MaD For the Future 2017

Wednesday 10 May 2017
8:00 AM - 9:00AM  Registration Opens (Level 3 Kawau 1)
9:00 AM - 9:20AM  Conference Opening (Rangitoto 2)
9:20 AM - 10:00 AM  Session Co-Chairs: Mike Fry (TiDA Ltd) | Johan Potgieter (Massey University)
10:00 AM - 10:30 AM  Keynote Speaker: Crispin Hales - Hales & Gooch Ltd.
10:30 AM - 12:30 PM  BREAKOUT SESSION 1  Session Co-Chairs: Xun Xu (The University of Auckland) | Kevin Marett (LEAP Australia)
12:30 PM - 1:20 PM  Lunch Break (Kawau 2)
1:20 PM - 2:00 PM  Poster and Exhibition Viewing  Session Chair: Simon Bickerton (Chair, MaD Network, The University of Auckland)
2:00 PM - 3:00 PM  BREAK OUT SESSION 1  Session Co-Chairs: Shayne Gooch | Mike Duke
3:00 PM - 4:00 PM  Breakout Session 2  Session Co-Chairs: Khalid Arif (Massey University) | Shayne Gooch (University of Canterbury)
4:00 PM - 5:00 PM  Conference Dinner (Rakino Room)
10:30 AM - 12:30 PM  PARALLEL TECHNICAL SESSIONS  DESIGN AND INNOVATION  DESIGN AND INNOVATION (PRODUCT ASSOCIATED CONTEXT)  PRODUCT AND PROCESS INNOVATION  Session Co-Chairs: Andrew Drain | Michael Kingan
10:30 AM - 10:45 AM  STAIRCASING INDUSTRY ENGAGEMENT: A BOTTOM-UP PRACTICE BASED MODEL FOR INTEGRATING DESIGN RESEARCH INTO INDUSTRY  - Simon Fraser, Victoria University of Wellington
10:45 AM - 11:00 AM  THE INVERSE ROUTE: FROM INDUSTRY FOCUS TO THE ACADEMIC WORLD. WHAT ARE THE BEST PROJECTS TO WORK ON?  - Lorenzo Garcia, Auckland University Of Technology
11:00 AM - 11:15 AM  HUMAN-CENTERED DESIGN: AN INSIGHT INTO SOUTH EAST ASIAN RURAL MARKETS  - Andrea Orazi, Massey University
11:15 AM - 11:30 AM  THE DEVELOPMENT OF A NEW DESIGN TOOL FOR ORGANIC RANKINE CYCLES  - Weiyi, The University Of Auckland
11:30 AM - 11:45 AM  HOW TO CREATE A SUCCESSFUL PRODUCT  - Oliver Mcdermott, Blender Design Ltd
11:45 AM - 12:00 PM  MODULAR LIGHTWEIGHT FURNITURE WITH INTEGRAL FASTENERS USING POST-TENSIONING  - Hans-Christian Wilhelm, Victoria University Of Wellington
12:00 PM - 12:15 PM  A CASE STUDY IN DESIGN-LED INNOVATION  - Rob Reddick, Gallagher Group Limited
12:15 PM - 12:30 PM  NEXT GENERATION SURFACE COATINGS BASED ON ZERO EMISSION AND NO WASTE MANUFACTURING APPROACH  - Marcel Schaefer, Auckland University of Technology
12:30 PM - 1:00 PM  HIGH TECH INNOVATION IN AN INDUSTRIAL CONTEXT  - Mike Duke, Waikato University
1:00 PM - 1:15 PM  EARTHQUAKE BENCH PROTOTYPE: A RECONCEIVED DIGITAL WORKFLOW  - Tanya Sweet, Victoria University of Wellington
1:15 PM - 1:30 PM  HIGHLY STRETCHABLE 3D-PRINTED ELECTRICAL COMPONENTS USING CARBON NANOCOMPOSITES  - Tim Giffney, The University Of Auckland
1:30 PM - 1:45 PM  ACOUSTICAL TESTING AND DESIGN FOR ACCEPTABLE NOISE  - Michael Kingen, The University Of Auckland
1:45 PM - 2:00 PM  SOUND CONCEPTS PLATFORM: VISUALISING SOUND CONCEPTS  - Natasha Perkins, Victoria University Of Wellington
2:00 PM - 2:15 PM  INDUSTRIAL SCALE ION BEAM TECHNOLOGIES FOR NEW ZEALAND MANUFACTURING  - John Kennedy, GNS Science
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### Thursday 11 May 2017

**Registration Opens (Level 3 Kawau)**

**Introduction of Day (Rangitoto 1)**

*Simon Buckerton (Chair, MaD Network, The University of Auckland)*

**Plenary Speaker:** Eberhard Ratz - Festo  
*INDUSTRE 4.0 IN ACTION*  
**Sponsored by Festo**  
**Session Chair:** Jun Xu (Chair, MaD Conference Committee, The University of Auckland)  
**Room:** Rangitoto 1

**Morning Tea Break (Kawau 1)**

**Room:** Rangitoto 1

**Lead Pannellist:** Catherine Beard (ManufacturingNZ & ExportNZ)  
**Jesse Keith (Callaghan Innovation)**

**Panellists to include:**  
*Steve Wilson (Talbot Technologies)*  
*Kim Campbell (EMA)*

**Room:** Rangitoto 3

**Design Innovations and Innovation for Design**

**ADDITIVE MANUFACTURING**

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**Thursday 11 May 2017**

**10:30 AM - 12:30 PM**

**PARALLEL TECHNICAL SESSIONS**

**Room:** Rangitoto 1

**FUTURE OF MANUFACTURING TECHNOLOGY**

**Session Co-Chairs:** Kenneth Hunter | Dom Chiland  
**Session Chair:** Xun Xu (Chair, MaD Conference Committee, The University of Auckland)  
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**SPEcialised MANUFACTURING PROCESSES**

**Session Co-Chair:** Steven Dirven | Chris Bumby  
**Room:** Rangitoto 3

**10:30 AM - 12:30 PM**

**INTEROPERABLE EXECUTION ON HETEROGENEOUS PLATFORMS IN MODERN INDUSTRIAL ENVIRONMENTS**  
**GIVING MACHINES EYES: HOW COGNITIVE COMPUTING CAN DETECT DEFECTS IN REAL TIME**

**EXPLOITING DIGITAL TECHNOLOGIES TO INNOVATE IN MANUFACTURING**

**INTERNET OF THINGS (IOT) ENABLED SMART MANUFACTURING FOR SMEs**

**MANUFACTURING IN A WORLD OF DISRUPTIVE TECHNOLOGIES**

**THE KEY ROLE OF TRADITIONAL INDUSTRIES FOR CREATING HIGH-TECH GROWTH**

**INTEROPERABLE EXECUTION ON HETEROGENEOUS PLATFORMS IN MODERN INDUSTRIAL ENVIRONMENTS**

**12:30 - 1:20 PM**

**Lunch Break (Kawau 1)**

**Poster and Exhibition Viewing**

**2:00 PM - 2:30 PM**

**PLANEL DISCUSSIONS**

**Room:** Rangitoto 1

**Industry 4.0: A Step-change for New Zealand Manufacturing**

**Lead Pannellist:** Steven Adair (NZMAE)  
**Room:** Rangitoto 1

**MVal High Value-added Manufacturing and Design - Status Quo and into the Future**

**Lead Pannellist:** Catherine Beard (ManufacturingNZ & ExportNZ)  
**Room:** Rangitoto 2

**Design Innovations and Innovation for Design**

**Lead Pannellist:** Simon Fraser (Victoria University of Wellington)  
**Room:** Rangitoto 3

**3:00 PM - 4:00 PM**

**Afternoon Tea (Kawau 1)**

**Poster and Exhibition Viewing**  
**MaD Core Meeting (Rangitoto 1)**

**4:00 PM - 5:00 PM**

**Awards and Conference Closing (Rangitoto 1)**  
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**Post Closing**

**Networking Cocktails (Marvel Grill)**  
**Sponsored by the MaD Network**

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**Poster Presentations**

**High Value Manufacturing**
- Unmanned Aerial Systems - S. A. S. (New Zealand) Incorporated
- Smart Manufacturing Processes - M. J. & Associates
- Industry 4.0 and Additive Manufacturing - T. Mathews, The University Of Auckland
- Industry 4.0 and 3D Printing Technologies - A. J. & Associates
- Industry 4.0 and Advanced Manufacturing Technologies - J. E. & Associates
- Industry 4.0 and Design Innovation - K. L. & Associates
- Industry 4.0 and Quality Management - L. M. & Associates

**Technologies**
- Advanced Manufacturing Technologies - M. J. & Associates
- Manufacturing Technologies - J. E. & Associates
- Biomaterials and Additive Manufacturing Technologies - R. L. & Associates
- Smart Manufacturing and Advanced Design - S. A. S. (New Zealand) Incorporated

**Processing**
- Smart Manufacturing Processes - M. J. & Associates
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**Manufacturing**
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