

Presents:

## Sustainable Design and Manufacturing 2017

SDM-17

26-27-28 April 2017

University of Bologna

Bologna, Italy

[sdm-17.kesinternational.org](http://sdm-17.kesinternational.org)



### WELCOME

We are pleased to invite participation in **SDM 2017** organised by the **University of Bologna** and **KES International** with the patronage of **AITeM** (*Associazione Italiana di Tecnologia Meccanica*) and **AIAS** (*Associazione Italiana per l'Analisi delle Sollecitazioni*). The conference will take place in Italy at the University of Bologna, which was founded in 1088 and which is considered the oldest University in the Western world. Bologna is an amazing medieval and Renaissance city where several monuments and architectural examples, such as medieval towers, antique buildings and churches as well as works of art are still well preserved. It is a lively cultural and artistic centre and a major transportation crossroad from which Florence, Venice, Milan and other Italian art cities are quickly reachable. All these features make it a popular destination for scholars and tourists. Furthermore, it is located in an important manufacturing district, where famous companies such as Ferrari, Lamborghini and Ducati have their headquarters and production plants.

The conference will consist of keynote talks, oral presentations, invited sessions and workshops. It covers the theory and applications of sustainable design and manufacturing, and related areas, whilst providing an excellent platform for the presentation and discussion of new data and concepts, leading to knowledge exchange and the generation of new ideas.

### SCOPE OF THE CONFERENCE

#### TRACK 1: SUSTAINABLE DESIGN, INNOVATION AND SERVICES

Ecodesign and eco-innovation; closed-loop design; design for environment; design for social sustainability; sustainable innovation; DfX (for lifecycle) – manufacturing, assembly, testing, use, recycling, etc; sustainable product and service modelling; design thinking for sustainability; design innovation for sustainable city, transportation, water and food security.

#### TRACK 2: SUSTAINABLE MANUFACTURING PROCESSES AND TECHNOLOGY

Environmentally conscious manufacturing processes; energy and resource efficiency and effectiveness in advanced manufacturing processes (e.g., RP/additive/layered manufacturing, micro and nanomachining, laser-based manufacturing); sustainable manufacturing processes; re-manufacturing processes and techniques; technology for waste recovery.

#### TRACK 3: SUSTAINABLE MANUFACTURING SYSTEMS AND ENTERPRISES

Product life cycle management; end-of-life strategies; energy management and efficiency improvement for production systems; predictive maintenance and service for sustainable manufacturing; sustainable supply chains and green logistics; sustainable business models; green factory; societal impact of manufacturing systems; policy aspects of sustainable manufacturing.

#### TRACK 4: DECISION SUPPORT FOR SUSTAINABILITY

Life cycle assessment and costing; intelligent decision support methods and tools for sustainable manufacturing; value mapping and assessment for sustainable manufacturing and society; diagnosis and prognostics; virtual and collaborative environment for sustainability; user behaviour models for sustainability; system thinking for sustainability.

### CALL FOR CONTRIBUTION

#### CALL FOR PAPERS

Contributions are invited from prospective authors with interests in the indicated conference topics and related areas of application. All contributions should be high quality, original and not published elsewhere or submitted for publication during the review period. Please see the website for details of the required paper format. Full papers will be thoroughly reviewed by the International Program Committee. Two Best Paper awards will be presented. The conference proceedings will be published by Springer and submitted for indexing in Scopus and Thomson-Reuters Conference Proceedings Citation Index (CPCI) and the Web of Science.

#### CALL FOR INVITED SESSIONS AND WORKSHOPS

We invite researchers on hot topics and fresh ideas in the field to organise invited sessions, or parallel workshops of a half or full day. By gathering a minimum of five papers, the organizer of the invited session will be rewarded for one free registration for the next SDM conference. Please contact the Conference Chairs for more details. We also welcome suggestions for other activities that will appeal to our delegates.

#### CALL FOR SPECIAL JOURNAL ISSUES

The best papers selected will be routed for journal special issues. Experienced researchers in the field are also invited to guest edit special issues covering the various facets of *Sustainable Design and Manufacturing*. Please contact the Conference Chairs for more details if you wish to contribute and lead a special issue.

### GENERAL DEADLINES:

Submission of full papers: **14<sup>th</sup> Dec. 2016**  
Notification of acceptance: **29<sup>th</sup> Dec. 2016**

Proposal acceptance for Invited Session: **30<sup>th</sup> Sept 2016**  
Final papers due and author registration by: **27<sup>th</sup> Jan 2017**

**All presenting authors must register and pay the conference fee by the early registration date 27<sup>th</sup> January 2017 for their papers to appear in the proceedings and conference programme.**

### ORGANISATION

#### SDM-17 Honorary Chair:

**Rossi Setchi**, Cardiff University, UK

**Guenther Seliger**, Technische Universität Berlin, Germany

#### SDM-17 General Chair:

**Giampaolo Campana**, University of Bologna

#### SDM-17 Executive Chair:

**Robert J. Howlett**, Bournemouth University

#### SDM-17 Local Scientific Committee:

**Flaviano Celaschi, Dario Croccolo, Stefano de Miranda, Emilio Ferrari, Alfredo Liverani, Luca Tomesani**, University of Bologna

#### SDM-17 Promotion and Publicity Chair:

**Barbara Cimatti**, University of Bologna

#### SDM-17 General Track Chairs:

Track 1: **Jeremy Boivoisin and Pinar Bilge**, Technische Universität Berlin, Germany

Track 2: **Peter Ball**, University of York, UK

Track 3: **Daniel Eyers**, Cardiff University, UK

Track 4: **Elliot Woolley**, Loughborough University, UK  
and **Dzung Viet Dao**, Griffith University, Australia