminary Study on Repair of Machine Components by Laser DED Method *Yuri Tei(1), Yoshihisa Harada(1), Satoshi Kajino(1), Miki Nakano(1), Hiroki Mano(1), Mitsutaka Matsumoto(1) 1.National Institute of Advanced Industrial Science and Technology	[E-11-04] Decarbonization Potential Analysis of Circular Business Transition Scenarios in the Mobility Industry *Atsushi Wada(1), Shinichi Fukushige(1) 1.Waseda University
			[C-11-05][E] Circular Value-added Productivity: Evaluating Cost Efficiency for Circular Economy Transition *Yuki Murasato(1), Osamu Hoshino(1), Toru Den(2), Akira Nakabayashi(3) 1.Hitachi, Ltd., 2.National Institute of Advanced Industrial Science and Technology, 3.AIST Solutions Co.		
16:55-17:05	Short Break				
17:05-17:50	Award Ceremony & Closing Session (Royal Hall I&II)				