

Program at a glance

	Room A	Room B	Room C	Room D	Room E
<u>2-Dec</u>					
9:30-10:15	Opening				
10:15-11:00	Plenary keynote 1: Hugo Schally European Commission				
11:00-11:45	Plenary keynote 2: Rolf Steinhilper Bayreuth University, Germany				
12:00-13:00	Lunch				
13:00-14:20	OS: Organizational LCA	Eco-innovation support method	Ecodesign method and tools (1)	Critical resource and urban mining	OS: Low carbon society
14:40-16:00	Sustainable society (1)	Eco-innovation and policy analysis	Ecodesign method and tools (2)	Critical resource recovery	OS: Designing sustainable energy futures (1)
16:20-17:40	Sustainable society (2)	Ecodesign policy/Eco labelling	Information feedback to design stage	Innovative assembly and disassembly process	OS: Designing sustainable energy futures (2)
18:15-20:30	Reception				
<u>3-Dec</u>					
9:00-10:20	OS: Future design for sustainability (1)	OS: Locally-oriented sustainable design (1)	Green electronics (1)	OS: Additive manufacturing as sustainable manufacturing tool	Sustainable energy system
10:40-12:00	OS: Future design for sustainability (2)	OS: Locally-oriented sustainable design (2)	Green electronics (2)	Remanufacturing (1)	Renewable energy system assessment
12:00-13:00	Lunch				
13:00-14:00	Poster Session				
14:10-15:30	OS: Future design for sustainability (3)	OS: Locally-oriented sustainable design (3)	Green electronics (3)	Remanufacturing (2)	Geographical sustainability assessment
15:45-16:30	Plenary keynote 3: Kiyoto Furuta Canon Inc., Japan				
16:30-17:15	Plenary keynote 4: John Disharoon Caterpillar Inc., USA				
18:30-21:00	Banquet				
<u>4-Dec</u>					
9:00-10:20	Sustainable consumption	PSS design	Sustainable manufacturing	Ecodesign of handicrafts	OS: Designing sustainable energy futures (3)
10:40-12:00	Prospects of ecodesign research (1)	Sustainable supply chain management	Green building	Ecodesign simulation (1)	OS: Designing sustainable energy futures (4)
12:00-13:00	Lunch				
13:00-14:20	Prospects of ecodesign research (2)		Green telecommunication and electronics	Ecodesign simulation (2)	Sustainable transportation
14:30-15:10	Closing&Award				

Plenary Keynote Speakers



Hugo Schally

Head of Unit, Directorate General “Environment”, “Eco-innovation and circular economy” at **European Commission**
EU Policy Development on Eco-innovation and Circular Economy



Rolf Steinhilper, PhD

Full Professor for Manufacturing and Remanufacturing Technology, Fraunhofer Group Leader, **University of Bayreuth, Germany**
Technology Trends and Challenges of Remanufacturing



Kiyoto Furuta

Senior General Manager of the Global Environment Center, **Canon Inc., Japan**
Canon’s Environmental Activities (Tentative)



John T. Disharoon

Director of Market Access for Caterpillar Remanufacturing, Components and Work Tools Division, **Caterpillar Inc., USA**
Caterpillar Remanufacturing: The Business of Sustainable Development

Oral sessions: First day (Dec. 2)

	Room A	Room B	Room C	Room D	Room E
13:00-14:20	OS: Organizational LCA	Eco-innovation support method	Ecodesign method and tools(1)	Critical resource and urban mining	OS: Low carbon society
	Julia Martínez-Blanco Guidance on Organizational Life Cycle Assessment	Ursula Tischner State of the Art of Open Innovation and Design for Sustainability	Therese Elisabeth Schwarz Reducing conflicts of interest in Eco-Design - the relation of innovation management and Eco-Design in the automotive Computer-Aided Design for Semi-Destructive Disassembly	Hiroki Hatayama Strategy Planning Before Urban Mining: Exploring the Targets	Hiroshi Onoda A Study on the approach to the Smart Community ~Through renewable energy projects in Saitama Prefecture~ Impact of Extreme Technologies on Low-Carbon Society
	Atsushi Inaba Japanese Activities on Organizational LCA	Jahau Lewis Chen Device Analysis Model in Computer-aided Innovation Software for Ecoinnovation of the Atmospheric Plasma Etching System	Shinichi Fukushima User model in the life cycle simulation of mechanical parts based on Prospect theory	Ichiro Daigo Structure of conditions for recycling from urban mine	Hidetaka Aoki Estimation of reduction in CO2 emissions by using ICT throughout Japan
	Julia Martinez-Blanco Social Organizational LCA (SOLCA)	Yumihito Yokoki Deriving Heuristic EcoDesign Guidelines for the Development of Components	Marco Mandolini A Methodology to Identify and Analyze Key Factors in Eco-design	Junbeum Kim Current Issues on Lighting Industry and System	Tomomi Nagao Development of Low-Carbon Society Businesses in Japan
	Discussion	Julian Sarnes	Seong-Rin Lim	Shinsuke Kondoh Linear programming approach to design competitive urban mines	Takashi Iwamoto
14:40-16:00	Sustainable society (1)	Eco-innovation and policy analysis	Ecodesign method and tools (2)	Critical resource recovery	OS: Designing sustainable energy futures (1)
	Christoph Hollauer Sustainability Indicators – Overview, Synthesis and future Research Directions	Helmut Yabar The Promotion and Diffusion of Environmental Innovations: Streamlining the Dissemination Mechanisms	Shuho Yamada Satisficing Design Method for Sustainable Performance, Profitability for Manufacturer and Reduction of Environmental Loads	Tohru Kamo Recovery of Useful Resources from End-of-Life Photovoltaic Module by liquefaction of cured EVA	Haruki Tsuchiya Sustainable energy strategy primarily involving renewable resources in Japan
	Harald E. Otto Postmodern Dynamics of Innovation and Knowledge in the Context of Sustainable Energy Development	Fanglin Chao Patentability considerations on Green Sustainable Design	Daniel Kammerl A Framework for Sustainable Product Development	Akihiro Yoshimura Development of Recycling System of Precious Metals and Rare Metals from Secondary Resources Using "Organic Aqua Regius"- DMSO Solution Containing Copper Halides	<i>Continued</i>
	Areli Geraldine Avendano The Role of Industrial Design in Effective Post-Disaster Management	Jacobus Marthinus Van Der Bank An Analysis of the Ecodesign Scientific Network 1994-2014	Marco Mengarelli A LCA based platform to support a systematic introduction of environmental criteria into the design process of mechatronic products	Hiroyuki Inano Recovery of Metals from E-waste Mediated by Molten CRT Lead Glass	Hooman Farzaneh Comparison of solar energy potential, policy and progress in different regions
		Young Do Jung Case Studies of Innovative Eco-Design	Egle Katiliute Dynamic model for product eco-design: case and analysis	Otmar Deubzer Recycling of Critical Resources from LED Products	Miguel Esteban Recent Developments in Ocean Energy and Offshore Wind: Financial Challenges and Environmental Misconceptions
16:20-17:40	Sustainable society (2)	Ecodesign policy/Eco labelling	Information feedback to design stage	Innovative assembly and disassembly process	OS: Designing sustainable energy futures (2)
	Andrea Gaiardo From Eco to Sustainable Innovation: approach and methodology to guide design initiative into the innovation world	Tsai Chi Kuo Eco-Design Activity in Taiwan - From Design for Environment to Design for Sustainable Consumption	Louise Lindkvist Investigating types of information from WEEE take-back systems in order to promote Design for Recovery	Erh-Chieh Chang A Natural and Intuitive Constraint-Based Virtual Assembly System with a Wearable Haptic Interface	Andrew John Chapman Renewable Energy Policy Efficacy and Sustainability: The role of equity in improving energy policy outcomes
	Gwyntorn Satean The Need to Go Beyond "Green University" Ideas to Involve the Community at Naresuan University, Thailand	Carl Dalhammar Rethinking the Ecodesign Policy Mix in Europe	Maike Kosiol Potential of Common Methods to Integrate Sustainability Requirements in the Product Development Process ? a Case Study	Shigeki Koyanaka Automatic sorting of small electronic device scraps for rare metal recycling	Benjamin C McLellan "What if we all lived by the sun?" Demand shifting for a renewable-driven society
	Kun Mo Lee Uncertainty analysis for the greenhouse gas impact of raw milk	Rattanawan Mungkung Global Initiative on UPCYCLE Carbon Footprint Certification and Label Systems for Creative Waste Management and Greenhouse Gas Reduction Strategy of Implementing Carbon Labeling in Taiwan by Combining SWOT and ANP	Keshav Parajuly A methodology platform for improved resource recovery from electronic products and design for end-of-life	Nozomu Mishima Concept Proposal and Feasibility Study of Remote Recycling - Design of the Screening Mechanism	Tatsuya Kurafuchi Potential of Cooperation of Two Facilities Dealing with Urban Biomass Resources
		Allen H. Hu		Nozomu Mishima Concept Proposal and Feasibility Study of Remote Recycling - Separation Characteristics and Cost-Profit Analysis	Hiroki Shibagaki Efficiency Improvements and Economic Evaluation by Exergy Analysis of Small Binary Power Generation with Unutilized Heat

Oral sessions: Second day (Dec. 3)

	Room A	Room B	Room C	Room D	Room E
9:00-10:20	OS: Future design for sustainability (1)	OS: Locally-oriented sustainable design (1)	Green electronics (1)	OS: Additive manufacturing as sustainable manuf	Sustainable energy system
	Tatsuyoshi Saijo Future Design <i>Continued</i>	Hideki Kobayashi Perspectives on Sustainable Product Design Methodology Focused on Local Communities Tomoyuki Tamura Proposal of a Design Method for Local Oriented Manufacturing in Developing Countries - 1st report: Problem description and knowledge representation	Eri Matsunaga Resource visualization technology for metal content of printed circuit boards Kathleen Jerchel Enabling Condition Based Maintenance of 2.5D Systems by Developing Canaries for Through Silicon Vias	Shinsuke Kondoh The potential of additive manufacturing technology for realizing a sustainable society Shinichi Fukushima Design Support System for Product Renovation through Direct Digital Manufacturing	Jouni K. Juntunen Green servicing in renewable micro-generation - What about the impact on local energy autonomy? Ayu Washizu Input-output analysis of Japan's use of renewable energy
	Michinori Uwasu Future design - How to create future generations in visioning?	Sittha Sukkasi Environment-community-human-oriented (ECHO) design: A context-appropriate design-thinking process for well-being of individuals, communities, and the local environment	Masatoshi Sakai Environment Friendly Printed Electronics by Thermal Lamination	Toshitake Tateno Bio-Degradable Mechatronic Products by Additive Manufacturing	Satoko Nasu Estimation of Surplus Power From Energy-efficient Solar House
	Masashi Kuroda Participatory deliberation for future design by creating virtual future generations – Evidence from an experimental workshop in Yahaba Town, Iwate, Japan	Jahau Lewis Chen Integrating Innovative Principles at the Bottom of Pyramid and Integrating Integrating Innovative Principles at the Bottom of Pyramid and TRIZ Theory to Develop Sustainable Product Design Method	Stephan Benecke Mission Profile Oriented Design for Energy Harvesting Systems to Reduce Environmental Impacts of Autonomous Sensors	Pitchapa Lotrakul1 The Monitoring of Three-Dimensional Printer Filament Feeding Process using an Acoustic Emission Sensor	Jorge Morel Analysis of the Roles of an Organic Chemical Hydride-Based Hydrogen Storage System in the Power Quality of a Microgrid
10:40-12:00	OS: Future design for sustainability (2)	OS: Locally-oriented sustainable design (2)	Green electronics (2)	Remanufacturing (1)	Renewable energy system assessment
	Masaru Yarime Stimulating Innovation for Sustainability Transitions: The Role of Stakeholder Platforms for University-Industry-Government Collaboration on Smart Communities	Harald E. Otto Unrealized Knowledge Creation Potential within the ESCO Concept at SOEs in Asia	Jacquetta J Lee What is 'value' and how can we capture it from the product value chain?	Rolf Steinhilper Remanufacturing Technology Developments for New Automotive Products	Lance H. Huang Assessment of the Carbon Footprint and Energy Payback Time of a High-Concentration Photovoltaic System
	Benjamin C McLellan Participatory design as a tool for effective sustainable energy transitions	Allen H. Hu Developing an Innovation Business Model for Bottom of the Pyramid Markets	Nozomu Mishima Evaluation of Resource Efficiency of Electrical and Electronic Equipment	Jelena Kurilova-Palisaitiene Lean Remanufacturing: addressing system challenges	Yusuke Jinno A proposal of the integrated performance indicator of residential fuel cell power system in consideration of eco-burden and resource depletion
	Yutaka Nomaguchi Study on "System of Systems" Design Method with Uncertainty Assessment based on Robust Optimality - Case Study of Distributed Energy System Design in Mishima Area, Osaka	Tsai Chi Kuo The study of sustainable product design on BOP consumer	Winco KC Yung Development of a Methodological Framework for Assessing the Social Impacts of Electronic Products	Kenta Matsui A Negotiation Model for Closed-Loop Supply Chains with Consideration for Economically Collecting Reusable Products	Yu Suiran The Environmental Impact Analysis Of Manufacturing Different Tubular Solid Oxide Fuel Cell Modules
	Tomohiro Tasaki Design and Formulation of a Local Circular Society: Cases of Biomass Recycling and its Strategic Aspects	James Turing Pico-Solar Lantern Repair & Recycling In East Africa	Hidetaka Hayashi Robust Micro Identification Marking on FPC Surface	Mitsutaka Matsumoto Examination of demand forecasting for remanufacturing without information of new product sales time distribution	Kenji Koido Well-to-wheel analysis on biomethane from food wastes in Nakhon Nayok province, Thailand

14:10-15:30

OS: Future design for sustainability (3)		OS: Locally-oriented sustainable design (3)		Green electronics (3)		Remanufacturing (2)		Geographical sustainability assessment	
Yusuke Kishita	Designing Sustainable Futures Using a Backcasting Approach	Hideki Endo	A comparative analysis of consumers' perception towards remanufactured auto parts in the US and in Japan, and the implications	Hyejeong Go	Ecodesign process of Samsung Electronics in the development of electronic equipment	Carsten Bucker	Combined Remanufacturing and Upgrading of a Diesel Engine into a LPG Gas Engine for River Barges	Sergiy Smetana	Regionalized Input-Output Life Cycle Sustainability Assessment: Food Production Case Study
Michinori Kimura	Examination of the Roundtable technique for Sustainable Society regional vision realize - A Case Study of Shiga Prefecture Takashima of "Takashima future-Roundtable"	Robert Wimmer	Analysis of User Needs for Solar Cooker Acceptance	Lauri Smalen	Environmental footprint of telecommunication products	Sharon Prendeville	Design for Remanufacturing and Circular Business Models	Giancarlo Raschio	Spatiotemporal tools for regional low-carbon development: linking LCA and GIS to assess clusters of GHG emissions from cocoa farming in Peru
Keishiro Hara	Will people's perceptions and judgements change in view of future generations? – Evidence from a questionnaire survey	Li-Hsing Shih	Persuasive Design Aid for Products Leading to LOHAS Considering User Type	Yongje Lee	A review on the result of eco-efficiency study	Yasutaka Kainuma	A study on hybrid manufacturing/remanufacturing system	Wu-Hsun Chung	Improvement of Carbon Emissions in a Green Port via AIS and GIS
Ritsuji Yoshioka	An Examination of Effective Forms of Two-Way Communication for Building a Consensus on Waterworks Policies			Rakesh Vazirani	Gathering a Product's Footprint for Materials Traceability, Safety, and Collaborative Sustainability	Nozomu Mishima	Analysis of Disassembly Characteristics and PSS Proposal by Component Reuse of Mobile Phones	Tatiana Perminova	Merging Risk Assessment and Human Toxicity in Petrochemical Manufacturing

Oral sessions: Third day (Dec. 4)

	Room A	Room B	Room C	Room D	Room E
9:00-10:20	<p>Sustainable consumption</p> <p>Christian N Madu Sustainable Consumption and Poverty Alleviation: A Case of Nigeria</p> <p>Sofie Oestergaard Food waste reduction, an overview of the field</p> <p>Hoang Thanh Tung Sustainable Development of the Food Supply Chains from Consumer's Perspective: A Case Study of Plum Supply Chain in the Northwest Upland Vietnam</p>	<p>PSS design</p> <p>Mattias Lindahl Actors and System Maps - A Methodology for Developing Product/Service Systems</p> <p>Fumika Murakami Qualitative Simulation for Early-Stage Service Design</p> <p>Johannes Matschewsky PSS without PSS Design - Possible Causes, Effects and Solutions</p> <p>Yutaka Dairokuno A method of selecting customer-oriented service and delivery modes in designing environmentally benign product service systems</p>	<p>Sustainable manufacturing</p> <p>Stephan Benecke Sustainability assessment for wireless micro systems in smart manufacturing environments</p> <p>Jurgis K. Staniskis Systems Approach to Resource Efficient and Cleaner Production Solutions: Method & Implementation</p> <p>Shih-Chen Shi Lubricating and degradability behavior of environmental friendly thin film HPMC</p> <p>Supachai Vongbunyong Selective volume fusing method for cellular structure integration</p>	<p>Ecodesign of handicrafts</p> <p>Singh Intrachooto Eco-design and Life Cycle Assessment of Japanese Tableware from Palm-Melamine Bio-Composites</p> <p>Chen-Fu Chen Consumer's Lifestyle and Its Impact on Eco-Product Aesthetics</p> <p>Muhamad Ezran Zainal Abdullah Playground and Toys as a Medium in Promoting Green Lifestyle</p>	<p>OS: Designing sustainable energy futures (3)</p> <p>Olang Tabitha Sustainable Renewable Energy Financing: Case Study of Kenya</p> <p>Hiroimi Ohkubo Energy Saving Potential of Next Generation BEMS</p> <p>Nobuyuki Kitamura A fully renewable DC Microgrid with autonomous power distribution algorithm</p> <p>Yusuke Kishita Describing Electricity Demand Scenarios Focusing on the Diffusion of Low-carbon Technologies in 2030</p>
10:40-12:00	<p>Prospects of ecodesign research (1)</p> <p>Kohmei Halada Rapid Change of global material flow and the requirement for Eco-design</p> <p>Fredrik Paulson Challenges and trends within eco-design</p> <p>Nils Nissen Long-term Research Cycles for Green Electronics</p>	<p>Sustainable supply chain management</p> <p>Jongseok Kim The Effects of Eco-Design of LG Household & Health Care's Dishwashing Detergent on Carbon Emission Reduction</p> <p>Sandra Link Potentials and Constraints for Companies Improving the Resource Efficiency of their Products</p> <p>Jessica Hanafi Preliminary Research on the Perception and Implementation of Sustainable Supply Chain in Indonesian Companies</p> <p>Keagan Rubel Engaging the supply chain on eco-design topics to stimulate innovation - BT Better Future Supplier Forum</p>	<p>Green building</p> <p>Chisato Takahashi Sustainability Assessment of High-rise and High-Density Urban Structures</p> <p>Shang-Jen Chen The method of composition of plant raw brick</p> <p>Ali Vakili-Ardebili Durability: A Key to Sustainable Building Design (SBD)</p>	<p>Ecodesign simulation (1)</p> <p>AMM Sharif Ullah A Fuzzy Monte Carlo Simulation Technique for Sustainable Society Scenario (3S) Simulator</p> <p>Hitoshi Komoto Simulation-based uncertainty quantification in end-of-life operations for strategic development of urban mines</p> <p>Yoshitaka Tanimizu Integrated Production and Transportation Scheduling for Low-Carbon Supply Chains</p>	<p>OS: Designing sustainable energy futures (4)</p> <p>Ranaporn Tantiwechuttikul Perovskite Solar Cells: The Next Promising Technology?</p> <p>Benjamin C McLellan The minerals-energy nexus? past, present and future</p> <p>Koji Tokimatsu Perspectives on mineral-energy nexus by a global systems modeling</p> <p>Warathida Chaipapa Oil and Gas industry's role on the transition to a low-carbon future in Thailand</p>
13:00-14:20	<p>Prospects of ecodesign research (2)</p> <p>Tomohiko Sakao Eco-Co-design - Ecodesign with Communication, Cooperation, and Co-creation: A preliminary report</p> <p>Rudi Meyer Improvisation: Negotiating needs and scarcity through design</p> <p>Casper Boks The future of design for sustainable behaviour, revisited</p>		<p>Green telecommunication and electronics</p> <p>Atsushi Terazono Material recovery and environmental impact by informal e-waste recycling site in the Philippines</p> <p>Minako Hara Analysis modeling for electricity consumption in communication buildings</p> <p>Yusuke Kishita Describing Long-term Scenarios of Electricity Consumption in the Telecommunications Industry</p>	<p>Ecodesign simulation (2)</p> <p>Yasuhiro Sudo Usage of a Digital Eco-Factory for a Printed-Circuit Assembly Line</p> <p>Yannick De Bock User Adapting System Design for Improved Energy Efficiency During the Use Phase of Products: Case Study of an Occupancy-Driven, Self-Learning Thermostat</p> <p>Yuki Yamamori Seller-Buyer Matching for Promoting Product Reuse Using Distanced-Based User-Grouping</p> <p>Faiz Mohd Turan Criteria Assessment in Design Evaluation for Product Development using Integrated Fuzzy-TOPSIS</p>	<p>Sustainable transportation</p> <p>Hyung Chul Kim Climate Change Implications of Vehicle Lightweighting: A Fleet-Based Life Cycle Assessment</p> <p>Kana Matsuura A Study on Development and Utilization of Next-Generation Mobility Equipment ~Development and Performance evaluation of Air Engine Vehicles~</p> <p>Yue Zhu Study on the Diffusion of NGVs in Japan and Other Nations using the Bass Model</p> <p>Akinori Kaneta Environmental effect of car cruising speed in consideration of natural wind</p>

Poster session (Dec. 3: 13:00-14:00)

<u>Eco innovation policy</u>	
Jong Min Kim	Opportunities and Challenges for New Korean Integrated Pollution Prevention and Control Regulation with Product Service System
Rajeev Kumar Singh	Analysis of Relation between Environment Policy Instruments and Innovations: Case Study in Japan
Hiroshi Sao	Estimates of disaster waste and damage costs from great earthquakes along the Nankai Trough: The case of Kanagawa prefecture
Yu-Chen Huang	Key Success Factors of Green Innovation for Transforming Traditional Industries
Zhaoling Li	Quantitative analysis of China's industrial structure based on input-output table and social network analysis
Noriko Nozaki	Simulation Analysis of Waste Recycling Policy towards Designing a Sound Material-cycle Society: Case Study in Tokyo
Ailyn Edith Rojas Cabrera	Introducing Integrated Waste Management Systems in Developing Countries: Case Study in Santiago de Chile
Ali Vakili-Ardebili	Sustainable Land Development and Management
<u>Corporate strategy and consumers</u>	
Yoshihiko Sakamoto	How Japanese companies can contribute to water sustainability
Tsai-Feng Kao	Research on Corporate Social Responsibility Advertising Design
Dai Kimura	How do public interest and knowledge affect environmental conscious consumption?
Taichi Kobayashi	Development of safety system for accidents in waste management and recycling facilities
<u>Product ecodesign and education</u>	
Yoon-ha Kim	Decoupling of component from product for the new g-BOM design approach
Yuya Sakaguchi	Effects of physical life distribution of a reusable unit in environmentally-conscious products on reuse efficiency
Yuuki Matsumoto	Simultaneous evaluation of environmental impact and incurred cost on selection of end-of-life products recovery options
Lirong Zhou	A Model Based on Design Features to Evaluate Product Life Cycle
Li Lu	Study On The Influence Mechanism Of Planar Linkages On Energy Consumption Of Heavy-Duty Mechanical Servo Presses
Edilson S Ueda	Undergraduate Students Designing Environmental Concern Products - A Case Study in Design Education
Fanglin Chao	Sustainable and industrial useful consideration of pet companion robot for elderly
<u>Sustainability assessment and indices</u>	
Jongseok Kim	The Carbon Partnership Performance of LG Household & Health care
Yoosung Park	Case study for Water Footprint of the Shampoo in Korea
Tatsuo Hishinuma	Potential for Greenhouse Gases Mitigation at a Typical Roughage Production System in the Japanese Dairy System
Ghita Yoshanti Syahrul	Batik Life Cycle Assessment Analysis (LCA) for Improving Batik Small and Medium Enterprises (SMEs) Sustainable Production in Surakarta, Indonesia
Sheng-Lung Lin	A Life Cycle Assessment Study of Single-Use Cups as Packages of Tea Soft Drinks in Taiwan
Yasunari Matsuno	Estimation of electricity consumption and global warming potential in Internet in Japan
Jong-Seok Lee	Quantification of the Greenhouse gas (GHG) emission of a product service system (PSS) based on the uncertainty analysis – A case study of the lithium iron phosphate battery of a golf cart
Min-Hyeok Lee	Uncertainty Analysis of the Greenhouse Gas Emissions in the Feedstuff Production stage of the Beef Cattle Farming - case study
Tamas Ivancsy	Analysis of the Energy Consumption of Building Automation Systems
Akifumi Nakao	Design and evaluation of low carbon strategy for restructuring sewage sludge and municipal waste treatment facilities under population decline: A case study of Wakayama City, Japan
Kazue I. Takahashi	Environmental Effects on Biodiversity of Solar Power Facilities
Lei Zhang	Research on Evaluation Index System and Comprehensive Evaluation of Typical Eco-industrial Parks
<u>New energy system and technology</u>	
Takuya Adachi	Study of the Light Receiving Characteristics of a Plant Shoot Model by Simulating the Evolutionary Process of a Tree
Katsuaki Sato	Design of an Optimal Energy System for an Isolated Island (Eco-Island) in a Cold Region in Japan
Yuta Utsugi	Study of the Optimal Distribution of Wind and Solar Farms in Hokkaido Island using Genetic Algorithm
Florencia Ines Venier	Analysis of the Energy Sector in Argentina: Exploring the Potential of Biogas Production
Masamitsu Takabatake	Development of a Small Temperature Difference Generator Based on the Energy Storage Characteristics of a CO ₂ Hydrate
Daisuke Mikawa	Modeling and Load Response Characteristics of a Gas-hydrate Power Generation System
Kyosuke Ishikawa	Investigation of the Basic Characteristics of a CO ₂ Hydrate Using Plate Type Heat Exchangers