

Smart Innovation, Systems and Technologies

Volume 130

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Dzung Dao · Robert J. Howlett
Rossi Setchi · Ljubo Vlacic
Editors

Sustainable Design and Manufacturing 2018

Proceedings of the 5th International
Conference on Sustainable Design
and Manufacturing (KES-SDM-18)

 Springer

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Preface

This volume forms the proceedings of the Fifth KES International Conference on Sustainable Design and Manufacturing (SDM-18), organized by KES International in collaboration with Griffith University, Gold Coast, Australia, and held on 24–26 June 2018 at the Mantra on View Hotel at Surfers Paradise.

This conference provided excellent opportunities for the presentation of interesting new research results and discussion about the theory and applications in the field of sustainable design and manufacturing, leading to knowledge exchange and generation of new ideas. This field includes both sustainable design and advanced manufacturing of sustainable products. The application areas included all the activities during the product life cycle and other activities such as modelling and simulation, decision support, production planning and control, logistics and supply chain management.

The conference featured five general tracks chaired by experts in the field, including micro/nanomachining and MEMS, sustainable design innovation and services, sustainable manufacturing processes and technology, sustainable manufacturing systems and enterprises, and decision support for sustainability.

The conference provided delegates with the opportunity to benefit from high-quality talks from leading-edge presenters: Dr. Martin Anda, Academic Chair of Environmental Engineering, Murdoch University, Australia; Prof. Hiroki Kuwano, New Industry Creation Hatchery Center (NICHe), Tohoku University, Japan; Prof. Rossi Setchi, Director, Mechanics, Materials and Advanced Manufacturing Research Theme, Cardiff University, UK; and Prof. Sara Wilkinson, University of Technology Sydney, Australia.

SDM-18 attracted high-quality papers from around the world. Submissions for the Full Paper Track were subjected to a two-stage blind peer review process. With the objective of producing a high-quality conference, only the best of these were selected for presentation at the conference and publication in the Springer proceedings. Submissions for the Short Paper Track were subjected to a ‘lighter-touch’ review and published in an online medium but not the Springer proceedings.

Thanks are due to the very many people who have given their time and goodwill freely to make SDM-18 a success. We would like to thank the members of the International Programme Committee who were essential in providing their reviews of the conference papers, ensuring appropriate quality. We thank the high-profile keynote speakers for providing interesting talks to inform delegates and provoke discussion. Important contributions to the conference were made by the authors, presenters and delegates without whom the conference could not have taken place, so we offer them our thanks. Finally, we would like to extend our thanks to the City of Gold Coast for welcoming our delegates.

It is hoped that you find the conference an interesting, informative and useful experience.

Robert J. Howlett
Dzung Dao

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