EcoDesign 2023

13th International Symposium on **Environmentally Conscious Design and Inverse Manufacturing**

- EcoDesign with Art, Science and Technology -



Nara Prefectural Convention Center, Nara, Japan

November 29 - December 1, 2023

We are pleased to announce that the 13th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2023) will be held in Nara, Japan, on November 29th to December 1st in 2023. Since the first EcoDesign symposium in 1999, this symposium has led the research and practices of environmentally conscious design of products, services, manufacturing systems, supply chain, business, and society. Amidst ongoing advancement of and social needs, circumstances technologies EcoDesign are changing. The latest issues on EcoDesign will be discussed. Professionals and scholars from industry, academia, and government are encouraged to attend. Presentations and events will be conducted in face-to-face format, with online provision for auditing only.





Call for

EcoDesign 2023 calls for two types papers: proceedings papers and e-book papers. Presenters can select the type of paper they submit. All presenters are required to submit a paper.

Proceedings papers: 2 to 8 pages; Not peer-reviewed (abstract review only); Copyright transfer is not required; Distributed online, which is delivered only to participants.

E-book papers: 6 to 8 pages; Peer-reviewed (if a paper is not accepted, it is treated as a proceedings paper); Copyright transfer is required; Double posting prohibited; Distributed online; E-book proceedings will be published by Springer after the symposium.

Important Dates

For proceedings papers

April 10, 2023 April 25, 2023

Abstract deadline Notification of acceptance September 6, 2023 Deadline for submission of

final papers

For e-book papers

April 10, 2023 April 25, 2023 Abstract deadline Notification of acceptance

June 14, 2023 August 20, 2023 Full paper submission deadline Notification of acceptance

September 6, 2023

Deadline for submission of final papers

Symposium Organizer

Union of EcoDesigners (Association of EcoDesign Societies, Japan)

In Cooperation with

Electronics Goes Green, Care Electronics, Europe

Symposium Executive Committee

Chair: Prof. Kobayashi, Hideki (Osaka University, Japan) Program chair: Prof. Fukushige, Shinichi (Waseda University, Japan)

Contact

EcoDesign 2023 Secretariat Email: ecodesign2023 secretariat@ecodenet.com

TOPICS

Product Life Cycle Design and Management

► Environmentally Conscious Design of Products and Services

E. g., Life cycle design, Design for environment (DfE), Design for disassembly, Design for recycling, Design for remanufacturing, Design from waste, Zero waste design, Design for behavior, Product service system (PSS)

Life Cycle Management

E. g., Maintenance, Smart life cycle management, Life cycle simulation (LCS), Product lifetime, Reliability analysis, Machine/System health monitoring, Waste valorization

▶ Sustainable Manufacturing

E. g., Industrial symbiosis, Industrial ecology, Zero-carbon factory, Cleaner production, Lean manufacturing, Smart materials, Additive manufacturing

► EoL Management and Process Technologies

E. g., Recycling, Disassembly, Remanufacturing, Refurbishment, Repair, Reuse, Urban mining, Critical raw materials (CRMs), Material recovery

Green Supply Chain Management

E. g., Closed-loop supply chain management, Reverse logistics, Green Logistics

Sustainability Assessment for EcoDesign

► Life Cycle Evaluation

E. g., Life cycle assessment (LCA), Carbon footprint, Material footprint, Water footprint, Material flow analysis (MFA), Material flow cost accounting (MFCA), Economic impacts of environmental regulations, Input-output analysis, Environmental product declaration (EPD), Social life cycle assessment (S-LCA)

► Sustainability Indices

E. g., Resource efficiency, Energy efficiency, Material criticality, Total material requirement (TMR), Social indicators of emergent technologies, Social acceptance of technology, Social shaping of technology (SST)

Sustainable Technology

▶ Digital and AI Technologies for Sustainability

E. g., Digitalization in developing country, Cyber physical system (CPS), Telework, Internet of things (IoT), Digital twin, Digital transformation (DX), Automation technology, Business innovation, Big data analytics, AI for optimizing energy consumption, AI for sustainable waste management, Green transformation (GX)

▶ Sustainable Social Infrastructure

E. g., Carbon neutral (CN), Renewable energy, Energy security, Smart grid, Green transportation system, Autonomous car, Sustainable constructions, Water security, Food security, Smart city, Resilience, Mining industry

Social Perspectives in EcoDesign

Sustainable Consumption and Production

E. g., Sharing economy, Behavioral science, Environmental consumer behavior, Social acceptance, Green marketing, Sufficiency, Locally oriented manufacturing, Behavior change in pandemic

► Policy, Legislation and Social Activities

E. g., Circular economy (CE), Digital product passport (DPP), Extended producer responsibility (EPR), Eco-label, International standard, Education for sustainable development (ESD), Corporate social responsibility (CSR), Ethical legal and social aspects research, Environmental justice, Environmental literacy

Finance and Investment for Sustainability

E. g., Green procurement, Task force on climate-related financial disclosures (TCFD), Environmental social and governance (ESG)

In addition, organized sessions will be arranged on special themes.

ABSTRACT SUBMISSION

Submission of abstract should be made through the EcoDesign 2023 website http://www.ecodenet.com/ed2023/. The abstract should be no more than 500 words in length, explaining the subject, originality, and relevance to EcoDesign 2023. It is also required to select the paper type (i.e., proceedings paper or e-book paper).