

Photo Credit: Native youth participants of the Overly Creative Minds arts studio at the Urban Native Youth Association, under the guidance of artist and OCM Coordinator Marie Wustner

CALL FOR PAPERS



IMPORTANT DATES

Aug. 1, 2016: paper submission open
Dec. 19, 2016: full paper deadline
Mar. 15, 2017: notification of paper acceptance
Apr. 24, 2017: camera-ready paper deadline
May 10, 2017: author registration deadline
Aug. 21, 2017: start of conference

CONTACT

For all inquiries, please contact:
info@iced-conference.org

To submit your paper, see <http://iced17.org>



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

VENUE

ICED17 will be held on the beautiful campus of the University of British Columbia in Vancouver, Canada in the New Student Union Building, the "Nest". Surrounded by gardens, ocean and forests, UBC is situated at the western tip of Point Grey Peninsula away from the traffic and noise of the city, yet only 30 minutes from downtown Vancouver and 50 minutes from the Vancouver International Airport by a superb public transit system. The 763-hectares campus boasts spectacular views of the Pacific Ocean over the Burrard Inlet, the north shore mountains and the downtown core of Vancouver. Pacific Spirit Regional Park, the largest "green belt" of lush forested parkland in Vancouver, separates UBC from vibrant downtown metropolitan Vancouver.



21st International Conference
on Engineering Design (ICED17)
Vancouver, Canada
21-25 August 2017

University of British Columbia, Vancouver, BC Canada

CONFERENCE THEME FOR SPECIAL SESSIONS AND KEYNOTES

"Resource-Sensitive Design". This general theme encompasses three main areas. The first is *"Design to advance resource-limited societies"*, or how to design products that succeed given limited infrastructure, uncertain supply chains and cultural factors that impact product introduction. Second, *Design to protect critical resources*: especially in British Columbia, how do limits on critical natural resources such as oil, gas, water, and forestry define how products are designed and fabricated? And third, *Design to embrace resource limitations*, or, how can all of us learn to design with a minimalistic approach: elegant, functional design through simplicity.

EXPECTED PARTICIPANTS

The ICED conference series invites and encourages contributions from both academia and industry. For ICED17, we seek designers from a broad range of experience and ideas, especially with the following profiles:

- Researchers in the field of engineering design and design science
- Researchers and practitioners working on multidisciplinary aspects of design
- Design, product development, engineering and technical professionals and managers
- R&D executives working in engineering design and product development
- Educators of high school, undergraduate and graduate design curricula
- Representatives from national and regional development agencies, governmental bodies and research, industry and innovation policy organisations.

WELCOME!

We are pleased to invite you to prepare and submit papers to the 21st International Conference on Engineering Design, ICED17.

The conference will be held on the campus of the University of British Columbia from Aug. 21-25, 2017.

In keeping with the critical nature of natural and human resources to Canada, and especially to the province of BC, the overarching theme of ICED17 is "Resource-Sensitive Design".

We will have special events and activities to showcase this theme as it is interwoven throughout the workshops and sessions that will span the traditional ICED topics.

All of us on the Organising and Programming Committees welcome you warmly to ICED17 in Vancouver!



Mike Van der Loos, Conference Chair

ACTIVITIES AND EVENTS

- Plenary, podium and discussion sessions
- Keynotes from academia and industry
- Workshop sessions
- Industry exhibits
- Design Society meeting
- Young Members event
- PhD forum
- Technical tours in evenings or on the last day of the conference to local companies, partner universities and other venues
- Social events such as conference dinners, and also additional excursions that participants will book separately

ICED – Innovation in Engineering Design

ICED conferences are premiere forums where the design community comes together to share insights, discover new ideas, and form friendships. ICED provides the most prominent biannual meeting in design for researchers, designers, engineers and practitioners to stay abreast of new developments in the field.

From its engineering roots, ICED has evolved over the past 35 years to cover a wide area of design-related topics. Today it is a flagship event of The Design Society, providing a platform for engineering design research and practice in all forms. We believe that this provides the most fruitful environment to discover and disseminate ideas with impact.

ICED conferences implement rigorous quality assurance processes for all conference contributions, and work hard to provide participants with one of the best conference experiences. ICED proceedings are indexed by the leading indexing bodies, and papers are available for download on the Design Society website.

Join us at ICED17, present and discuss your work and views, and engage with fellow engineering design experts from all around the world. Join the global, multidisciplinary, inclusive and joyful community that comes together at ICED conferences.

We appreciate your continued support to design and look forward to meeting you in Vancouver.



Anja Maier
Programme Committee
Chair



Dorian Marjanović
President of the
Design Society

ORGANISERS

Program Committee

- Anja Maier, Programme Committee Chair
- Harrison Kim, Programme Chair
- Michael Kokkolaras, Programme Chair
- Josef Oehmen, Programme Chair
- Stanko Škec, Assistant Programme Chair
- Georges Fadel
- Stephan Husung
- Filippo Salustri
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- Mike Van der Loos, Conference Chair
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- Tamara Etmanski
- Georges Fadel
- Florin Gheorghe
- Chris McKesson
- Oscar Nespoli
- Peter Ostafichuk
- Sonia Serrambana

CONFERENCE TOPICS

Design processes

- Design models, strategies and design management
- Design process modelling and management
- Innovation engineering
- Trans-disciplinary processes
- Industrial design

Design organisation and management

- Organisational understanding
- Workspaces for design
- Market, business and performance impact of design
- Management of innovation and complexity
- Assessment and management of risk and uncertainty
- Social responsibility and ethics of designing
- Designing for new technologies

Design research applications and case studies

- Design practice and industrial case studies
- Transfer and application of design research to industry
- Applications to complex engineered systems

Product, service and systems design

- Product and system modelling
- Structural complexity
- Architectures, platforms, modularisation, family design
- Product-service systems (PSS) design
- Design and optimisation of organisational processes
- Systems engineering and design
- Designing large-scale socio-technical systems

Design methods and tools

- Design tactics and methods
- Requirements elicitation and management
- User orientation and user integration
- Evaluation and decision making
- Modelling and simulation methods
- Virtual product development
- Usage and integration of supportive technologies
- Bio-inspired design

Design for X, design to X

- Design for lifecycle (DFX) – manufacturing, assembly, testing, use, recycling
- Design to properties (DtX) – cost, time, quality, flexibility
- Ecodesign and Design for Sustainability

Design information and knowledge

- Knowledge-intensive design
- Global and local Information / knowledge management
- Representation of design information and knowledge

Design theory and research methodology

- Design theories and approaches
- Research methodologies and methods
- Experiments in design
- Evaluation of theories

Human behaviour in design

- Designers' thinking, motivations, skills
- Design cognition
- Creativity and innovative thinking
- Teamwork in design, locally and globally
- Collaborative and participatory design
- Communication in design
- Design for emotion and experience

Design education and teaching

- Teaching examples and experiments
- Education experiences and programmes (academic and industry)
- Plans and visions in education



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