

### INVITED SESSION SUMMARY

#### Title of Session:

Systematic Innovation Tools for Eco-Design: Products, Processes and Assessment Methods

#### Name, Title and Affiliation of Chair:

Davide Russo, PhD Mec. Eng, Associate Professor at University of Bergamo, Department of Management, Information and Production Engineering

#### Co-chair

Yuri Borgianni, PhD Mech. Eng., Assistant Professor at the Free University of Bozen-Bolzano, Faculty of Science and Technology

# Details of Session (including aim and scope):

The Special Session Eco Design through Systematic Innovation offers the opportunity to discuss the interplay between eco design and systematic innovation as for, among the others, developed products, generated solutions and concepts, followed approaches, assessment criteria. Systematic innovation is the process of methodically analyzing and solving problems aiming at identifying the right problems to be solved and, then, generating innovative solution concepts avoiding empirical trial-and-error approaches. The Special Session is interested in attracting contributions that use a variety of structured design methods that aim to enhance the systematic level of employed design procedures.

More in particular this session welcomes research contributions dealing with:

- TRIZ and other inventive problem solving methods in Eco-Design
- How to generate new ideas by Nature-inspired Systematic Innovation, via a Biomimetic Approach
- How to exploit patent literature or other scientific Knowledge bases for supporting Eco-design tasks
- How to evaluate market potential and environmental impact in the very early stages of product development
- Value perception of and emotional reactions to products and services aimed at sustainability
- Eco-design methods that fuel and/or require creativity and inventiveness

The session is open to every theoretical and applicative contribution to eco-design, involving Systematic methods, CAI tools, Information retrieval strategies and theories conceived or experimented to support eco design in industry.

This session welcomes research contributions to this topic that have integrated systematic approaches for eco-designed product and process development.

# Main Contributing Researchers / Research Centres (tentative, if known at this stage):

LCA Italian network, University of Bergamo, Free University of Bozen-Bolzano, University of Pisa, Ensam Paris, Etria Triz community, Green innovate European program partners

### Website URL of Call for Papers (if any):

# **Email & Contact Details:**

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