NTNU NORWEGIAN UNIVERSITY OF TECHNOLOGY

## **PROCEEDINGS OF**

# NordDesign 2016

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Trondheim, Norway

### PART 1

Edited by:

**CASPER BOKS** 

JOHANNES SIGURJONSSON

**MARTIN STEINERT** 

**CARLIJN VIS** 

ANDREAS WULVIK



Faculty of Engineering Science and Technology

Department of Engineering Design and Materials

Department of Product Design

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### Preface

The 12<sup>th</sup> biennial Norddesign2016 Conference "Highlighting the Nordic approach" took place at the Norwegian University of Science and Technology (NTNU) in Trondheim, during August 10-12, 2016. Following previous editions in Helsinki (1996), Stockholm (1998), Copenhagen (2000), Trondheim (2002), Tampere (2004), Reykjavik (2006), Tallinn (2008), Gothenburg (2010), Aalborg (2012) and Helsinki (2014), it was the second time that the conference came to Trondheim.

The Norddesign conference series aims to serve as a Nordic complement to the large European and American Design Society conferences within the fields of Engineering and Product Design, but also welcomes participants from other countries. A Nordic Scientific Advisory committee, consisting of representatives from the main universities of technology in the Nordic region, guards over the quality and the continuity of the conference series.

The Norddesign2016 conference was hosted and co-organized by the Departments of Product Development & Materials, and the Department of Product Design, under the auspices of the Design Society.

#### Conference program

This year's conference theme called for evidence-based academic work on topical issues on design, development, and innovation that strengthens both our theoretical understanding, and the connection between theory and practice. The committee was fortunate enough to receive 155 abstracts. After reviewing abstracts, full paper submissions and subsequent revisions, 86 contributions were deemed worthy of publication in the proceedings, representing 18 different countries.

The organising committee has made an effort to categorise the papers in sessions with titles which reflect the content of the papers as good as possible.

This has resulted in a program with a broad variety of topics, with three parallel streams.

- The first stream has a focus on user perspectives, and may be most interesting for participants with an interest in product/service/interaction design. This stream features topics such as design and emotion, design for sustainability, service design, human interaction prototyping, and healthcare design.
- The second stream is more engineering design focused, and may be most interesting for participants with a background in mechanical or systems engineering. In addition to range of papers on general and special applications of product development and manufacturing methodologies, this stream also features a session on additive manufacturing.
- The third stream has perhaps a more innovation and (stakeholder) management flavour to it, with sessions on collaboration and creativity, value chain innovation, and new

product development strategies. This stream also features two sessions on educational perspectives, and one on design thinking.

#### Acknowledgements

The organising committee would like to thank all colleagues and students that have contributed to making Norddesign2016 possible. We are also thankful to the 50 reviewers who have contributed with scientific reviews.

#### **Conference Executive and Scientific Committee**

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