



# 19th International Conference on Engineering and Product Design Education

HiOA in Oslo, Norway  
7–8 September 2017

## Conference Agenda

Session Overview		
<b>Date: Wednesday, 06/Sep/2017</b>		
<b>2:30pm</b> - <b>5:30pm</b>	<b>Workshop 1: Misconceptions in Product Communication</b> Location: Room 3 - IDUNN  <b>EXTENDING PRODUCT AFFORDANCES TO USER MANUALS</b> <b>Nenad Pavel, Emilene Zitkus</b> Oslo and Akershus University College of Applied Science, Norway	<b>Workshop 2: Cultural Sensitivity in Design Education</b> Location: Room 4 - EIR  <b>CULTURE SENSITIVE DESIGN EDUCATION – THE BEST OF ALL WORLDS</b> <b>Annemiek van Boeijen, Marieke Sonneveld, Chen Hao</b> Delft University of Technology, Netherlands, The
<b>6:00pm</b> - <b>8:00pm</b>	<b>Early Registration Evening - refreshment at KK senteret, entrance hall</b>	

Date: Thursday, 07/Sep/2017

8:15am - 9:00am	Registration				
9:00am - 9:15am	Introduction: Curt Rice: Rector.				
9:15am - 10:00am	Keynote Speaker 1: Light in the Public Realm by James Carpenter				
10:00am - 10:30am	Coffee Break				
10:30am - 12:10pm	<p><b>A: Design Education Practice - 1</b> Location: Room 1 - FRIGG Chair: Steen Ory Bendtzen</p> <p><b>UTILIZATION OF MOBILE EYE TRACKING DATA TO IMPROVE ENGINEERING DESIGN EDUCATION</b> Stephan Hess, Quentin Lohmeyer, Mirko Meboldt ETH Zurich, Switzerland</p> <p><b>Progress cards as a tool for supporting reflection, management and analysis of design studio processes</b> Tomasz Jaskiewicz, Aadjan van der Helm TU Delft, the Netherlands</p> <p><b>How design education can support collaboration in teams</b> Louise brigid Kiernan, Ann Ledwith, Raymond Lynch University Limerick, Ireland</p> <p><b>Gizmo – Arcadia, theatre, creatures and orchestra</b> Andrew Brand<sup>1</sup>, Peter R.N. Childs<sup>2</sup> 1: Imperial College, United Kingdom; 2: Imperial College, United Kingdom</p> <p><b>CRITICAL DESIGN – A NEW PARADIGM FOR TEACHING AND LEARNING UNIVERSAL DESIGN</b> Anne Britt Torkildsby NTNU; Norwegian University of Science and Technology, Norway</p>	<p><b>G: Collaboration and Industrial involvement in Design Education - 1</b> Location: Room 2 - FREYJA Chair: Ahmed Kovacevic</p> <p><b>Rescued by design: enabling low-resource communities to reduce global drowning</b> John Powell<sup>1</sup>, Gary Underwood<sup>2</sup> 1: Royal National Lifeboat Institution; 2: Bournemouth University</p> <p><b>DECISION MAKING IN PRODUCT DESIGN – BRIDGING THE GAP BETWEEN INCEPTION AND REALITY</b> Julian Lindley<sup>1</sup>, Richard Adams<sup>1</sup>, Les Wynn<sup>2</sup> 1: University of Hertfordshire, United Kingdom; 2: HCL Europe, United Kingdom</p> <p><b>Older Adult insights for age friendly environments, PRODUCTS and SERVICE SYSTEMS</b> Linda SHORE<sup>1</sup>, Adam de EYTO<sup>1,2</sup>, Louise KIERNAN<sup>1,2</sup>, Deirbhile Nic A BHAIRD<sup>2</sup>, Anne CONNOLLY<sup>3</sup>, PJ WHITE<sup>4</sup>, Tracy FAHEY<sup>5</sup>, Siobhan MOANE<sup>6</sup> 1: Design Factors, School of Design, University of Limerick, Ireland.; 2: Product Design &amp; Technology, School of Design, University of Limerick, Ireland.; 3: ISAX, Ireland Smart Ageing Exchange, Ireland.; 4: Design CORE, Institute of Technology Carlow, Ireland.; 5: Limerick School of Art &amp; Design, Limerick Institute of Technology, Ireland.; 6: Limerick Institute of Technology, Ireland</p> <p><b>CIRCULAR DESIGN – LEARNING FOR INNOVATIVE DESIGN FOR SUSTAINABILITY: ERAMUS + KNOWLEDGE ALLIANCE PROJECT FOR SUSTAINABLE DESIGN</b> Jordi Segalas<sup>1</sup>, Adam De Eyto<sup>2</sup>, Muireann McMahon<sup>2</sup>, Peter Joore<sup>3,6</sup>, Marcel Cruil<sup>3</sup>, Renee Wever<sup>4</sup>, Alex Jimenez<sup>5</sup> 1: Research Institute for Sustainability Science and Technology, Universitat Politècnica de Catalunya – Barcelona Tech, Barcelona, Spain; 2: Design Factors, University of Limerick, Limerick, Ireland; 3: Stichting NHL, Leeuwarden, Netherlands; 4: Linköping University, Linköping, Sweden; 5: NutCreative, Barcelona, Spain; 6: Technological University of Delft, Delft, Netherlands</p> <p><b>Transdisciplinary Course Work in Entrepreneurship:</b></p>	<p><b>T: Student Papers related to Design Education - 1</b> Location: Room 3 - IDUNN Chair: Deborah Andrews</p> <p><b>ICT versus craft in design education for the general public</b> Ingri Strand, Liv Merete Nielsen Oslo and Akershus University College of Applied Sciences, Norway</p> <p><b>INTEGRATING A MULTIDISCIPLINARY DESIGN METHODS MINDSET INTO CLASSROOM PRACTICE</b> Camilla Gwendolyn Stark, Bryan Howell Brigham Young University, United States of America</p> <p><b>THE VISUALLY IMPAIRED AND COOKING AS A LANDSCAPE OF PRACTICE</b> Malin Brekke Medin, Bente Skjelbred Oslo and Akershus university college of applied science, Norway</p> <p><b>DESIGN EDUCATION AND THE NEW CULTURE OF DESIGN CENTRIC INTELLECTUAL PROPERTY</b> Bryan Howell, Thomas Briscoe Brigham Young University, United States of America</p>	<p><b>Q: New Design Education Paradigms - 1</b> Location: Room 4 - EIR Chair: Jeff Barrie</p> <p><b>DEVELOPING EMPATHY FOR OLDER USERS IN DESIGN STUDENTS</b> Andree Woodcock, Deana McDonagh, Jane Osmond Coventry University, United Kingdom</p> <p><b>Interactional Co-Design and Co-Production through Shared Dialogue Workshops</b> Lyndon Buck<sup>1</sup>, Tracy Morse<sup>2</sup>, Kingsley Lungu<sup>3</sup>, Matthew Petney<sup>4</sup> 1: Buckinghamshire New University, United Kingdom; 2: University of Strathclyde; 3: University of Malawi - Polytechnic; 4: Rice University</p> <p><b>The Estate of Drawing—a Provisional Domain or a Domain of the Provisional?</b> Theodor Barth<sup>1</sup>, Carsten Loly<sup>2</sup>, Bjørn Blikstad<sup>1</sup>, Isak Wisløf<sup>1</sup> 1: Oslo National Academy of the Arts (KHiO); 2: The Oslo School of Architectures and Design (AHO)</p> <p><b>Educational effectiveness of robot contest for students in design education</b> Atsushi Mitani Sapporo City University, Japan</p> <p><b>Sell It: Design Project Assessment by the Public</b> David Morgan Brigham Young University, United States of America</p>	<p><b>K1: Design Education for the General Public - 1</b> Location: Room 5 - LOFN Chair: Eva Lutnaes</p> <p><b>DEVELOPING CO(DESIGN) PROCESS AND TOOLS TO INNOVATE EDUCATION THROUGH DIGITAL DO IT YOURSELF</b> Carmen Bruno, Maria Rita Canina Politecnico di Milano, Italy</p> <p><b>'HANDS ON': A DESIGN PROJECT FOR A SUSTAINABLE FUTURE</b> Jeanette Helleberg Dybvik, Lise.Kari Berg Oslo and Akershus University College of Applied Sciences, Norway</p> <p><b>EVALUATING INTERDISCIPLINARY COLLABORATION – TOWARDS A METHODOLOGY</b> Matthias Hillner, Stanley Lim LASALLE College of the Arts, Singapore</p> <p><b>Problem Framing in the Age of Data Analytics</b> Carolina Gill<sup>1</sup>, Hector Rendon<sup>2</sup>, Judith Rodriguez<sup>3</sup> 1: North Carolina State University, United States of America; 2: North Carolina State University, United States of America; 3: Universidad Jorge Tadeo Lozano, Bogota, Colombia</p> <p><b>CULTIVATING A UNIVERSAL DESIGN MINDSET IN YOUNG STUDENTS</b> Naoe Tataru, George Anthony Giannoumis Oslo and Akershus University College of Applied Sciences, Norway</p>

		<b>Challenges and Opportunities</b> <b>Jason O'Neill Germany<sup>1</sup>,</b> <b>Nathan Lillegard<sup>2</sup></b> 1: University of Washington, United States of America; 2: University of Oregon, United States of America			
10:30am - 4:00pm	Poster Presentations				
12:10pm - 1:10pm	Lunch break				
1:10pm - 2:10pm	<b>B: Design Education Practice - 2</b> Location: <b>Room 1 - FRIGG</b> Chair: <b>Colin Ledsome</b>  <b>Designing Interactive Objects through Cinematic Prototyping</b> <b>Gert Pasman, Marco Rozendaal</b> Delft University of Technology, Netherlands, The  <b>ENCOURAGING CREATIVE RISK TO REDUCE RISK TO LIFE</b> <b>Ashley Hall, Michael Geoffrey Kann, Laura Ferrarello, Robert Pulley</b> Royal College of Art, United Kingdom  <b>VALUES OF CRAFTING IN DESIGN EDUCATION</b> <b>Astrid Heimer, Kristin Andreassen, Sigrid Haugen</b> Oslo and Akershus University College of applied sciences, Norway	<b>H: Collaboration and Industrial involvement in Design Education - 2</b> Location: <b>Room 2 - FREYJA</b> Chair: <b>Bryan Howell</b>  <b>Engineering Design, Apprenticeships &amp; Diversity</b> <b>Tania Maxine Humphries-Smith<sup>1</sup>, Matthew White<sup>2</sup>, Clive Hunt<sup>1</sup></b> 1: Bournemouth University, United Kingdom; 2: Bournemouth & Poole College  <b>SOLVING GRAND CHALLENGES TOGETHER: A BRAZIL-NORWAY APPROACH TO TEACHING COLLABORATIVE DESIGN AND PROTOTYPING OF ASSISTIVE TECHNOLOGIES AND PRODUCTS FOR INDEPENDENT LIVING</b> <b>Frode Eika Sandnes<sup>1</sup>, Fasto Orsi Medola<sup>2</sup>, Arild Berg<sup>3</sup>, Osmar Vicente Rodrigues<sup>2</sup>, Peymann Mirtaheri<sup>4</sup>, Terje Gjøvaag<sup>5</sup></b> 1: IT, TKD, HiOA, Norway; 2: Dept Design, UNESP, Brazil; 3: PD, TKD: HiOA, Norway; 4: MEK, TKD, HiOA, Norway; 5: HF, HiOA, Norway  <b>NEW METHODS FOR THE DESIGN OF SMART PRODUCTS: PROJECT BASED LEARNING WITH INDUSTRY</b> <b>Jelle Saldien, Steven Verstockt, Tom Neutens, Francis Wyffels</b> Universiteit Gent, Belgium	<b>U: Student Papers related to Design Education - 2</b> Location: <b>Room 3 - IDUNN</b> Chair: <b>Julian Lindley</b>  <b>REVIEW OF CREATIVITY FACTORS IN FINAL YEAR DESIGN PROJECTS IN CHINA</b> <b>Yang Zhang, Erik Bohemia, John McCardle</b> Loughborough university, United Kingdom  <b>A SHIFT FROM TECHNICAL PROPERTIES TOWARDS SENSORIAL CHARACTERISTICS IN PRODUCT DESIGN EDUCATION</b> <b>Charlotte Asbjørn Sørensen<sup>1,2</sup>, Anders Warel<sup>1</sup>, Santosh Jagtap<sup>1</sup></b> 1: Industrial Design, Design sciences, Lund University, Sweden; 2: Product Design, K3, Malmö University, Sweden  <b>COMMON LANGUAGE FOR COMMUNITY BUILDING</b> <b>Anita Neuberg, Ingvild Digranes</b> Oslo and Akershus University College of Applied Sciences, Norway	<b>N: New Design Education Paradigms - 2</b> Location: <b>Room 4 - EIR</b> Chair: <b>Leslie, John Arthur</b>  <b>Articulating knowledge generation and a share net between research and education in Design</b> <b>Rita Assoreira Almendra, Gonçalo Moço Falcão</b> Faculty of Architecture, University of Lisbon, Portugal  <b>Building cross-border communities: trans-national innovation design students create trans-cultural innovations and a global network of practice</b> <b>John Simon Stevens, Hermione Townsend</b> Royal College of Art, United Kingdom  <b>Design Thinking Methods and techniques in Design Education</b> <b>Ana Paula Kloeckner<sup>1</sup>, Cláudia de Souza Libânio<sup>1,2</sup>, José Luis Duarte Ribeiro<sup>1</sup></b> 1: PPGEP/UFRRGS, Brazil; 2: UFCSPA, Brazil	<b>K2: Design Education for the General Public - 2</b> Location: <b>Room 5 - LOFN</b> Chair: <b>Liv Merete Nielsen</b>  <b>HOW LIGHTING DYNAMICS CREATE SOCIAL INTERACTIVE GAME</b> <b>Elham Atighi Lorestani, Maryam Khalili</b> University of Tehran, Iran, Islamic Republic of  <b>HOW ELDERLY PEOPLE EXPERIENCE VIDEOS IN MOOCS</b> <b>Anna Nishchyk, Norun Christine Sanderson, Weiqin Chen</b> Oslo and Akershus University College of Applied Sciences, Norway  <b>SYSTEMATIC COOPERATION FOR IMPROVED PRACTICE IN PRIMARY SCHOOLS' DESIGN EDUCATION IN THE ARTS AND CRAFTS SUBJECT</b> <b>Irene Brodshaug, Janne Beate Reitan</b> HIOA/Kjeller skole, Norway
2:10pm - 2:30pm	Coffee Break				
2:30pm - 3:30pm	<b>C: Design Education Practice - 3</b> Location: <b>Room 1 - FRIGG</b> Chair: <b>Aran Dasan</b>  <b>DIGITAL DRAWING DEMYSTIFIED: EXPLORING A CREATIVE ZONE OF PROXIMAL DEVELOPMENT</b> <b>Nils Seiersten, Arild Berg</b> Oslo and Akershus University College of Applied Sciences, Norway  <b>UNDERSTANDING GROUP DESIGN BEHAVIOUR IN ENGINEERING DESIGN EDUCATION</b> <b>Thea Morgan, Chris McMahon</b> University of Bristol, United Kingdom	<b>I: Collaboration and Industrial involvement in Design Education - 3</b> Location: <b>Room 2 - FREYJA</b> Chair: <b>Gunnar H. Gundersen</b>  <b>THE CHALLENGES FACING EDUCATION IN ENGINEERING DRAWING PRACTICE</b> <b>Nigel Patrick Garland, Richard Gliitho, Russell Wade</b> Bournemouth University, United Kingdom  <b>Employability of graduates: Insights to enhancing the employability through research of internships of entrepreneurship design students</b> <b>Dorthe Fiona Petersen</b> KEA, Denmark  <b>CAROUSEL: A STUDY ON COLLABORATION WITHIN A SMALL INTERNATIONAL DESIGN COMMUNITY OF</b>	<b>V: Student Papers related to Design Education - 3</b> Location: <b>Room 3 - IDUNN</b> Chair: <b>Vicki Thomas</b>  <b>Challenging briefs; learning through client and designer roles in freshmen design education</b> <b>Philip Ekströmer, Mats Näbo, Vanja Pavlasevic, David Eklöf, Renee Wever</b> Linköpings universitet, Sweden  <b>REDESIGN OF GARMENTS IN GENERAL EDUCATION: A PATH TO REDUCED CONSUMPTION</b> <b>Monica Schlanbusch Orheim, Liv Merete Nielsen</b> Oslo and Akershus university college of applied sciences, Norway  <b>Co-creation in service design; a master's study on how to achieve sustainable services</b> <b>Helena Larsson, Arild Berg</b>	<b>O: New Design Education Paradigms - 3</b> Location: <b>Room 4 - EIR</b> Chair: <b>Lyndon Buck</b>  <b>IS AUGMENTED REALITY A NEW PARADIGM IN DESIGN EDUCATION WHEN EDUCATIONAL SUBSIDY DECREASES?</b> <b>Yoke-Chin Lai</b> Mechanical Engineering Department, VIA University College, Denmark  <b>EVALUATION OF "CODEVE" METHODOLOGY FOR TEACHING NPD TO VIRTUAL DESIGN TEAMS</b> <b>Ahmed Kovacevic<sup>1</sup>, Nikola Vukasinovic<sup>2</sup>, Neven Pavkovic<sup>3</sup>, Peter Horak<sup>4</sup></b> 1: City, University of London, United Kingdom; 2: University of Ljubljana, Faculty of Mechanical Engineering, Slovenia; 3: University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Croatia; 4:	<b>K3: Design Education for the General Public - 3</b> Location: <b>Room 5 - LOFN</b> Chair: <b>Ingvild Digranes</b>  <b>UNDERSTANDING SUSTAINABILITY THROUGH MAKING A BASIC T-TUNIC IN PRIMARY SCHOOL</b> <b>Christine Løkvik<sup>1</sup>, Janne Beate Reitan<sup>2</sup></b> 1: OSLO AND AKERSHUS UNIVERSITY COLLEGE OF APPLIED SCIENCES, NORWAY; 2: OSLO AND AKERSHUS UNIVERSITY COLLEGE OF APPLIED SCIENCES, NORWAY  <b>RESPONSIBLE CREATIVITY IN DESIGN EDUCATION</b> <b>Eva Lutnæs</b> Oslo and Akershus University of Applied Sciences, Norway  <b>NARROWING THE GAP BETWEEN GENERAL DESIGN EDUCATION AND</b>

	<p><b>PRACTICE AND ITS IMPACTS ON DELIVERING 'ONE WEEK' EXCHANGE EXPERIENCES</b></p> <p><b>Einar Stoltenberg<sup>1</sup>, Richard Firth<sup>2</sup>, Michael Taks<sup>3</sup></b>  1: Oslo and Akershus University College of Applied Science, Norway; 2: School of Arts and Creative Industries Edinburgh Napier University; 3: Windesheim University</p>	Oslo and Akershus University College of Applied Science, Norway	Budapest University of Technology and Economics, Budapest, Hungary	<p><b>HIGHER EDUCATION IN DESIGN</b></p> <p><b>Laila Belinda Fauske</b></p> <p>Oslo and Akershus University College of Applied Sciences, Norway</p>
3:30pm - 4:00pm	Walk to catch boat and sail to Bygdoy and visit the Viking Ship Museum			
6:30pm - 7:00pm	Walk to Hukodden restaurant and see the panoramic views over the Oslo Fjord.			
10:00pm	Guests will be transported by bus back to the Conference venue.			

Date: Friday, 08/Sep/2017

9:00am - 9:45am	<b>Keynote Speaker 2: The Future of Design: A Design Anthropological Perspective by Anna Kirah</b>				
9:45am - 11:25am	<b>D: Design Education Practice - 4</b> Location: Room 1 - FRIGG Chair: Kaare Eriksen  Integrating expert design reviews in project-based design courses to address multiple learning goals Stacy Benjamin, John Anderson Northwestern University, United States of America  <b>RELATING TO THE INDIVIDUAL'S LEVEL OF CONSUMPTION - AN INDICATOR OF ECOLOGICAL FOOTPRINT</b> Nikolai Øvrebekk, Astrid Skjervén Oslo and Akershus University College of applied sciences, Norway  <b>THE CHARACTERISTICS OF A SUCCESSFUL FRAMING PROCESS</b> Louise Møller Aalborg University, Denmark  <b>COLLABORATING WITH IMPACT: A LIVE INDUSTRIAL PRODUCT DESIGN PROJECT</b> Matthew Alan Watkins <sup>1</sup> , Christopher Ebbert <sup>1</sup> , Leslie Arthur <sup>1</sup> , Emma Attwood <sup>2</sup> 1: Nottingham Trent University, United Kingdom; 2: McGee Group Ltd, United Kingdom  <b>EMPOWERING REFUGEE AND HOST-COMMUNITY YOUTH WITH DESIGN THINKING SKILLS FOR COMMUNITY DEVELOPMENT</b> Kathinka Strand Hasselknippe, Thomas Flygenring, Anna Kirah Design without Borders	<b>J1: Creativity and Innovation in Design Education - 1</b> Location: Room 2 - FREYJA Chair: Peer Mohideen Sathikh  <b>GAME DYNAMICS IN DESIGN - A PROCESS TO ACHIEVE CREATIVE AGENCY (TO GIVE PEOPLE A CHANCE)</b> Vibeke Sjøvoll, Tore Gulden Oslo and Akershus University College of Applied Science, Norway  <b>The Creative Engineering Education Imperative for Twenty-First Century Living</b> Jennifer Loy <sup>1</sup> , Samuel Canning <sup>2</sup> 1: University of Technology Sydney; 2: Griffith University  <b>PROBLEM BASED LEARNING: DEVELOPING COMPETENCY IN KNOWLEDGE INTEGRATION IN HEALTH DESIGN</b> Kate M Sellen OCAD University, Canada  <b>IS GLOABLISED DESIGN EDUCATION KILLING DESIGN VARIETY?</b> Ashley Hall Royal College of Art, United Kingdom  <b>Student Design Projects Set in the Space Environment</b> Colin Ledsome IED, United Kingdom	<b>Y: Assessment Methods in Design Education - 1</b> Location: Room 3 - IDUNN Chair: Leslie, John Arthur  <b>READY FOR SUCCESS, FIRST YEAR EFFICIENCY FOR INDUSTRIAL DESIGN ENGINEERING EDUCATION</b> Stephan Blom, Mirjam van den Bosch Rotterdam University of applied science, Netherlands, The  <b>Aligning Assessment Results with Learning Outcomes</b> Markus VOß <sup>1</sup> , Hulusi BOZKURT <sup>1</sup> , Thorsten SAUER <sup>2</sup> 1: DHBW Baden-Württemberg Cooperative State University Mannheim, Germany; 2: DHBW Baden-Württemberg Cooperative State University Ravensburg, Germany  <b>LIGHT AND SHAPE: EXPLORING THE IMPACT OF LIGHT DURING THE PRODUCT DESIGN PROCESS</b> Harald Skulberg The Oslo School of Architecture and Design, Norway  <b>CREATIVITY IN CHILDREN'S DESIGN PROCESSES: IDENTIFYING INDICATORS OF DESIGN FIXATION</b> Alice Schut <sup>1</sup> , Fenne van Doorn <sup>1</sup> , Remke Klapwijk <sup>1</sup> , Debbie Buchner <sup>2</sup> 1: TU Delft, Netherlands, The; 2: InHolland, Netherlands, The  <b>EXPERIENCES FROM IMPLEMENTATION OF SUSTAINABILITY IN A CIVIL ENGINEERING COURSE AT THE UNIVERSITY OF AGDER</b> Poul Ragnar Svennevig <sup>1</sup> , Eilif Hjelseth <sup>2</sup> 1: Universtietet i Agder; 2: HiOA	<b>Z: Ethics and Social Issues in Design Education - 1</b> Location: Room 4 - EIR Chair: Peter Childs  <b>CROSSING CULTURES: CREATING A PhD-PROGRAMME IN ENGINEERING, ART &amp; DESIGN</b> Ragnhild Tronstad Oslo and Akershus University College of Applied Sciences, Norway  <b>Icons and archetypes moving forward</b> Amos Scully, Aishwarya Uniyal Rochester Institute of Technology, United States of America  <b>Challenging the Auditorium. How to Flip a Classroom in a Room That Cannot Be Flipped?</b> Nina Hagerup, G. Anthony Giannoumis, Peter Haakonsen, Petter Øyan Oslo and Akershus University Collage, Norway  <b>Analysis and Transformation of Works in Design</b> Bente Dahl Thomsen Department of Architecture, Design and Media Technology, Aalborg University, Denmark  <b>EMPOWERMENT THROUGH PRODUCT DESIGN: DIGITAL TEXTILE PATTERN DESIGN FOR GRIP DEVELOPMENT IN HEALTHCARE</b> Wenche Lyche, Arild Berg Oslo and Akershus university College of Applied Sciences, Norway	<b>K4: Design Education for the General Public - 4</b> Location: Room 5 - LOFN Chair: Ingvild Digranes  <b>PLANTING THE SEEDS OF FUTURE MECHANICAL DESIGN ENGINEERS – LEARNING SKILLS</b> Selin Üreten, Dieter Krause, Gregor Beckmann Hamburg University of Technology, Germany  <b>A 21st Century Approach to Teaching Engineering Mechanics</b> Mark Jacobus Smit, Stefan Maxim Persaud Rotterdam University of Applied Sciences, School of Engineering and Applied Science, department of Industrial Design Engineering, The Netherlands  <b>PLAY LAB: CREATING SOCIAL VALUE THROUGH COMPETENCY AND CHALLENGE-BASED LEARNING</b> Alejandro Acuña, Mariana Maya, Ella Britton, Mariano Garcia ITESM Campus Queretaro, Mexico  <b>CULTURE SENSITIVE CONTEXTMAPPING: DISCOVERING THE STRENGTHS OF EASTERN AND WESTERN PARTICIPANTS</b> Chen Hao, Annemiek van Boeijen, Pieter Jan Stappers Delft University of Technology, Netherlands  <b>COMBINING ONLINE COURSES, METHOD PORTAL AND ONLINE EXERCISES FOR EDUCATION IN ENGINEERING DESIGN</b> Ann-Kathrin Bavendiek, Tobias Ring, David Inkermann, Thomas Vietor, Sabine C. Langer Technische Universität Braunschweig, Germany
11:25am - 11:35am	Coffee Break				
11:40am - 1:00pm	<b>E: Design Education Practice - 5</b> Location: Room 1 - FRIGG Chair: Rita Assoreira Almendra  <b>Future scenarios in general design education and 21st century competencies</b> Tore Andre Ringvold <sup>1</sup> , Ingvild Digranes <sup>2</sup> 1: Oslo and Akershus University College of Applied Sciences; 2: Oslo and Akershus University College of Applied Sciences  <b>Individual Learning of CAD enhanced by teamwork</b> Claus Pütz RWTH Aachen, Germany, Germany  <b>“YACON” PROJECT TO DESIGN PROMOTION OF</b>	<b>J2: Creativity and Innovation in Design Education - 2</b> Location: Room 2 - FREYJA Chair: Annemiek van Boeijen  <b>HOW DESIGNERS LEARN - Objects of Knowledge Representation as Means of Knowledge Transfer</b> Nenad Pavel Oslo and Akershus University College of Applied Science, Norway  <b>Design and innovation with problem based learning methods: an engineering perspective</b> Peyman Mirtaheri, Nils Sponheim HiOA/TKD, Norway  <b>THE BLACK THREAD PROJECT: BUILDING STUDENT COMMUNITIES</b>	<b>R: Assessment methods in Design Education - 2</b> Location: Room 3 - IDUNN Chair: Ian de Vere  <b>THE IMPORTANCE OF PRACTISING DESIGN FOR DESIGN EDUCATORS AND RESEARCHERS</b> Sissel Isachsen, Janne Beate Reitan Oslo and Akershus University College, Norway  <b>PASTEL AS A SWIFT SKETCH TOOL FOR DESIGN EDUCATION AND PRACTICE: A QUALITATIVE REVIEW</b> J. Hoftijzer Delft University of Technology, Netherlands, The  <b>Critical review of implementation of</b>	<b>W: Ethics and Social Issues in Design Education - 2</b> Location: Room 4 - EIR Chair: Christian Tollestrup  <b>Trials and tribulations of teaching Product Design to non-designers</b> Mehran Koohegilani Bournemouth University, United Kingdom  <b>‘SISTERS ARE DOING IT FOR THEMSELVES?: EXPLORING GENDER IN IRISH PRODUCT DESIGN EDUCATION’</b> Muireann McMahon, Louise Kiernan School of Design, University of Limerick, Ireland  <b>Makeriet: A Norwegian University Makerspace</b>	<b>K5: Design Education for the General Public - 5</b> Location: Room 5 - LOFN Chair: Liv Merete Nielsen  <b>THE POSITIVE EFFECT OF A MORPHOLOGICAL APPROACH ON DESIGN TEAM COOPERATION</b> Wim Zeiler TU Eindhoven, Netherlands, The  <b>Results from cross-fertilization of courses for improved student learning</b> Jörgen Normark, Therese Öhrling, Anders Håkansson Luleå University of Technology, Sweden  <b>BEYOND LAMP SHADES – TEACHING UPCYCLING IN A MEANINGFUL WAY</b>



	<p><b>REGIONAL SPECIALITIES COLLABORATING WITH THE LOCAL GOVERNMENT AND COMMUNITIES</b></p> <p><b>Takao Ito<sup>1</sup>, Mune-aki Sakamoto<sup>1</sup>, Keiko Matsumoto<sup>1</sup>, Jun-Ichi Sagara<sup>1</sup>, Ikuhiro Tanida<sup>1</sup>, Satoshi Takeuchi<sup>1</sup>, Miwa Yasukawa<sup>2</sup></b> 1: Kanazawa Institute of Technology, Japan; 2: Suisei High School, Japan</p> <p><b>What on earth is Responsible Innovation anyway? (and how to teach it)</b></p> <p><b>Nicholas Spencer<sup>1</sup>, Mark Bailey<sup>1</sup>, Neil Smith<sup>1</sup>, Jenny Davidson<sup>1</sup>, Philip Sams<sup>2</sup></b> 1: Northumbria University, United Kingdom; 2: Royal Society of Engineers, United Kingdom</p>	<p><b>Randi Veiteberg Kvellestad</b> Oslo and Akershus university college for applied sciences, Norway</p> <p><b>INNOVATION SHOULD BE TAUGHT TO ALL 14 TO 16 YEAR OLDS IN SCHOOLS</b></p> <p><b>Michael Charles Goatman</b> Coventry University, United Kingdom</p>	<p><b>sustainability in higher education</b></p> <p><b>Eilif Hjelseth</b> Oslo and Akershus University College of Applied Sciences, Norway</p>	<p><b>Evin Güler<sup>1</sup>, Peyman Mirtaheeri<sup>1</sup>, Anders-Petter Andersson<sup>2</sup>, Terje Gjøvaag<sup>1</sup></b> 1: Oslo and Akershus University College of Applied Sciences, Norway; 2: Norwegian University of Science and Technology, Norway</p> <p><b>BEYOND DESIGN THINKING-WHOSE PERSPECTIVE IS DRIVING THE PEOPLE-CENTRIC APPROACH TO CHANGE</b></p> <p><b>Anders Berglund<sup>1</sup>, Larry Leifer<sup>2</sup></b> 1: KTH Royal Institute of Technology, Sweden; 2: KTH Royal Institute of Technology, Stanford University</p>	<p><b>Christopher Michael Ebbert<sup>1</sup>, Oskar Rexfelt<sup>2</sup>, Isabel Ordoñez<sup>2</sup></b> 1: Nottingham Trent University, United Kingdom; 2: Chalmers University, Sweden</p> <p><b>PARTICIPATORY RESEARCH WITH REFUGEES – CAN INDUSTRIAL DESIGN ENGINEERS IMPLICITLY COPE WITH SOCIAL DESIGN PROBLEMS?</b></p> <p><b>Tina Bobbe, Christian Wölfel, Jens Krzywinski</b> Technische Universität Dresden, Germany</p>
1:00pm - 1:50pm	<b>Lunch break</b>				
1:50pm - 3:10pm	<p><b>F: Design Education Practice - 6</b> Location: <b>Room 1 - FRIGG</b> Chair: <b>Peter Childs</b></p> <p><b>MORPHOLOGY TO ILLUSTRATE THE MENTAL MODEL OF A DESIGN TEAM'S PROCESS</b></p> <p><b>Wim Zeiler</b> TU Eindhoven, Netherlands, The</p> <p><b>REDEFINING THE BACHELORS CURRICULUM IN DESIGN AND MEDIA</b></p> <p><b>Peer Mohideen Sathikh</b> Nanyang Technological University, Singapore</p> <p><b>DESIGN PROJECTS IN UNDERGRADUATE COURSES– APPROACH AND EXPERIENCES</b></p> <p><b>Robert Watty</b> Ulm University of Applied Sciences, Ulm, Germany</p> <p><b>PRACTICE MAKES PERFECT: PRODUCT DESIGN AND EXTERNAL COLLABORATIONS</b></p> <p><b>Vicki Thomas</b> The University of Northampton/Vicki Thomas Associates, United Kingdom</p>	<p><b>J3: Creativity and Innovation in Design Education - 3</b> Location: <b>Room 2 - FREYJA</b> Chair: <b>Arild Berg</b></p> <p><b>GROWING SPACES: DEVELOPING A SUSTAINABILITY– LITERATE GRADUATE</b></p> <p><b>Deborah Andrews<sup>1</sup>, Susana Soares<sup>2</sup></b> 1: London South Bank University, United Kingdom; 2: London South Bank University, United Kingdom</p> <p><b>Fostering learning communities through student-led prototyping workspaces</b></p> <p><b>Jeff Barrie</b> Imperial College London, United Kingdom</p> <p><b>A TALE FROM THE TROPICS: EDUCATION FOR SUSTAINABILITY AND THE VALUE OF PROJECT-BASED LEARNING</b></p> <p><b>Deborah Andrews<sup>1</sup>, Barney Townsend<sup>2</sup></b> 1: London South Bank University, United Kingdom; 2: London South Bank University, United Kingdom</p> <p><b>USING SLACK FOR SYNCHRONOUS AND ASYNCHRONOUS COMMUNICATION IN A GLOBAL DESIGN PROJECT</b></p> <p><b>Kim Brendan Frank White, Hilary Grierson, Andrew Wodehouse</b> University of Strathclyde, United Kingdom</p>	<p><b>L: Assessment methods in Design Education - 3</b> Location: <b>Room 3 - IDUNN</b> Chair: <b>Andree Woodcock</b></p> <p><b>DOES THE IMITATION OF THE SKETCH STYLE OF GOOD INDUSTRIAL DESIGNERS INFLUENCE STUDENTS' DRAWING SKILLS?</b></p> <p><b>Jan A.M. Corremans, Werner Coppieters</b> University of Antwerp - Faculty of Design Sciences, Belgium</p> <p><b>CHALLENGES OF 3D PRINTING FOR HOME USERS</b></p> <p><b>Russell Wade, Nigel Garland, Gary Underwood</b> Bournemouth University, United Kingdom</p> <p><b>PEDAGOGICAL CONTENT KNOWLEDGE IN PRODUCT DEVELOPMENT EDUCATION</b></p> <p><b>Tero Sakari Juuti<sup>1</sup>, Kaisu Rättyä<sup>2</sup>, Timo Lehtonen<sup>1</sup>, Miia-Johanna Kopra<sup>1</sup></b> 1: Tampere University of Technology, Finland; 2: University of Eastern Finland</p> <p><b>Measuring Creativity</b></p> <p><b>Ingeborg Stana</b> Oslo and Akershus University College of Applied Sciences, Norway</p>	<p><b>M: Ethics and Social Issues in Design Education - 3</b> Location: <b>Room 4 - EIR</b> Chair: <b>Kate M Sellen</b></p> <p><b>Universal design education: Brazilian students reflections and their environment</b></p> <p><b>Claudia de Souza Libânio<sup>1,2</sup>, Fernando Gonçalves Amaral<sup>1</sup>, Sérgio Almeida Migowski<sup>3,4</sup></b> 1: UFRGS, Brazil; 2: UFCSPA, Brazil; 3: Unisinos, Brazil; 4: IFRS, Brazil</p> <p><b>UNIVERSAL DESIGN IN THE TECHNOLOGY EDUCATION CURRICULUM: EXPERIENCES FROM NORWAY</b></p> <p><b>Frode Eika Sandnes, Evelyn Eika</b> HiOA, Norway</p> <p><b>Handle Diameter and the Influence on the Ergonomics of Crutches</b></p> <p><b>Guilherme da Silva Bertolaccini<sup>1</sup>, Melissa Marin Vasquez<sup>1</sup>, Ana Carolina Bianchi<sup>1</sup>, Frode Eika Sandes<sup>2,3</sup>, Luis Carlos Paschoarelli<sup>1</sup>, Fausto Orsi Medola<sup>1</sup></b> 1: Graduate Programme in Design, UNESP - Univ. Estadual Paulista, Bauru, Brazil; 2: Department of Computer Science, Faculty of Technology, Art and Design, Oslo; 3: Akershus University College of applied Sciences, Norway</p> <p><b>ADVANCING COMMUNITY DESIGN EDUCATION</b></p> <p><b>Alireza Borhani, Negar Kalantar</b> Texas A&amp;M university, United States of America</p>	
3:10pm - 3:30pm	<b>Coffee Break</b>				
3:30pm	<p><b>Closing Ceremony</b> Chair: <b>Lyndon Buck</b> please fill in the E&amp;PDE conferece online survey by selecting this link <a href="https://goo.gl/forms/b16CcSgB10i744i52">https://goo.gl/forms/b16CcSgB10i744i52</a></p>				