SEFI ANNUAL CONFERENCE 2–5 SEPTEMBER 2024 LAUSANNE

Conference Agenda

Overview and details of the sessions of this conference. Please select a date or location to show only sessions at that day or location. Please select a single session for detailed view (with abstracts and downloads if available).

🎓 The first author is a student, at least 2/3 of the authors are students -Undergraduate, Master, Doctoral-; may include supervisor as one of the authors.

Hide Presentations | Table View | Authors

Session Overview

Date: Monday, 02/Sept/2024

7:30am - 9:00am	**Registration & Welcome Coffee** Location: SG Main Hall
9:00am - 9:30am	**Opening Session** Location: SG01 Session Chair: **Jessica Dehler Zufferey**
9:30am - 10:25am	**Johanna Lönngren: Emotions in Engineering Education: The emergence of a new field of research** Location: SG01 Session Chair: **Jessica Dehler Zufferey**
10:25am - 10:30am	**SIG pitches** Location: SG01 Session Chair: **Jessica Dehler Zufferey**
10:30am - 11:00am	**Refreshment Break 1-1** Location: SG Main Hall
11:00am - 12:00pm	**Well-being session 1: Eat some Swiss chocolate**
11:00am - 12:00pm	**Teaching and Learning with Digital Tools** Location: SG0211 Session Chair: **Patrick Jermann**
	Learning Analytics with Matlab Grader in Undergraduate Engineering Courses **Jannis Dethmann, Brit-Maren Block** Leuphana University Lüneburg, Germany
	Reflection processes for learning with digital media in higher education courses: A report on our experience **Nico Marten, Kathrin Thiele** Ostfalia University of Applied Sciences, Germany
	Leveraging Large Language Models for Actionable Course Evaluation Student Feedback to Lecturers **Mike Zhang, Euan Lindsay, Frederik Bode Thorbensen, Danny Bøgsted Poulsen, Johannes Bjerva** Aalborg University, Denmark
	STEM TEACHERS' ATTITUDES TOWARDS TECHNOLOGY USAGE IN ENGINEERING EDUCATION OF BANGLADESH **Abdullah Binta Suleiman, Md Shahadat Hossain Khan** Islamic University of Technology (IUT), Bangladesh, People's Republic of
11:00am - 12:00pm	**Diversity and pathways** Location: SG0213
	The Road Not Taken: How First-Generation Students Differ in Their Postgraduate Educational Paths **Joelyn de Lima, Olga Kasatkina, Isabelle Lermigeaux-Sarrade** The Swiss Federal Institute of Technology (EPFL)
	Choosing Information Technology as a Major; Are There Gender Differences? **Outi Tuulia Virkki** Haaga-Helia University of Applied Sciences, Finland
	FRAMEWORK CONDITIONS AND STRATEGIES FOR ATTRACTING YOUNG WOMEN TO ENGINEERING IN TIMES OF DIGITAL AND GLOBAL TRANSFORMATION **Brit-Maren Block, Marie Gillian Guerne, Jennifer Wulfes** Leuphana University Lüneburg, Germany
	Experiencing engineering – increasing the attractiveness of engineering through period of work experience for lower secondary school pupils **Anni-Elina Leinonen, Johanna Kristiina Naukkarinen** LUT University, Finland
11:00am - 12:00pm	**Theorising to Practicing in DEI** Location: AAC008 Session Chair: **Ines Direito**

A COMPARATIVE SCIENTOMETRIC ANALYSIS OF DIVERSITY, EQUITY, AND INCLUSION (DEI) PUBLICATIONS IN EUROPEAN JOURNAL OF ENGINEERING EDUCATION AND JOURNAL OF ENGINEERING EDUCATION

Bill Williams[1,4,5], Andrew Valentine[2], Natalie Wint[3]
[1]CEGIST, Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal; [2]The Univeristy of Melbourne, Australia; [3]University College London, UK; [4]CREATE research centre, TU Dublin, Dublin, Ireland; [5]Polytechnic Institute of Setubal, Setubal, Portugal

HOW DO ENGINEERING EDUCATION SOCIETIES ENGAGE WITH DEI CONCEPTS? A PRELIMINARY THEORETICAL ANALYSIS OF FORMAL DEI STATEMENTS

Homero Murzi[1], Becky Bergman[2], Inês Direito[3], Jan Van Maele[4]
[1]Virginia Tech, United States of America; [2]Chalmers University of Technology; [3]Universidade de Aveiro; [4]Katholieke Universiteit Leuven

A co-curricular approach to addressing the variation of practical skills in students from diverse backgrounds

Jon Fullwood, Andrew Garrard
University of Sheffield, United Kingdom

11:00am - 12:00pm

Mathematics in Transition into University
Location: **AAC014**
Session Chair: **Adélie Garin**

Understanding the Support Mechanisms Available to First-Year Mathematics Students: A Case Study from South Africa

Robert Noel Prince, Zach Simpson
University of Johannesburg, South Africa

Delivering Round-the-Clock Study Support in Mathematics Courses to First-Year Engineering Students Using Discord: An Experience Report

Maarouf Fallaha, Asaad Fallaha, Mirela Vinerean
Karlstad University, Sweden

Development of the Differential Equations Concept Inventory to Assess Conceptual Understanding

Tina A. Fuhrmann[1], Christian Kautz[2]
[1]University of Applied Sciences Merseburg, Germany; [2]Hamburg University of Technology, Germany

Informing the Design of 10-Minute Videos for Vector Calculus Instruction: A Rapid Review

Pragashni Padayachee, Anita Campbell
University of Cape Town

11:00am - 12:00pm

Perspectives on AI
Location: **AAC020**
Session Chair: **Euan Lindsay**

Integrating AI Education in Disciplinary Engineering Fields: Towards a Systems and Change Perspective

Johannes Schleiss[1], Aditya Johri[2], Sebastian Stober[1]
[1]Otto von Guericke University Magdeburg, Germany; [2]George Mason University, United States of America

ICT-ENGINEERING TEACHERS' EXPERIENCES AND EXPECTATIONS WITH AI

Tauno Tepsa, Juhani Angelva, Maisa Mielikäinen
Lapland UAS, Finland

ROLE OF AI IN HIGHER EDUCATION: OPPOPTUNITIES AND CHALLENGES OF USING AI TECHNOLOGIES

Muniah Maree[1], Freeha Azmat[1], Amina Jameel[2]
[1]University of WARWICK, United Kingdom; [2]Bahria University, Pakistan

Towards Responsible AI - Competencies for Engineers: An Explorative Literature Review On Existing Frameworks

Marie Decker[1], Johannes Schleiss[2], Ben Schultz[1], Sarah Gail Moreno[1], Sebastian Stober[2], Carmen Leicht-Scholten[1]
[1]RWTH Aachen University, Germany; [2]Otto von Guericke University Magdeburg, Germany

11:00am - 12:00pm

Ethics Learning Activities
Location: **AAC108**
Session Chair: **Diana Adela Martin**

Building ethical engineers: insights from a guide to integrating ethics in civil engineering education

Irene Josa[1], Christina Nick[2], Ester Giménez[3]
[1]The Bartlett School of Sustainable Construction, University College London London, United Kingdom; [2]Inter-Disciplinary Ethics Applied Centre, School of Philosophy, Religion, and History of Science, University of Leeds, Leeds, United Kingdom; [3]Institute of Concrete Science and Technology (ICITECH), Universitat Politècnica de València, Valencia, Spain

Engaging Engineering Students in STS-topics Utilizing Students Perceived Relevance

Ronny Kjelsberg, Trond Morten Thorseth, Magnus Strøm Kahrs
Departmen of Physics, NTNU - Norwegian University of Science and Technology, Norway

PRACTISING ETHICS IN ENGINEERING AND SCIENCE EDUCATION

Laura Ferrarello, Jaïr Campfens, Rehab Massoud, Santhanu Ramanandan
EPFL, Switzerland

Prometheus Challenge: an ethics training for engineering students

Seddik Benlaksira[1], Chloé Bonifas[2], Ambre Davat[1], Louis Devillaine[3], Sofia Duran-Cardenas[2], Marc Tilly[2], Thierry Ménissier[2], Yvan Pigeonnat[4]
[1]GRESEC, Université Grenoble Alpes, France; [2]IPhiG, Université Grenoble Alpes, France; [3]PACTE, Université Grenoble Alpes, France; [4]PerForm, Grenoble INP, Université Grenoble Alpes, France

11:00am - 12:00pm

Curriculum Development
Location: **AAC114**
Session Chair: **John Mitchell**

Course Perception Differences Among STEM Students in a Multi-Culture Course: A Case Study in US
Yuanyuan Song
Tsinghua University, China, People's Republic of

Designing an engaging first-year engineering experience: a case study
Lionel Lam, Huey Yee Chan, Ray Dagastine
The University of Melbourne, Melbourne, Australia

ASSESSING THE SHIFT IN ENGINEERING STUDENTS' INITIAL KNOWLEDGE AND FIRST-YEAR RESULTS OVER A DECADE
Louise Therese Pick, Charles Declan McCartan, Felix Hagan
School of Mechanical and Aerospace Engineering, Queens University Belfast, United Kingdom

Do you need to be mad to work here? Reflections on leading extremely large-scale interdisciplinary team project modules
Fiona Truscott[1], Lelanie Smith[2]
[1]Centre for Engineering Education, UCL, United Kingdom; [2]Faculty of Engineering, Built Environment and IT, University of Pretoria, South Africa

11:00am - 12:00pm

Building Capacity
Location: **AAC120**
Session Chair: **Annechien Sarah Helsdingen**

Appraising a 2.5th Space: Learnings from an Engineering Education Unit in Engineering and Computing
Joshua Burridge, Shannon A Rios, Sally Amanda Male
The University of Melbourne, Australia

Motivation and Hindering Factors in Engineering Education – Perspectives of Engineering Educators at European Universities
Ann-Kristin Winkens[1], Clara Lemke[1], Christian Stöhr[2], Carmen Leicht-Scholten[1]
[1]RWTH Aachen University, Germany; [2]Chalmers University of Technology, Sweden

How Experienced Teachers Teach Lifelong Learners
Malene Bolding
DTU Learning Lab, Technical University of Denmark

A FRAMEWORK TO PREPARE ACADEMIC AND INDUSTRY EDUCATORS TO DELIVER CONTINUING ENGINEERING EDUCATION
Christopher J. M. Smith[1], Sonia M. Gomez Puente[2], Kostas Nizamis[4], Bente Nørgaard[5], Matias Urenda Moris[6], Patricia Olga Caratozzolo Martelliti[3]
[1]Glasgow Caledonian University, United Kingdom; [2]Eindhoven University of Technology Eindhoven, The Netherlands; [3]Tecnologico de Monterrey Mexico City, Mexico; [4]University of Twente, Enschede , The Netherlands; [5]Aalborg University Aalborg, Denmark; [6]Uppsala University Uppsala, Sweden

11:00am - 12:00pm

Well-being & Care
Location: **AAC132**
Session Chair: **Ingrid Le Duc**

EDUCATORS' WELL-BEING IN A LONG RUN
Lógó Emma, Séllei Beatrix
BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS, Hungary

PSYCHOLOGICAL SAFETY IN PRACTICE: GUIDELINES AND INSIGHTS FOR DIFFERENT STAKEHOLDERS IN HIGHER EDUCATION
Beanta Alberink, Yousef Jalali
EPFL, Switzerland

Integrating Ethics of Care into Engineering Education
Robert K Irish, Lisa Romkey
University of Toronto, Canada

11:00am - 12:00pm

Reflection, Metacognition and Life Long Learning
Location: **AAC137**

Upgrading Mathematical Skills for Professional Studies: The Role of Interactive Tasks and Self-Direction in Online Courses
Päivi Porras[1], Jarkko Hurme[2], Henry Lähteenmäki[3]
[1]LAB University of Applied Sciences, Finland; [2]Oulu University of Applied Sciences, Finland; [3]South-Eastern Finland University of Applied Sciences, Finland

DON'T JUST THINK, PONDER: METACOGNITIVE SKILLS AMONG ENGINEERING STUDENTS WITH AND WITHOUT WORK PLACEMENTS
Max Leong, Sarah Junaid
Aston University, United Kingdom

Triggering students' lifelong learning competencies through a personal development process – case studies from Belgium, Ireland & Finland
Lynn Van den Broeck[1], Rani Dujardin[1], Sofie Craps[1], Johanna Naukkarinen[2], Una Beagon[3], Caitriona DePaor[3], Aimee Byrne[3]
[1]KU Leuven, Belgium; [2]LUT, Finland; [3]TU Dublin, Ireland

FROM THEORY TO PRACTICE: THE PERSONAL DEVELOPMENT PROCESS IN AN E-PORTFOLIO TO PREPARE FOR LIFELONG LEARNING
Rani Dujardin[1], Lynn Van den Broeck[1], Sofie Craps[1], Johanna Naukkarinen[2], Una Beagon[3], Caitriona DePaor[3], Aimee Byrne[3]
[1]KU Leuven, Belgium; [2]LUT, Finland; [3]TU Dublin, Ireland

11:00am - 12:00pm	**PBL in Practice** Location: **AAC231**
	Project-based approach for electrical engineering education at ETH Zürich **Michele Magno[2], Victoria Abou Khalil[1], Curt Schurgers[2,3]** [1]CHILI computer-human interaction in learning and instruction, EPFL, Switzerland; [2]Center for Project-Based Learning, ETH Zurich, Switzerland; [3]Electrical and Computer Engineering Department, UC San Diego, California, USA
	Challenge-Based Learning in Practice: Redesign and Evaluation of an Interdisciplinary Minor **Kostas Nizamis** University of Twente, Netherlands, The
	An overview of the professional skills encountered through capstone engineering projects **Victoria Abou Khalil, Helena Kovacs** EPFL, Switzerland
	Engineering collaboration in project-based learning **Juliane Balder, Rainer Stark** Industrial Information Technology, TU Berlin, Germany
12:15pm - 1:15pm	**Well-being session 2: Catch up with colleagues**
12:15pm - 1:15pm	**Transversal Skills** Location: **SG0211** Session Chair: **Helena Kovacs**
	Academics' Perceptions of Transversal Skills: A Case Study in a New Engineering Programme at the Norwegian Defence University College **Luke Dokter** Norwegian Defence University College, Norway
	FLEXIBLE LEARNING IN HIGHER EDUCATION: DRIVING FUTURE SKILLS DEVELOPMENT AND EMPLOYMENT OPPORTUNITIES **Patricia Munoz-Escalona[1], Sonia M. Gómez Puente[2], Patricia Caratozzolo[3]** [1]Glasgow Caledonian University, Scotland, United Kingdom; [2]Eindhoven University of Technology (TU/e), The Netherlands; [3]Institute for the Future of Education, Tecnologico de Monterrey, Mexico
	Transversal skills priorities and curricular support as experienced by engineering students on their path to becoming responsible engineers **Joelyn de Lima, Siara Isaac, Jessica Dehler Zufferey** Ecole polytechinque Fédéerale de Lausanne, Switzerland
12:15pm - 1:15pm	**Learning and Testing in Mathematics** Location: **SG0213** Session Chair: **Simone Deparis**
	Testing is Learning: Using Randomized, Parametrized, and Diversified Weekly Online Quizzes with Answer-Dependent Feedback in Multivariable Calculus **Martijn Boussé, Laurie Delnoij, Stefan Jongen, Gavin Phillips** Maastricht University, Netherlands, The
	Evaluation of a strategy training to promote mechanical-mathematical modeling competence in problem solving in Technical Mechanics (statics) **Kristina Lampe[1], Martin Lang[2], Alexandra Dorschu[1]** [1]Ruhr West, University of Applied Sciences, Germany; [2]University of Duisburg-Essen, Germany
	DEVELOPMENT OF A FORMATIVE ASSESSMENT PRACTICE **Trine Højberg Andersen, Knut Bjørkli Rolstad** NTNU, Norway
12:15pm - 1:15pm	**Attractiveness Systems for Engineering Pathways** Location: **AAC008** Session Chair: **Klara Kövesi**
	EXPLORING THE ROLE OF NATIONAL EDUCATION SYSTEM ON PATHWAYS INTO ENGINEERING: A COMPARITIVE STUDY (RESEARCH) **Natalie Wint[1], Sofie Craps[2], Hanne Deprez[2], Patrik Mottl[3]** [1]Centre for Engineering Education (CEE), UCL, United Kingdom; [2]KU Leuven; [3]Czech Technical University in Prague
	THE SUPPORTIVE ROLE OF THE EUROPEAN UNIVERSITIES IN ENGINEERING EDUCATION INNOVATION – THE CASE OF EUROTEQ **Patrik Mottl[1], Sonia Maria Gómez Puente[2], Anneli Kalm[3], Ludmila Dohnalova[1]** [1]Czech Technical University in Prague, Czech Republic; [2]Eindhoven University of Technology, Netherlands; [3]Tallinn University of Technolgy, Estonia
	Surprises at Work: A STUDY OF EARLY CAREER ENGINEERS **Dennis Friedrichsen, Jette Egelund Holgaard, Anette Kolmos, Maiken Winther, Henrik Routhe** Aalborg University, Denmark
	UNIVERSITY ATTRACTIVENESS AND COVID-19INFLUENCE: A FOCUS ON INDUSTRIAL ENGINEERING AND MANAGEMENT STUDENTS **Marlene von Steinaecker[1], Maria Serodio[2]** [1]ESTIEM, Germany; [2]ESTIEM, Portugal
12:15pm - 1:15pm	**Teaching Design** Location: **AAC014** Session Chair: **Iris Capdevila**
	Can a robot teach design? Large language model based feedback tool for engineering design courses **May Lim** The University of New South Wales, Australia
	USING 'DESIGN SHORTS' TO ENGAGE ENGINEERING STUDENTS IN SELF AND PEER SUPPORTED PROBLEM BASED LEARNING **Aled Wyn Davies** Cardiff University, United Kingdom
	IDEATION TECHNIQUES FOR ENGINEERING STUDENTS: STATE OF THE ART AND RECENT CASE STUDIES **Matthew Thompson, Sam Jeffery Fishlock** The Engineering & Design Institute London, United Kingdom

12:15pm - 1:15pm	**AI in Engineering Education** Location: **AAC020**
	INTRODUCING AI TOOLS IN THE ENGINEERING CURRICULUM **Nael Barakat, Shih-Feng Chou, Muath Salim, Hamed Seyyedhosseinzadeh** University of Texas at Tyler, United States of America
	Critical Thinking with AI: Navigating ChatGPT in Engineering Education **Joanna Weng** Zurich University of Applied Sciences, Switzerland
	A Roles-based Competency Framework for Integrating Artificial Intelligence (AI) in Engineering Courses **Johannes Schleiss[1], Aditya Johri[2]** [1]Otto von Guericke University Magdeburg, Germany; [2]George Mason University, United States of America
	AI-Driven Digital Competencies in Engineering Education: A Notebook-based Teaching Approach **Falk K Wittel, Jonas M. Maas** ETH Zurich, Switzerland
12:15pm - 1:15pm	**PBL in disciplinary contexts** Location: **AAC108** Session Chair: **Victoria Abou Khalil**
	Are technical knowledge sacrificed with the integration of transferable skills into the engineering curriculum? – an evaluation of one-week intensive project-based learning in biochemical and biomedical engineering **Lillian Yun Yung Luk[1,2], John Mitchell[2], Mauryn C. Nweke[2], Terence Leung[2]** [1]The University of Hong Kong, Hong Kong; [2]University College London, United Kingdom
	Project-Based Learning Approach for an Engineering Course: Challenges and Learnings of Teaching Transversal Skills **Yousef Jalali, Iris Capdevila, Jamie Paik** EPFL, Switzerland
	Integration of Life Cycle Assessment of full-scale Structures as part a PBL Civil Engineering Programme **Michael Quilligan, William Horan, Declan Phillips, Terence Ryan** University of Limerick, Ireland
	The Cynefin Framework and Sustainability in Engineering Education **Christian Lystbæk, Michael Noerager** Aarhus University, Denmark
12:15pm - 1:15pm	**Competences across the curriculum** Location: **AAC114** Session Chair: **Peter R Neal**
	Integrating competencies in a curriculum through developing learning paths and reflection assignments **Melanie van Berkum** Wageningen University & Research, Netherlands, The
	STUDENTS' REFLECTIONS ON PROGRESSION IN THEIR EDUCATION PROGRAMME **Camilla Björn, Kristina Edström, Viggo Kann** KTH Royal Institute of Technology, Sweden
	Engineering Education Accreditation Frameworks: History and Global Expansion of the Washington Accord and EUR-ACE Label **Leonardo Pollettini Marcos, Brent Jesiek, Stephanie Masta, Kerrie A Douglas** School of Engineering Education, Purdue University, United States of America
12:15pm - 1:15pm	**Metacognition and Reflection in Engineering Education** Location: **AAC120**
	Comparing and Exploring adjustments to an implemented Flipped classroom combined model: A follow-up study **Adriana Maria Smith Ortiz, Piotr Mazurkiewicz, Gill Cooke** University of Warwick, United Kingdom
	The Role of Reflection-Informed Learning and Instruction in an Introductory Physics Course for Engineering and Science Students **Jiwon Kim[1], Alfa Satya Putra[1], Saira Anwar[2], Ahmed Ashraf Butt[3], Ahmed Magooda[4], Diane Litman[5], Muhsin Menekse[1]** [1]Purdue University, USA; [2]Texas A&M University, USA; [3]Carnegie Mellon University, USA; [4]Microsoft Corporation, USA; [5]University of Pittsburgh, USA
	Bottlenecks in Thermodynamics: Bridging Gaps in Energy Balance Derivation between Experts and Students **Matthias Neef[1], Johannes Goebel[1], Sylvia Schädlich[2], Lisa Demant[2], Vivian Kowalzik[3]** [1]Hochschule Düsseldorf, University of Applied Sciences, Germany; [2]Hochschule Ruhr West, University of Applied Sciences, Germany; [3]Technische Hochschule Köln – University of Applied Science, Germany
12:15pm - 1:15pm	**Sustainability in Technical Disciplines** Location: **AAC132**
	PILOTING A SOCIOTECHNICAL MODULE ABOUT ELECTRIC VEHICLE BATTERIES IN A SMALL CIRCUITS COURSE (PRACTICE PAPER) **Susan M. Lord[1], Cynthia Finelli[2]** [1]University of San Diego, United States of America; [2]University of Michigan, United States of America
	Exploring journeys from sustainable design to design for sustainability **Marc Laperrouza, Michka Mélo** EPFL, Switzerland
	UNDERGRADUATE SUSTAINABILITY RESEARCH EXPERIENCE FOR ENGINEERING EDUCATION **Riadh Habash** University of Ottawa, Canada
	Exploring the Education and Training of Nuclear Engineers in Australia **Tina Baradaran[1], Andrew Sill[2], Ilpo Koskinen[1], Mihail Ionsecu[2], Edward Obbard[1]** [1]University of New South Wales, Australia; [2]Australian Nuclear Science and Technology Organisation

12:15pm - 1:15pm	**Mathematics and Real world data** Location: **AAC137** Session Chair: **Stanislas Herscovich**
	Statistics in engineering degrees: a case study of a community service **Elisa Futos-Bernal[1], María Anciones-Polo[1], Deolinda Maria L. Dias Rasteiro[2], María Jesús Santos Sánchez[1], Araceli Queiruga-Dios[1], Ascensión Hernández Encinas[3]** [1]Universidad de Salamanca, Spain; [2]Polytechnic Institute of Coimbra; [3]Non-profit association AELCLÉS
	USING STUDY AND RESEARCH PATHS IN STATISTICS WITH REAL DATA TO RAISE QUESTIONS AND AWARENESS **Maria-Josep Freixanet[1], Montserrat Alsina[1], Marianna Bosch[2]** [1]Universitat Politècnica de Catalunya, Spain; [2]Universitat de Barcelona, Spain
	SERVICE-LEARNING: AS A WAY TO ENHANCE STUDENTS' COMPETENCIES **Deolinda Maria L. Dias Rasteiro[1], Araceli Queiruga-Dios[2], Ascénsion Hernández Encinas[3], Maria Jesus Santos Sánchez[2], Emília Bigotte de Almeida[1], Cristina P. Caridade[1]** [1]Polytechnique University of Coimbra - IPC/ISEC, Portugal; [2]Universidad de Salamanca, Salamanca, Spain; [3]Non-profit association AELCLÉS Salamanca, Spain
	Connecting Experience and Expertise: The University of Experience and its Impact on Engineering Students **María Anciones-Polo[1], Elisa Futos-Bernal[1], Marián Queiruga-Dios[2], María Jesús Santos Sánchez[1], Jackeline Murillo[3], Araceli Queiruga-Dios[1]** [1]Universidad de Salamanca, Spain; [2]Universidad Francisco de Vitoria, Spain; [3]Universidad Vasco de Quiroga, Mexico
12:15pm - 1:15pm	**Diversity in Engineering Education Experiences** Location: **AAC231**
	HOW US POSTDOCTORAL OFFICES SUPPORT INTERNATIONAL STEM POSTDOCTORAL SCHOLARS (RESEARCH) **Jennifer Tygret[1], Anneke Bruwer[2], Sylvia Mendez[3]** [1]Illinois College, United States of America; [2]University of Colorado Colorado Springs, United States of America; [3]University of Kentucky, United States of America
	INVESTIGATING WHAT CONTRIBUTES TOWARDS A HOLISTIC ENGINEERING STUDENT EXPERIENCE FOR INTERNATIONAL AND HOME STUDENTS **Mauryn Chika Nweke[1], Irina Lazar[1], Abel Nyamapfene[1], Folashade Akinmolayan[2], Yuncong Liu[1], Obioma Egemonye[1]** [1]University College London, United Kingdom; [2]Queen Mary University of London
	USING FORUMS FOR PROMOTING STUDENT DIVERSITY **Alexandra Niculescu, Patrick Jermann** EPFL, Switzerland
	ACADEMIC RESILIENCE: A STUDY OF PARENTAL BACKGROUND'S CONTRIBUTION TO ENGINEERING IDENTITY IN THREE EUROPEAN ENGINEERING FACULTIES **Neil Cooke[1], Sarah Chung[1], Enrica Caporali[2], Jörgen Forss[3], Gianni Bartoli[2], Daniel Cottle[1], Kamel Hawwash[1], Jesper Andersson[3]** [1]University of Birmingham, United Kingdom; [2]University of Florence, Italy; [3]Linnaeus University, Sweden
1:15pm - 2:15pm	**Newjoiners Lunch** Location: **Second floor Hall**
1:15pm - 2:15pm	**Lunch break 1** Location: **SG Main Hall**
2:15pm - 3:15pm	**SIG Workshop 1-01** Location: **SG01**
	Kicking off the EER Reading Club -The Handbook of Engineering Research Series **Tinne De Laet[1], Esther Ventura-Medina[2], Jenni M. Case[3]** [1]KU Leuven, Belgium; [2]TU Eindhoven, the Netherlands; [3]Virginia Tech, Blacksburg, USA
2:15pm - 3:15pm	**SIG Workshop 1-02** Location: **SG0211**
	What conflicts does sustainability bring to engineering education? **Aida Guerra[1], André Baier[2]** [1]Aalborg University, Denmark; [2]Technische Universität Berlin, Germany
2:15pm - 3:15pm	**SIG Workshop 1-03** Location: **SG0213**
	Sorting skills: curriculum profiles and the forthcoming SEFI handbook **Helena Kovacs[1], Tamara Milosevic[1], Jennifer Griffiths[2], Matteo Di Benedetti[3], Esther Perea Borobio[6], Thies Johannsen[4], Natalie Wint[2], Neil Cooke[5]** [1]EPFL, Switzerland; [2]University College London, United Kingdom; [3]The University of Sheffield, United Kingdom; [4]Technische Universität Berlin, Germany; [5]University of Birmingham, United Kindgom; [6]Imperial College London, United Kingdom
2:15pm - 3:15pm	**SIG Workshop 1-04** Location: **AAC008**
	ENGINEERING OUTREACH: EXAMPLES, EVALUATION AND EVIDENCING **Hanne Deprez[1,2], Sofie Craps[1,2], Gillian Guerne[3], Elisabeth Huelse[4], Klara Kövesi[5], Michael Milligan[6], Margaret Morgan[7], Susie Ye[8], Natalie Wint[9]** [1]KU Leuven, Belgium; [2]Leuven Engineering and Science Education Center (LESEC), Belgium; [3]Leuphana, Universität Lüneburg, Germany; [4]Ansys Academic Development Team, Germany; [5]ENSTA Bretagne, Brest, France; [6]ABET, USA; [7]Ulster University, Belfast, Northern Ireland; [8]Bentley systems, Hoofddorp, The Netherlands; [9]University College London (UCL), London, UK
2:15pm - 3:15pm	**SIG Workshop 1-05** Location: **AAC014**
	ENACTING OUR VALUES - STEPS TOWARDS A MORE SUSTAINABLE AND INCLUSIVE SEFI COMMUNITY (WORKSHOP) **Joelyn de Lima[1], Siara Isaac[1], Natalie Wint[2], Fiona Truscott[2], Terhi Kilamo[3]** [1]Swiss Federal Institute of Technology Lausanne (EPFL) Lausanne, Switzerland; [2]Centre for Engineering Education (CEE), University College London (UCL), UK; [3]Unit of Computing Sciences, Tampere University (TAU) Tampere, Finland

2:15pm - 3:15pm	**SIG Workshop 1-06** Location: **AAC020** **Staff Capacity Building for Educating Socially Responsible Engineers: Considerations Related to Culture and Emotion** **Madeline Polmear[1], Jennifer Griffiths[2], Greet Langie[3], Johanna Lönngren[4], Klara Kovesi[5], Thies Johannsen[6], Christian Kautz[7], Ester Ventura Medina[8], Peter Neal[9], Marcus Pereira Pessoa[10], Nikita Hari[11]** [1]King's College London, United Kingdom; [2]University College London; [3]KU Leuven; [4]Umea University; [5]ENSTA Bretagne; [6]TU Berlin; [7]TU Hamburg; [8]TU Eindhoven; [9]UNSW Sydney; [10]University of Twente; [11]University of Oxford
2:15pm - 3:15pm	**SIG Workshop 1-07** Location: **AAC108** **NEEDS OF STUDENTS AND EDUCATORS FOR EFFECTIVE ORGANIZATION OF CONTINUING ENGINEERING EDUCATION** **Heli Väätäjä[1], Wim de Boer[2], Patricia Caratozzolo[3], Rigas Hadzilacos[4], Yves Jeanrenaud[5], Kostas Nizamis[2], Christopher Smith[6], Natalie Wint[7]** [1]Lapland University of Applied Sciences, Finland; [2]University of Twente Enschede; [3]Tecnologico de Monterrey; [4]Swiss Federal Institute of Technology Lausanne; [5]Ludwig Maximilian University of Munich; [6]Glasgow Caledonian University; [7]University College London
2:15pm - 3:15pm	**SIG Workshop 1-08** Location: **AAC114** **Empowering Engineering Education: Tools and Strategies for International Accreditation** **José Carlos Quadrado[1,2,3,4], Raja Toqeer[5]** [1]ENAEE; [2]ENTER; [3]ISEL; [4]ISRC/ISEP; [5]University of Sheffield
2:15pm - 3:15pm	**SIG Workshop 1-09** Location: **AAC120** **Eager to further develop the field of engineering ethics education?** **Diana Adela Martin[1], Shannon Chance[1,2], Tom Boersen[3], Roland Tormey[4], Thomas Lennerfors[5], Gunter Bombaerts[6], Mircea Tobosaru[7], Helena Kovacs[4]** [1]University College London, United Kingdom; [2]Technological University Dublin, Ireland; [3]Aalborg University, Denmark; [4]EPFL, Switzerland; [5]University of Uppsala, Sweden; [6]Technological University of Eindhoven, the Netherlands; [7]National University of Science and Technology Politehnica Bucharest
2:15pm - 3:15pm	**SIG Workshop 1-10** Location: **AAC132** **CURRICULUM DEVELOPMENT AND EMERGING CURRICULUM MODELS IN ENGINEERING** **John Mitchell[1], Iris Capdevila[2], Sophia Economides[1], Alison Gwynne-Evans[3], Marc Laperrouza[2], Emanuela Tilley[1], Gareth Thomson[4], Natalie Wint[1]** [1]UCL Centre for Engineering Education, United Kingdom; [2]EPFL, Switzerland; [3]University of Cape, Town Cape Town, South Africa; [4]Aston University, Birmingham, UK
2:15pm - 3:15pm	**SIG Workshop 1-11** Location: **AAC137** **AI and ICT Integration in Mathematics Engineering Education: Enhancing Learning and Teaching** **Deolinda Maria L. Dias Rasteiro[1], Kathrin Thiele[2]** [1]Polytechnic University of Coimbra, IPC/ISEC, Portugal; [2]Ostfalia University of Applied Sciences applied Sciences, Faculty of Mechanical Engineering
3:15pm - 3:45pm	**Refreshments 11-2** Location: **SG Main Hall**
3:45pm - 4:45pm	**SIG Physics Meeting** Location: **AAC008**
3:45pm - 4:45pm	**SIG Continuing Engineering Education and Lifelong Learning Meeting** Location: **AAC014**
3:45pm - 4:45pm	**SIG Attractiveness Meeting** Location: **AAC020**
3:45pm - 4:45pm	**SIG Curriculum Development Meeting** Location: **AAC108**
3:45pm - 4:45pm	**SIG Ethics Meeting** Location: **AAC114**
3:45pm - 4:45pm	**SIG Capacity Building Meeting** Location: **AAC120**
5:00pm - 6:00pm	**SIG Mathematics Meeting** Location: **AAC008**
5:00pm - 6:00pm	**SIG Engineering Skills Meeting** Location: **AAC014**
5:00pm - 6:00pm	**SIG Digital Learning Meeting** Location: **AAC020**
5:00pm - 6:00pm	**SIG Quality Assurance and Accreditation Meeting** Location: **AAC114**
5:00pm - 6:00pm	**SIG Engineering Education Research Meeting** Location: **AAC120**
5:00pm - 6:00pm	**SIG Sustainability Meeting** Location: **AAC137**
5:00pm - 6:00pm	**SIG Diversity, Equity and Inclusion Meeting** Location: **AAC231**
6:00pm - 7:00pm	**Welcome Reception and Fellowship Awards** Location: **SG01** Session Chair: **Francesco Mondada**

Date: Tuesday, 03/Sept/2024

7:30am - 9:00am	**Wellbeing Activities Tuesday**
9:00am - 10:15am	**Equity and Sustainability: What do employers need our graduates to know?** Location: **SG01** Session Chair: **Roman Bruegger**
10:30am - 11:00am	**Refreshment Break 2-1** Location: **SG Main Hall**
11:00am - 12:00pm	**Well-being session 1: Stretch!**
11:00am - 12:00pm	**Learning in Virtual and Augmented Realities** Location: **SG0211** Session Chair: **Jessica Dehler Zufferey**
	MixedLAB: Mixed Reality to Teach Students Experimental Knowledge in Microfabrication **Qinglan Shan[1,2], Julia Chatain[2], Manu Kapur[2], Jürgen Brugger[1]** [1]Microsystems Laboratory, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland; [2]Professorship for Learning Sciences and Higher Education, ETH Zurich, Swizerland
	Integrating Immersive Technology Solutions in Engineering Education at University Level **Johannes Hendrik Moolman, Michael Edgar, Fiona Boyle, Joseph Walsh** Munster Technological University, Ireland
	THE EFFECTIVENESS OF VIRTUAL REALITY IN ENGINEERING EDUCATION: A SEMI-EXPERIMENTAL STUDY AT CASE COMPANY **Lotta Saarikoski[1], Vida Shokati[2], Minna Lähteenmäki[3], Khalil Gholami[2]** [1]VAMK, Vaasa University of Applied Sciences, Finland; [2]Åbo Akademi University, Finland; [3]Wärtsilä Ltd., Finland
	VIRTUAL INDUSTRY VISITS USING IMMERSIVE 360 DEGREE VIDEO: ENSURING ACCESS FOR ALL ENGINEERING STUDENTS **Mary Moloney[1], Jeremiah Spillane[1], Kieran Ruane[1], Philippe Joly[2]** [1]Munster Technological University, Ireland; [2]Universite Toulouse III - Paul Sabatier
11:00am - 12:00pm	**Transversal Skills Learning** Location: **SG0213** Session Chair: **Gerhard Müller**
	WE CAN SEE INVENTION IN EVERYTHING: EFFECTS OF THE SIX-WEEK INVENTION FACTORY PROGRAM **Aditi Kothiyal[1], Jidugu Kavya Harshitha[1,2]** [1]IIT Gandhinagar, India; [2]Queen's University, Canada
	Engineering Education for a Sustainable Future: Integrating Social and Environmental Transversal Competencies **Mary Bridget Nolan[1], David Mulligan[1], Mary Carden[1], Lizbeth Goodman[2]** [1]Atlantic Technological University Sligo, Ireland; [2]University College Dublin, Ireland
	Empowering women in STEM: An innovative study orientation program with a focus on new technologies to strengthen the creative potential and self-efficacy of women **Marie Gillian Guerne[1], Brit-Maren Block[1], Matthias Schmidt[2]** [1]Leuphana University, Germany; [2]Leibnitz University, Germany
	MAKING CONFIDENT DESIGNERS: EFFECT OF A DESIGN AND PROTOTYPING COURSE AND GENDER DIFFERENCES IN STUDENTS' ENGINEERING DESIGN SELF-EFFICACY **Aditi Kothiyal[1], Avanish Chauhan[1,2], Sameer Sahasrabudhe[1], Madhu Vadali[1]** [1]IIT Gandhinagar, India; [2]Karnavati University
11:00am - 12:00pm	**Inner and Outer Sustainable Develoment** Location: **AAC008**
	Improving Mental Health in Engineering Education: a Path to Social Responsibility **Alya Muneaux, Cathel Zitzmann** EPF Engineering School, France
	Responsibly Educating Responsible Engineers **Helena Kovacs, Tamara Milosevic** EPFL, Switzerland
	IMPACT OF AN INTERNATIONAL EXPERIENCE ON STUDENTS' GLOBAL COMPETENCES **Patricia Munoz-Escalona[1], Christopher Smith[1], Luis Medina[2], Mervyn Marquez[2], Homero Murzi[3], Colin Milligan[1]** [1]Glasgow Caledonian University; [2]Universidad Austral de Chile; [3]Virginia Tech
	IS IT A NEED OR A WANT? PERCEPTIONS OF THE NEED FOR A PEER MENTOR FROM UNDERGRADUATE ENGINEERING STUDENTS WITHOUT ONE **Darcie Christensen[1], Cody Mann[1], Abigail Lauer[1], Aidan Wesley[1], Idalis Villanueva Alarcón[2]** [1]Minnesota State University Mankato - Iron Range Engineering, United States of America; [2]University of Florida, United States of America
11:00am - 12:00pm	**Teamwork & Leadership** Location: **AAC014** Session Chair: **Balázs Vince Nagy**
	Multidisciplinary Teamwork And Student Experiences In A Challenge-Based Learning Course **Canan Mesutoglu[1], Dury Bayram[2]** [1]Erasmus University Rotterdam, Netherlands, The; [2]Eindhoven University of Technology, Netherlands, The
	COMMUNICATION IN INNOVATION TEAMS **Stephanie Willemoës, Hanne Løje, Jussi Mikkonen** DTU, Denmark
	Promoting International Chemical Engineering Postgraduate Taught Students' Teamwork Skills via the Inclusive Workshop and Team-building Games **Ya He[1], Mo Zandi[2]**

[1]University of Sheffield, United Kingdom; [2]University of Sheffield, United Kingdom

HOW TO TEACH CONSCIOUS LEADERSHIP TO FUTUR ENGINEERS? THE DEVELOPMENT OF AN INNOVATIVE ACTIVE TEACHING AND LEARNING PROGRAMME

Klara Kövesi[1], Nathalie Chelin[2], Gilles Jacovetti[2]

[1]ENSTA Bretagne, France; [2]IMT Atlantique, France

11:00am - 12:00pm

Sustainability and Curriculum Innovations
Location: **AAC020**

Integrating sustainability in higher education institutions: A case study from EPFL

Valentina Rossi, Adélie Garin, Siroune Marie-Noëlle Der Sarkissian, Jacopo Grazioli, Gisou van der Goot, Pierre Dillenbourg

EPFL, Switzerland

Unfold the complexity of engineering learning in a transdisciplinary environment: a Q. study from the University of Twente

Jovana Jezdimirovic Ranito[1], Aida Guerra[2], Dan Jiang[2], Juabei Chen[2]

[1]University of Twente; [2]Aalborg University

EXAMINING THE EFFECTIVENESS OF A SUMMER SCHOOL TO EQUIP ENGINEEERING STUDENTS WITH COMPETENCES REQUIRED TO ACHIEVE THE SDGS

Una Beagon[1], Janet McKennedy[1], Ruchita Jani[1], Brian Bowe[1], Margaret Morgan[2], Rosalind Henry[2]

[1]TU Dublin, Ireland; [2]Ulster University, Belfast, United Kingdom

Enhancing Education for Sustainable Development (ESD): A new tool for teaching Life Cycle Assessments (LCA) in multidisciplinary engineering

Rhythima Shinde

The Engineering and Design Institute- London (TEDI London), United Kingdom

11:00am - 12:00pm

Supporting Diversity
Location: **AAC108**
Session Chair: **Siara Isaac**

Advice for Success: Insights from Early Career Women on Vital Competencies Empowering Their Transition into the Civil Engineering Workforce

Elizabeth Sara Volpe, Denise Rutledge Simmons

University of Florida, United States of America

MENTORING MATURE STUDENTS: EXPLORING PEER MENTOR EXPERIENCES AT A PRE-UNIVERSITY ENGINEERING PROGRAMME

Sophia Economides, Teguh Dewangga, Jiaxin Chen

UCL, United Kingdom

Proposing a Mentorship Life Cycle for a Developing Country's Women Engineering Students and Early Career Women Engineers

Ann Sharon Lourens[1], Nicole Truter[1], Curwyn Mapaling[2]

[1]Nelson Mandela Univeristy, South Africa; [2]University of Johannesburg, South Africa

Sharing the caring

Johanna Kristiina Naukkarinen, Hanna Niemelä

LUT University, Finland

11:00am - 12:00pm

Social and Human Sciences in Engineering Education
Location: **AAC114**
Session Chair: **Beanta Alberink**

Teaching technology and politics: From a less desirable to a preferred digital nation

Vero Estrada-Galiñanes

EPFL, Switzerland

The Straight Poop: How Service Design and Teaching Partnerships Mitigate Over-Engineering and Promote Sustainability

Allison Hutchison, Christina Sheley, Sunghwan Jung

Cornell University, United States of America

ENHANCING LEADERSHIP PEDAGOGY WITHIN ENGINEERING EDUCATION: EXPERIENTIAL INSIGHTS

Jari Heikki Ylitalo, Tuukka Kostamo, Peter Kenttä, Merit Morikawa

Aalto University, Finland

11:00am - 12:00pm

Innovations in Curriculum Models
Location: **AAC120**

4TU RESPONSIBLE SUSTAINABILITY CHALLENGE: DEVELOPING AND RUNNING AN INTER-UNIVERSITY CHALLENGE-BASED MASTER HONOURS PROGRAMME

Marc Salvador Fuentes Bongenaar, Olga Karageorgiou, Aarezo Sha

University of Twente, Netherlands, The

THE DEVELOPMENT OF THE SCALE FOR AUTHENTIC ENGINEERING LEARNING MODEL IN DIVERSE CONTEXTS

Wei Zhang[1], Shuai Wang[2], Peiyun Xu[2]

[1]Institute of China's Science, Technology and Education Policy, Zhejiang University, Hangzhou, China; [2]School of Public Affairs, Zhejiang University, Hangzhou, China

A METHOD FOR CURRICULA MAPPING TO IDENTIFY KEY SUSTAINABILITY COMPETENCE DEVELOPING CONTENT IN ENGINEERING EDUCATION

Liisa Routaharju[1,2], Sanni Väisänen[1], Risto Soukka[1]

[1]LUT university, Finland; [2]South-Eastern Finland University of Applied Sciences (Xamk), Finland

EMPOWERING TOMORROW'S INDUSTRIAL DESIGN ENGINEERS: A CURRICULUM REFORM JOURNEY AT THE UNIVERSITY OF TWENTE'S FACULTY OF ENGINEERING TECHNOLOGY

Wim de Boer, Janneke Massa, Geke Ludden, Eric Lutters

University of Twente, Netherlands, The

11:00am - 12:00pm

Educating the Whole Engineer
Location: **AAC132**
Session Chair: **Alexandra Niculescu**

Educating the Whole Engineer – Educational Experiences that Have Impact in a Civil Engineering Problem Based Learning Programme
Declan Phillips, Michael Quilligan
University of Limerick, Ireland

THE EMOTIONAL JOURNEY OF COMPUTER SCIENCE STUDENTS IN TEAM PROJECTS: THE TURBULENCES AND THE INTERPLAY BETWEEN THE ACADEMIC EMOTIONS
Nihat Kotluk[1], Yoann Favre[2], Marina Fiori[2], Egon Werlen[3], Roland Tormey[1]
[1]Ecole polytechnique fédérale de Lausanne (EPFL), Switzerland; [2]Swiss Federal University for Vocational Education and Training (SFUVET), Switzerland; [3]Swiss Distance University of Applied Sciences (FFHS), Switzerland

"I'VE LEARNED THAT BEHIND EVERY HEADLINE THERE IS A HUMAN WITH THEIR STORY": GEARING UP ENGINEERING DESIGN PROJECTS FOR NURTURING EMPATHY
Diana Bairaktarova[1], Veerle Bloemen[2], Ines Direito[3,4], Jan Van Maele[2]
[1]Virginia Tech, United States of America; [2]KU Leuven, Belgium; [3]TEMA, University of Aveiro, Portugal; [4]CEE, University College London, United Kingdom

DESIGN AN ENGINEER. A FUN-DAMENTAL LEARNING EXPERIENCE AND RESEARCH ACTIVITY.
Michael Noctor, Fiona Boyle
Munster Technological University, Ireland

11:00am - 12:00pm

Credentials, Competences and Life Long Learning
Location: **AAC137**
Session Chair: **Christopher Smith**

THE IMPLEMENTATION OF THE UAS STRATEGY AS PART OF THE DEVELOPMENT OF COMPETENCE-BASED CIRCULAR ECONOMY EDUCATION
Pia Haapea
LAB University of Applied Sciences, Finland

APPROACH AND EXPERIENCES OF USING DIGITAL CREDENTIALS IN CONTINUING EDUCATION MOOCS
Heli Väätäjä[1], Mira Alhonsuo[1], Liudmila Beloglazova[2], Anssi Gröhn[2], Tiina Soininen[2]
[1]Lapland University of Applied Sciences, Finland; [2]Karelia University of Applied Sciences, Finland

STUDENT RESEARCH SOCIETIES: THE WIDEST FORM OF TALENT DEVELOPMENT
László Ákos Kun[1], Szabina Cziráki[2], Tibor Sándor[1], Tamás Weiszburg[2,5], István Szabó[2], Szabolcs Berezvai[1], Brigitta Szilágyi[1,3,4]
[1]Budapest University of Technology and Economics, Hungary; [2]National Council of Student Research Societies ; [3]Corvinus University of Budapest Budapest, Hungary; [4]MTA–ELTE Theory of Learning Mathematics Research Group; [5]Eötvös Loránd University

DECODING THE SKILL PUZZLE: AN INVESTIGATION OF COMPETENCy PROFILES OF RECENT GRADUATES IN ENGINEERING
Julia Sundman, Maija Taka, Meeri Karvinen, Olli Varis
School of Engineering, Aalto University, Finland

11:00am - 12:00pm

Inclusivity & Belonging
Location: **AAC231**

Using Inquiry Based Learning to Teach Inclusive Engineering
Michael Trikic[1], Tara Baldacchino[2], Fudail Ajaz[3]
[1]The University of Sheffield, United Kingdom; [2]The University of Sheffield, United Kingdom; [3]The University of Sheffield, United Kingdom

Developing the Inclusive Mindset of the Future for Engineering Education
Sheryl Sorby[1], Gary Bertoline[2]
[1]University of Cincinnati, United States of America; [2]Purdue University

BELIEFS ON BELONGING: PERCEPTIONS OF FIRST YEAR ENGINEERING STUDENTS
Elizabeth Rees, Hanne Løje, Lene Duedahl-Olesen
DTU, Denmark

Conceptualising an Inclusive Mindset: A Scoping Review and Framework for Engineering Education
Akrimar Tongkaew, Carina Lomberg
Technical University of Denmark

12:15pm - 1:15pm **Well-being session 2: Disconnect for a while**

12:15pm - 1:15pm

Group-based Learning
Location: **SG0211**
Session Chair: **Tamara Milosevic**

"What I Meant to Say Was...": Unravelling the Knots of Competent Communication in Engineering Research Teams."
Mary Ifeoma Nwanua, Denise Rutledge Simmons, Jasmine McNealy, Idalis Villanueva Alarcón
University of Florida, Nigeria

Addressing issues related to running and assessment of group work in engineering education
Maria del Pilar Garcia Souto, Justin Siefker, Ademola Odunsi, Fiona Truscott, Alan Seatwo
UCL, United Kingdom

Reluctance Despite Recognition: Student Perceptions of Benefits of Group Work
Manuela Piñeros Rodríguez, Simone Deparis, Kathryn Hess, Joelyn de Lima
École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

12:15pm - 1:15pm	**Engineering Skills: Thinking, Acting and Feeling** Location: SG0213 Session Chair: **Tinne De Laet**
	PELTON TURBINE UNDER DIFFERENT OPERATING CONDITIONS: An Experimental Pedagogical Study **Francisco J. R. M. Calhindro[1,2], Javier Ruiz Ramírez[3], A. Virgílio M. Oliveira[2], João C. A. Ferreira Mendes[2]** [1]Faculty of Engineering of University of Porto; [2]Coimbra Institute of Engineering, Portugal; [3]Miguel Hernández University of Elche, Spain
	ENHANCING STUDENT ENGAGEMENT AND DEEP LEARNING THROUGH INNOVATIVE LEARNING STRATEGIES IN ENGINEERING EDUCATION: POINT-BASED GAMING (PBG) FRAMEWORK **Fatemeh Shahbazi, Farah H. Villa López** University of Warwick, United Kingdom
	Collaborative co-design and implementation of a practical manufacturing module for large classes **Matthew John Cairns, Scott Leslie James Millen, Louise Therese Pick, Charles Declan McCartan** Queen's University Belfast, United Kingdom
	Bridging the Gap Between Theory and Practice in Antenna Teaching for Graduate Students **Rawad Asfour, Salam Khamas, Rola Saad** Department of Electronic and Electrical Engineering, University of Sheffield, United Kingdom
12:15pm - 1:15pm	**Cognition and Metacognition** Location: AAC008
	CRITICAL THINKING TO ADDRESS COGNITIVE BIAS IN ENGINEERING **Francesc Torres, Antoni Elias, Santiago Silvestre** Universitat Politècnica de Catalunya (UPC), Spain
	A Holistic Approach for "Teaching-to-learn" Professional Competencies in Engineering Education **Ann-Kristin Winkens, Clara Lemke, Carmen Leicht-Scholten** RWTH Aachen University, Germany
	Assessing Engineering Epistemology: A Systematic Literature Review of Instruments **Alaa Abdalla, Gunter Bombaerts, Wybo Houkes** Technical University of Eindhoven, Netherlands, The
	A REVIEW OF STUDENT THOUGHTS ON REFLECTIVE PRACTICE **Klara Kövesi[1], Gareth Thomson[2], Orsolya Barna[3], Maria Szalmáné Csete[3], Balázs Vince Nagy[3]** [1]ENSTA Bretagne, France; [2]ASTON University, UK; [3]Budapest University of Technology and Economics, Hungary
12:15pm - 1:15pm	**New Teachers of Engineering** Location: AAC014
	Student teachers' perceived importance and (teaching) self-efficacy towards engineering in secondary education: preliminary validation of a test instrument. **Hanne Deprez[1,2], Sascha Spikic[3]** [1]KU Leuven, Leuven, Belgium; [2]KU Leuven Engineering and Science Education Center (LESEC), Leuven, Belgium; [3]Hasselt University, Hasselt, Belgium
	Effective development and recognition of Teaching Assistant practice: An aligned model **Sarah Plumb, Harry Day, Matteo Di Benedetti** The University of Sheffield, United Kingdom
	Teaching Engineering Students How to Teach: Training Teaching Assistants for Diverse Responsibilities **Anna Augusta Fornø** Technical University of Denmark, Denmark
12:15pm - 1:15pm	**WS session 2-2-05** Location: AAC020
	SECURING FELLOWSHIPS FOR ENGINEERING EDUCATION RESEARCH **Shannon Chance[1,2], Aditya Johri[3], Inês Direito[4,2], Madeline Polmear[5], Helena Kovacs[6], Rucha Joshi[7]** [1]TU Dublin; [2]UCL; [3]George Mason University; [4]University of Aveiro; [5]King's College London; [6]EPFL; [7]Plaksha University
12:15pm - 1:15pm	**WS session 2-2-06** Location: AAC108
	Epistemic Lenses for Designing Instruction and Supervision in the Age of Generative Artificial Intelligence: An Adaptive Gameful Approach to Higher Education Pedagogy **Sofie Otto, Stine Ejsing-Duun, Niels Erik Ruan Lyngdorf, Lykke Brogaard Bertel** Aalborg University, Denmark
12:15pm - 1:15pm	**WS session 2-2-07** Location: AAC114
	Re-imagining engineering education through solving interdisciplinary course design challenges **Xiaoqi Feng[1], Hanna Aarnio[1], Michael O'Connell[2], Maija Taka[1], Marko Keskinen[1]** [1]Aalto University, Finland; [2]Chalmers University of Technology, Sweden
12:15pm - 1:15pm	**WS session 2-2-08** Location: AAC120
	Teaching Engineering Ethics in the Disciplines: Strategies to integrate ethics into the classroom. **Renato Bezerra Rodrigues[1], Tom Børsen[2], Christiano Cordeiro Cruz[3], Ester Giménez[4], Aaron W Johnson[5], Irene Josa[6], Susan Lord[7], Stephanie Lunn[8], Isis Hazewindus[9], Jan Mehlich[10], John Mitchell[6], Christina Nick[11], Prajish Prasad[12], Vivek Ramachandran[6]** [1]University of Manitoba; [2]Aalborg University; [3]Universidade Federal de São João del-Rei; [4]Universitat Politècnica de Valencia; [5]University of Michigan; [6]UCL; [7]University of San Diego; [8]Florida International University; [9]Universiteit van Amsterdam; [10]Rheinische Friedrich-Wilhelms-Universität Bonn; [11]University of Leeds; [12]FLAME University, India.

12:15pm - 1:15pm	WS session 2-2-09 Location: AAC132
	Engineering Non-technical Skills Behavioral Taxonomy: A Sort and Grid Workshop Ali Jaberi, Claire Lucas, Francesco Ciriello King's Collage London, United Kingdom
12:15pm - 1:15pm	WS session 2-2-10 Location: AAC137
	SHARING EFFECTIVE PRACTICES FOR SUPPORTING ENTERING DOCTORAL STUDENTS Holly Marie Matusovich[1], Juan Cruz[2], Stephanie Adams[3] [1]Virginia Tech, United States of America; [2]Rowan University, United States of America; [3]University of Texas- Dallas, United States of America
12:15pm - 1:15pm	WS session 2-2-11 Location: AAC231
	Archimedean Oath: A reflection tool for responsible engineers Valentina Rossi[1], Ingrid Le Duc[1], Jonathan Truslove[2], Philippine Milward[1], Charlotte Vandenberghe[1], Mihai Filimon[3], Helena Kovacs[1] [1]École polytechnique fédérale de Lausanne (EPFL), Switzerland; [2]Engineers Without Borders UK (EWB-UK), United Kingdom; [3]Board of European Students of Technology (BEST), Belgium
1:15pm - 2:15pm	**Dean's Lunch**
1:15pm - 2:15pm	**SIG Chairs Lunch**
1:15pm - 2:15pm	**Lunch break 2** Location: SG Main Hall
2:15pm - 3:15pm	**Well-being session 3: Go for a walk near the lake**
2:15pm - 3:15pm	WS session 2-3-01 Asian Forum Location: SG01
	Asian Engineering Education Forum at the 2024 Annual Conference of the European Society for Engineering Education (SEFI) Dai Chen Chinese Society for Engineering Education, China, People's Republic of
2:15pm - 3:15pm	WS session 2-3-02 Sponsor WS Location: SG0211
	Digital Twins for Smart Universities and Industry Engagement Ali Intizar[1], Andrius Jurelionis[2] [1]Dublin City University; [2]Kaunas university of technology
2:15pm - 3:15pm	WS session 2-3-03 Location: SG0213
	ENGINEERING EDUCATION RESEARCH: WRITING FOR PUBLICATION Jonte Bernhard[1], Maartje van den Bogaard[2], Rebecca Broadbent[3], Shannon Chance[4], Scott Daniel[5], Ines Direito[6], Xiangyun Du[7], Kristina Edström[8], Sally Male[9], Dominik May[10], John Mitchell[11], Natalie Wint[11] [1]Linköping University; [2]The University of Texas at El Paso; [3]Aston University; [4]Technological University Dublin; [5]University of Technology Sydney; [6]University of Aveiro; [7]Aalborg University; [8]KTH Royal Institute of Technology; [9]University of Melbourne; [10]University of Georgia; [11]UCL Centre for Engineering Education
2:15pm - 3:15pm	WS session 2-3-04 Location: AAC008
	Transversal skills that promote sustainability -> an experiential activity for engineering students Siara Isaac, Valentina Rossi, Joelyn de Lima Ecole polytechinque Fédéerale de Lausanne, Switzerland
2:15pm - 3:15pm	WS session 2-3-12 Location: AAC014
	INGREDIENTS FOR PROFESSIONAL DEVELOPMENT OF ENGINEERING EDUCATORS Sonia M. Gomez Puente, Esther Ventura Medina, Jan van der Veen, Rachelle Kamp Eindhoven University of Technology
2:15pm - 3:15pm	WS session 2-3-05 Location: AAC020
	CODESIGNING AN EXPEDITION SEMESTER AROUND EUROPE FOR FUTURE RESPONSIBLE ENGINEERS Siegfried Rouvrais[1], Haraldur Auðunsson[2], Arlinta Barus[3], Sari Silalahi[4] [1]IMT Atlantique, Lab-STICC UMR CNRS 6285, France; [2]Reykjavik University, Iceland; [3]Del Institute of Technology; [4]Del Institute of Technology
2:15pm - 3:15pm	WS session 2-3-06 Location: AAC108
	Innovating Responsibility: Fostering Creative Competences for Sustainable Engineering Solutions Anna-Kathrin Wimmer, Yves Jeanrenaud Ludwig-Maximilians-Universität Munich, Germany
2:15pm - 3:15pm	WS session 2-3-07 Location: AAC114
	A National Approach to Supporting an Expanded Focus on Human and Social Context in Engineering Tom Goldfinch[1], Justine Lawson[2], Ashlee Pearson[1] [1]Faculty of Engineering, University of Sydney, Australia; [2]Engineering Futures Initiative
2:15pm - 3:15pm	WS session 2-3-08 Location: AAC120
	Teach Students how to Study Successfully Abboy Verkuilen The Hague University of Applied Science, Netherlands, The
2:15pm - 3:15pm	WS session 2-3-09 Location: AAC132
	SUPPORTING THE FULL LIFE CYCLE OF RICH OPEN EDUCATIONAL RESOURCES WITH A LEARNING EXPERIENCE PLATFORM Denis Gillet[1], Michele Notari[2], Vera Ernsting[2], Jérémy La Scala[1], Basile Spaenlehauer[1] [1]École Polytechnique fédérale de Lausanne (EPFL), Switzerland; [2]Pädagogische Hochschule (PHBern), Switzerland

2:15pm - 3:15pm	**WS session 2-3-10** Location: **AAC137**
	WHO IS THE BEST ENGINEER?: IDENTITY THEORY AS A FRAMEWORK TO REFLECT ON HOW OUR CLASSROOM PRAXIS INFORMS THE VALUE OF SOCIAL RESPONSIBILITY IN ENGINEERING **Emily Dringenberg** The Ohio State University, United States of America
2:15pm - 3:15pm	**WS session 2-3-11** Location: **AAC231**
	Utilizing Home Experiment Kits for Hybrid Learning Methodology (WORKSHOP) **Arkadi Rafalovich, Roi Raich** Tel Aviv University, Israel
3:15pm - 3:30pm	**Refreshment Break 2-2** Location: **SG Main Hall**
3:30pm - 5:00pm	**SEFI General Assembly** Location: **SG01**
6:00pm - 8:00pm	**Social Programme**

Date: Wednesday, 04/Sept/2024

7:30am - 9:00am	**Wellbeing Activities Wednesday**
9:00am - 10:10am	**Margarita Boenig-Liptsin: Computing Education, Cultures of Responsibility** Location: **SG01** Session Chair: **Roland Tormey**
10:10am - 10:30am	**Poster Pitch** Location: **SG01** Session Chair: **Roland Tormey**
10:30am - 12:00pm	**Poster session (incl. refreshment break)** Location: **Second floor Hall**

Comparative judgment: Assessing competence development in the context of humanitarian engineering education
Nikola Nizamis, Wout van Mensvoort, Peter Chemweno, Alberto Martinetti
University of Twente, Netherlands, The

PRELIMINARY INSIGHTS INTO AI AND ENGINEERING EDUCATION IN THE US AND UK: AN EXPLORATORY STUDY
Gouri Vinod, David Guile
UCL, United Kingdom

A FRAMEWORK FOR IMPROVING THE LEADERSHIP BEHAVIOR OF GRADUATE STUDENTS
Tomoko Maruyama[1], Masahiro Inoue[2]
[1]Ehime University, Japan; [2]Keio University, Japan

MICRO-CREDENTIAL ARCHITECTURE THAT HIERARCHICALLY STRUCTURES EDUCATIONAL SYSTEMS AND INFORMATION TECHNOLOGIES
Masahiro Inoue[1], Tomoko Maruyama[2], Tsuneo Yamada[3], Keiko Ikeda[4], Shingo Ashizawa[5]
[1]Keio University, Japan; [2]Ehime University, Japan; [3]The Open University of Japan; [4]Kansai University, Japan; [5]Kansai University of International Studies, Japan

An Automatic Grading System for Large Classes
Matt Bovel, Hamza Remmal
EPFL, Switzerland

EDUCATION ADAPTING TO THE FUTURE: MEETING THE SKILL NEEDS IN MANUFACTURING SECTOR
Sami Suhonen
Tampere University of Applied Sciences, Finland

PUBLISH OR PERISH: HOW DO CAREERS OF EUROPEAN ENGINEERING EDUCATION RESEARCHERS EVOLVE?
Greet Langie, Tinne De Laet
KU Leuven, Belgium

Enhancing Professional and Engineering Skills via Practical Design Projects for First-Year Electrical and Electronic Engineering Students
Esther Perea-Borobio, Zohaib Akhtar
Imperial College London, United Kingdom

Educating the whole engineer through dialogue, ethics, reflection and stakeholder analysis
Caroline Mok, Joost van Hoevelaak, Janneke Sluijs, Godelieve Kodde, Naomi van der Kolk, Wianda Visser
The Hague University of Applied Sciences, The Netherlands

Integration Of Tuckman's Theory With SPARKPLUS To Improve Team Dynamics In Undergraduate Engineering Education
Caren Karamagi, Michael Vieira
Munster Technological University

CREATIVE ENGINEERING: APPLYING DESIGN THINKING IN TELECOMMUNICATIONS LABORATORY PRACTICE
Raquel Cervigón, Joan Miquel Galve
University of Castilla-La Macha, Spain

PEER REVIEW EVALUATION IN 3D MODELING COURSE: SIMPLIFYING ASSESSMENT AND ENSURING QUALITY
Changyang Li, Chen Li, Harri Eskelinen, Sami Matthews, Johanna Naukkarinen
LUT University, Lappeenranta, Finland

Teaching Value Innovation: Blue Ocean Strategy Challenge
Albert Mihranyan[1,2]
[1]Uppsala University, Sweden; [2]EIT InnoEnergy MSc programme in Energy Technologies (ENTECH)

Retrieval-Augmented Generation for Finding Relevant Lectures from Quizzes in a Multilingual STEM Educational Environment
Javier Lloret Pardo, Annechien Sarah Helsdingen, Patrick Jermann
EPFL, Switzerland

12:15pm - 1:15pm	**Well-being session 1: Have a nap**
12:15pm - 1:15pm	**Being and Relating Ethically** Location: **SG01** Session Chair: **Tom Børsen**
	Cultivating A Pro-Diversity Mindset: An intervention Among First-Year Engineering Students **Mieke Cannaerts[1], Sofie Craps[1], Colette Van Laar[1], Veerle Draulans[1], Jenny Veldman[2], Greet Langie[1]** [1]Ku Leuven, Belgium; [2]Utrecht University, The Netherlands
	Narrative ethics and narrative pedagogy in Engineering ethics education: a road not (yet) taken **Lavinia Marin** TU Delft, Netherlands, The
	Phronesis in a Complex World: Normative Education and Climate Change Ethics **Thijs Immanuel Loonstra** Wageningen University & Research, Netherlands, The
12:15pm - 1:15pm	**Mathematics Innovations** Location: **SG0211** Session Chair: **Deolinda Maria L. Dias Rasteiro**
	CORRELATION AMONG COURSES IN MATHEMATICS TRAJECTORY OF ENGINEERING TECHNOLOGY **Akshara Parul, Toon van Waterschoot** KU Leuven, Belgium
	The characteristics of innovative engineering mathematics courses in the Netherlands and China **Wenjun Cai[1], Esther Ventura-Medina[1], Jinni Zhou[2], Birgit Pepin[1]** [1]Eindhoven University of Technology, the Netherlands; [2]The Hong Kong University of Science and Technology (Guangzhou)
	INTERVENTION IN ENGINEERING STUDENTS' MATHS EDUCATION TO OVERCOME THE AFTERMATH OF DISTANCE LEARNING **Szabolcs Berezvai[1], Ákos Köpeczi-Bócz[1], Tibor Sándor[1], László Ákos Kun[1], Brigitta Szilágyi[1,2,3]** [1]Budapest University of Technology and Economics, Hungary; [2]Corvinus University of Budapest, Hungary; [3]MTA–ELTE Theory of Learning Mathematics Research Group
	Sharing collaborative classroom experiences: in groups vs in team **Cristina P. Caridade, Deolinda Maria L. Dias Rasteiro** Polytechnique University of Coimbra - IPC/ISEC, Portugal
12:15pm - 1:15pm	**Perspectives on Sustainability in Engineering Education** Location: **SG0213**
	EDUCATION FOR A HOPEFUL AND SUSTAINABLE FUTURE FOR ENVIRONMENTAL ENGINEERING STUDENTS **Liisa Ilona Routaharju[1,2], Sanni Väisänen[1], Risto Soukka[1]** [1]LUT university, Finland; [2]South-Eastern Finland University of Applied Sciences (Xamk), Finland
	No Time To Waste: A Plea for Immediate Implementation of Sustainability in Engineering Education **MaartenJan Hoekstra, Monika Roeling, Leo van den Burg, Wing Yung** TU Delft, Netherlands, The
	ON EMPLOYER VIEWS REGARDING ALUMNI'S CONTRIBUTIONS TO SUSTAINABLE DEVELOPMENT **Kamilla Klonowska, Daniel Einarson** Kristianstad University, Sweden
	Students' perspective on innovation, entrepreneurship and new technologies for a responsible STEM education **Ljiljana Kheirawi, Irina Milojkovic, Alessio Fino** Board of European Students of technology, Belgium
12:15pm - 1:15pm	**Teaching Engineering Skills** Location: **AAC008** Session Chair: **Jennifer Ann Griffiths**
	INTERVENTION DESIGN AND TEACHING PRACTICE FOR ENHANCING ENGINEERING SKILLS IN READING RESEARCH ARTICLES **Mercè Vilchez[1], Mikhail Vlasov[2], Miquel Torrent[1], Lourdes Rodero-de-Lamo[2], Pedro-Javier Gamez-Montero[1]** [1]Department of Fluid Mechanics, Universitat Politecnica de Catalunya, Terrassa, Spain; [2]Department of Statistics and Operational Research, Universitat Politecnica de Catalunya, Barcelona, Spain
	UNLOCKING NEW POSSIBILITIES IN BIO EDUCATION AND RESEARCH: THE FIBER - FLEXIBLE INTERACTIVE BIOREACTOR **Lucca Johann Leal, Alfred Joseph Thekkiniyath, Kai Fordham-Brown, Raja Toqeer, Joy Mukherjee** University of Sheffield, United Kingdom
	Who is who in algo foo **Pia Niemelä, Jenni Hukkanen, Jaakko Rajala, Eerik Voimanen, Xinyi Yang, Hannu-Matti Järvinen** Tampere University, Finland
	Lessons learned from the first edition of a large second-year course in software construction **Shardul Chiplunkar, Clément Pit-Claudel** EPFL, Switzerland
12:15pm - 1:15pm	**Developing Engineering Educators** Location: **AAC014** Session Chair: **Greet Langie**

PIONEERING PEDAGOGY: UNVEILING THE POTENTIAL OF PODCASTING IN ENGINEERING EDUCATION FROM EDUCATORS' PERSPECTIVE

Jeanette Engzell[1], **Ina Peters**[2], **Charlotte Norrman**[1]
[1]Linköping University, Sweden; [2]Technische Universität Berlin

The contribution of Debate to Faculty Development: The Italian case study of the Faculty of Engineering at Cattaneo University

Manuele De Conti[1], **Raffaella Manzini**[2]
[1]Università Cattaneo - LIUC, Italy; [2]Università Cattaneo - LIUC, Italy

EJEE this century in the words of two Editors in Chief

Bill Williams[1,2]
[1]TUDublin; [2]CEGIST, Instituto Superior Técnico, Universidade de Lisboa

TAKING THE INITIATIVE FOR INNOVATION IN ENGINEERING EDUCATION – LAUNCHING THE IDEE MODEL

Annoesjka Cabo[1], **Kristina Edström**[1,2], **Lisanne Roseboom**[1]
[1]Delft University of Technology, The Netherlands; [2]KTH Royal Institute of Technology, Sweden

12:15pm - 1:15pm

Online and Onsite Learning
Location: **AAC020**
Session Chair: **Henning Meyer**

E4E – Engineers for Europe: a study about the future of Engineering profession

Alfredo Soeiro[1], **Martin Barrett**[2], **Keith Sunderland**[2], **Joao Pego**[3], **Ana Freitas**[3]
[1]AECEF, Portugal; [2]Technical University Dublin; [3]Universidade Porto

Utilizing flipped classroom approaches offered in a joint programme: opportunities and challenges

Hamed Moghaddasi
University of Strathclyde, United Kingdom

ENHANC(E)ing Engineering Perspectives: The European MOOC Responsible Innovators of Tomorrow

Marie Decker, Sebastian Bernhard, Julia Berg-Postweiler, Evamaria Fauster, Carmen Leicht-Scholten
Research Group Gender and Diversity in Engineering, RWTH Aachen University, Germany

An exploratory analysis of student behaviour, performance and evaluation in hybrid and blended first year bachelor calculus course

Annechien Sarah Helsdingen, Manuela Pineros-Rodriguez
EPFL, Switzerland

12:15pm - 1:15pm

Tools to support learning in Interdisciplinary Challenges
Location: **AAC108**
Session Chair: **Esther Ventura-Medina**

BRIDGING THE GAP: EFFECTIVE COMMUNICATION AND PROJECT LEADERSHIP IN CHALLENGE-BASED LEARNING

Marta Aguilar-Perez[1], **Peter Hagström**[2], **Jordi Olivella-Nadal**[1]
[1]Universitat Politècnica de Catalunya, UPC, Spain; [2]KTH

Leveraging Collaborative Digital Platforms for Supervising Project-Based Learning Activities: A Case Study

Jérémy La Scala, Denis Gillet
École Polytechnique Fédérale de Lausanne, Switzerland

THE ARTEFACT PROJECT'S RECIPE FOR INTERDISCIPLINARY SUCCESS

Joanna Bates, Julian Dean, Lewis Owen, Lynne Newcombe
The University of Sheffield, United Kingdom

Real-life cases in Challenge-based learning

Hanne Løje, Nina Qvistgaard
DTU, Denmark

12:15pm - 1:15pm

Socially Responsible Design
Location: **AAC114**

DEVELOPING SOCIALLY RESPONSIBLE ENGINEERS THROUGH ENGINEERS WITHOUT BORDERS' ENGINEERING FOR PEOPLE DESIGN CHALLENGE

Christopher J. M. Smith, Alan Nesbitt
Glasgow Caledonian University, United Kingdom

Experiential Learning for Enhanced Understanding of Disabilities: A Pathway to Inclusive Design through Engaging Students with Accessibility Challenges

Mary Carden[1], **Mary Nolan**[1], **Lizbeth Goodman**[2]
[1]ATU Sligo, Ireland; [2]UCD, Dublin, Ireland

Glassboxing the Blackbox: On how Social Reality gets loaded into Engineering Design

Kamakshi Khosla, Aditi Kothiyal, Sameer Sahasrabudhe
Indian Institute of Technology, Gandhinagar, India

Development of a Pan-European Citizen Lab within a European University Alliance Using Action Design Research

Karlis Valtins[1], **Zane Emilija Sarma**[1], **Emily Kouzaridi**[2], **Karine Lan**[3]
[1]Riga Technical University, Latvia; [2]Cyprus University of Technology, Cyprus; [3]European University of Technology, Secretariat General

12:15pm - 1:15pm

Arts-based Education of Acting, Thinking and Feeling
Location: **AAC120**

EXPLORING THE IMPACT AND CHALLENGES OF AN EMBODIED AND IMPROVISATION-BASED COURSE: INSIGHTS FROM ENGINEERING STUDENTS

Melanie Studer[1], Emily Cross[2], Simon Henein[1]
[1]Ecole Polytechnique Fédérale de Lausanne, Switzerland; [2]Eidgenössische Technische Hochschule Zürich, Switzerland

Writing-to-Engage: An Approach to Enhance Creative Problem-Solving through Writing Prompts in Engineering Courses

Krista Speicher Sarraf, Rebekah Oulton
California Polytechnic State University, San Luis Obispo, United States of America

POPULAR FILMS ENCOURAGE ENGINEERING STUDENTS TO REFLECT ON RESEARCH METHODS

Ninna Isabel Makrinov, Nikos Katsanakis, Zhou Lin, Crawford Koltai Gabriella
WMG, University of Warwick, United Kingdom

DOES ARTS TRULY PROMOTE SCIENCE? AN INVESTIGATION INTO THE IMPACT OF ARTS EDUCATION ON THE RESEARCH PERFORMANCE OF SCIENCE AND ENGINEERING GRADUATE STUDENTS IN TOP CHINESE UNIVERSITIES

Wei Yao[1], Wengang Xie[2], Shuxian Yang[2], Shenfan Qian[2]
[1]Institute of China's Science, Technology and Educaion Policy, Zhejiang University, Hangzhou, China; [2]School of Public Afairs, Zhejiang University, Hangzhou, China

12:15pm - 1:15pm

Generative AI and LLMs
Location: AAC132
Session Chair: **Kim Lynn Uittenhove**

Leveraging Generative AI for Assessing Student Reports in Engineering Education

Saul Garcia Huertes, Ramon Bragós Bardia, Eva Vidal Lopez, Sandra Bermejo Broto
Universitat Politècnica de Catalunya, Spain

More than ChatGPT – additional AI tools for different teaching-learning scenarios

Felix Huening
University of Applied Science Aachen, Germany

Uses and Impacts of LLMs on the Learning Experience of Future Engineers: Case Studies in the Context of a French Engineering School

David Rodriguez[1], Firas Mourad[1], Cécilia Vatus[1], Estelle Blavy[2]
[1]Icam site de Toulouse, France; [2]Icam site de Strasbourg-Europe, France

Prompt Potential: A Pilot Assessment of Using Generative Artificial Intelligence (ChatGPT-4) as a Tutor for Engineering and Maths

Sasha Nikolic[1], Ashley Heath[1], Bao Anh Vu[1], Scott Daniel[2], Armin Alimardani[1], Carolyn Sandison[1], Xiaoping Lu[1], Brad Stappenbelt[1], David Hastie[1]
[1]University of Wollongong, Australia; [2]University of Technology Sydney, Australia

12:15pm - 1:15pm

Engagement and Disengagement
Location: AAC137
Session Chair: **Emanuela Tilley**

The impact of Active Learning strategies on redesigned interdisciplinary engineering courses using Case-Based Learning

Janneke Massa, Greta Bozzelli, Martina Gueci, Eric Lutters
University of Twente, Enschede, The Netherlands

Rule-based access to learning materials in a Flipped class in embedded programming

Ole Schultz
DTU, Denmark

"ONCE I FINALLY UNDERSTAND THE CONCEPT, I WON'T RETHINK AND REDO IT AGAIN, BECAUSE I NOW HAVE THAT VISUAL AND THAT ENTIRE CONCEPT IN MY HEAD TO THINK BACK ON": STUDENTS MENTAL MODELS WHEN USING MECHANICAL OBJECTS AS LEARNING AIDS

Mohammed El Kihal, Diana Bairaktarova
Virginia Polytechnic Institute and State University, United States of America

Student Absenteeism at Engineering Degrees: a case study at Barcelona School of Industrial Engineering

Elisabet Mas de les Valls, Roser Capdevila, Núria Pla-Garcia, Roger Castells-Martínez, Marcel·la Castells-Sanabra
Universitat Politècnica de Catalunya · BarcelonaTech, Spain

12:15pm - 1:15pm

Gender and Engineering Experiences
Location: AAC231
Session Chair: **Vivek Ramachandran**

IMPROVING ACCESS AND PARTICIPATION OF WOMEN TO ENGINEERING RESEARCH

Freeha Azmat[1], Mark Elliott[2], Joanna Collingwood[1]
[1]University of WARWICK, United Kingdom; [2]University of Birmingham

Using Narratives to Explore Social Influences on the Identities of Women Students in Engineering: Two Case Studies

Shameela Arbi, Corrinne Shaw, Bruce Kloot
University of Cape Town, South Africa

Exploring analytical frameworks to investigate power dynamics in collaborative learning in engineering education

Sandra Ireri Cruz Moreno, Shannon Chance
Technological University Dublin, Ireland

Exploring Gender Differences In Professional Competencies In Engineering Students. Insights From The Prefer Match Test

Sofie Craps, Marie Matthijs, Mieke Cannaerts
KU Leuven, Belgium

1:15pm - 2:15pm **Sponsors' and partners' lunch**

1:15pm - 2:15pm **Lunch break 3**
Location: SG Main Hall

	Location: SG Main Hall
2:15pm - 3:15pm	**Well-being session 2: Catch up on emails**
2:15pm - 3:15pm	**WS session 3-2-01** Location: **SG01**
	REFINING A TAXONOMY AND LEXICON FOR CONTINUING ENGINEERING EDUCATION **Christopher J. M. Smith[1], Patricia Olga Caratozzolo Martelliti[2], Sonia M. Gomez Puente[3], Bente Nørgaard[4], Hans-Ulrich Heiß[5], Matias Urenda Moris[6]** [1]Glasgow Caledonian University, United Kingdom; [2]Tecnologico de Monterrey Mexico City, Mexico; [3]Eindhoven University of Technology Eindhoven, The Netherlands; [4]Aalborg University Aalborg, Denmark; [5]TU Berlin Academy for Professional Education Berlin, Germany; [6]Uppsala University Uppsala, Sweden
2:15pm - 3:15pm	**WS session 3-2-02** Location: **SG0211**
	Skills-based workshop for educators navigating a Volatile, Uncertain, Complex and Ambiguous world using recently co-created tools **Jonathan Truslove[1], Sarah Hitt[2], Cindy Cooper[3], Emma Crichton[1]** [1]Engineers Without Borders UK, United Kingdom; [2]New Model Institute for Technology and Engineering (NMITE); [3]The Lemelson Foundation
2:15pm - 3:15pm	**WS session 3-2-03 Sponsor WS** Location: **SG0213**
	Videos in education and research **Matthias Spirig, Markus Buerer** Switch, Switzerland
2:15pm - 3:15pm	**WS session 3-2-04** Location: **AAC008**
	Chasing Career Readiness: Raising Engineers for Critical and Ethical Information Gathering and Analysis to Solve Complex Problems **Mark Andrew Natanael, Marta Bracha** Elsevier, United States of America
2:15pm - 3:15pm	**WS session 3-2-12** Location: **AAC014**
	Lifelong learning as an engineering educator: A hands-on co-creation exercise to enhance engineering students' lifelong learning competencies **Lynn Van Den Broeck[1], Rani Dujardin[1], Sofie Craps[1], Johanna Naukkarinen[3], Una Beagon[2], Caitriona DePaor[2], Aimee Byrne[2]** [1]KU Leuven, Belgium; [2]TU Dublin, Ireland; [3]LUT University, Finland
2:15pm - 3:15pm	**WS session 3-2-05** Location: **AAC020**
	Actively engaging with a code of conduct to foster responsible and inclusive behavior. **Pleun Hermsen, Sjoerd Van Dommelen, Paula Hueso Espinosa** Delft University of technology, Netherlands, The
2:15pm - 3:15pm	**WS session 3-2-06** Location: **AAC108**
	THE LEARNING STATION MODEL: CO-CREATION WITH STUDENTS AND STAKEHOLDERS AS A PRACTICE FOR KNOWING, THINKING, FEELING AND DOING **Emrah Acar[1], Semra Ahmetolan[1], Merve Çalımlı Akgün[1], Emine Görgül[1], Emma Henderson[2], Ross Maclachlan[2], Scott Strachan[2]** [1]Istanbul Technical Unversity, Turkiye; [2]University of Strathclyde, Scotland
2:15pm - 3:15pm	**WS session 3-2-07** Location: **AAC114**
	What more can I/we do? Exploring the potential of humor and activism for accelerating educational transformation **Maria Berge[1], Johanna Lönngren[1], Anne Peters[2]** [1]Umeå University, Sweden; [2]KTH Royal Institute of Technology, Sweden
2:15pm - 3:15pm	**WS session 3-2-08** Location: **AAC120**
	DESIGNING TEACHING AND LEARNING ACTIVITIES IN DIFFERENT LEARNING SPACES: CONSIDERING PACE, PLACE AND PEDAGOGY **Trine Højberg Andersen[1], Sylvia Grommen[2], Guri Sivertsen Korpås[1]** [1]NTNU, Norway; [2]KU Leuven, Belgium
2:15pm - 3:15pm	**WS session 3-2-09** Location: **AAC132**
	Promoting and Facilitating a Human Rights-based Approach to AI Development: a Workshop for an Engineering Audience **Emma Kallina[1,2], Sofia Kypraiou[2], Caitlin Kraft-Buchman[2]** [1]University of Cambridge, UK; Women at the Table, Switzerland; [2]Women at the Table, Switzerland
2:15pm - 3:15pm	**WS session 3-2-10** Location: **AAC137**
	Beyond "Just play with it!": A rubric to help teachers design Jupyter notebooks for instructional efficiency **Cécile Hardebolle[1], Aditi Kothiyal[2], Pierre-Olivier Vallès[1], Maria Carla Di Vincenzo[1], Urs Brändle[3], Katrin Bentel[3], Daniel Flück[3], Patrick Jermann[1]** [1]Ecole Polytechnique Fédérale de Lausanne, Switzerland; [2]IIT Gandhinagar, India; [3]Eidgenössische Technische Hochschule Zürich, Switzerland
2:15pm - 3:15pm	**WS session 3-2-11** Location: **AAC231**
	Engineering a Sustainable Future: Inspiring next STEM generation by Innovation **Barbora Bruant Gulejova[1], Denis Gillet[2]** [1]University Bern, Switzerland; [2]EPFL, Switzerland
3:15pm - 3:45pm	**Refreshment Break 3-2** Location: **SG Main Hall**

3:45pm - 4:45pm	**Well-being session 3: Search for a recipe for fondue moitié-moitié**
3:45pm - 4:45pm	**Ethics and Sustainability in Engineering Programmes** Location: **SG01**
	EXPLORING THE EFFECT OF CHANGES IN THE FORMULATION OF LEARNING OUTCOMES ON THE TEACHING AND LEARNING OF ETHICS IN ENGINEERING PROGRAMMES IN SOUTH AFRICA **Alison Joy Gwynne-Evans** University of Cape Town, South Africa
	Integrating Responsible Innovation into Engineering Education: Insights from Scenario Leads at UCL's Integrated Engineering Programme **Vivek Ramachandran, Kate Roach, Emanuela Tilley** University College London, United Kingdom
	THE EMERGENCE OF ENGINEERING EDUCATION 5.0 IN A NEW INDUSTRIAL ERA **Louise O'Gorman[1], Mark Brown[2], Margaret Leahy[2], Paul Young[2]** [1]Atlantic Technological University, Ireland; [2]Dublin City University, Ireland
	ON STUDENTS' FUTURE READINESS REGARDING SUSTAINABLE DEVELOPMENT **Daniel Einarson, Kamilla Klonowska** Kristianstad University, Sweden
3:45pm - 4:45pm	**WS session 3-3-12 Sponsor WS** Location: **SG0211**
3:45pm - 4:45pm	**Attracting Students to STEM Education** Location: **SG0213**
	ENGINEERING PRACTICES AND CORE CONCEPTS IN SCHOOLS: TEACHING THE FUTURE ENGINEERS **Cristina Simarro[1], Digna Couso[2]** [1]Universitat Politècnica de Catalunya, Spain; [2]Universitat Autònoma de Barcelona, Spain
	Developing a better understanding of impact evaluation of STEM outreach programmes – a comparative study exploring teachers' and outreach evaluators' perspective **Youn Affejee, Freeha Azmat, Michael Mortenson, Robin Clark** University of Warwick, United Kingdom
	MIRTE: an affordable, open, mobile robot education platform **Martin Klomp, Khaldon Araffa, Gillian Saunders-Smits** Delft University of Technology, the Netherlands
	CAREER PATH INFLUENCES: A THEMATIC ANALYSIS AMONG PRACTICING ENGINEERS AND FORMER ASPIRANTS **Meryn McNea[1], Reena Cole[1], David Tanner[1], Diarmaid Lane[2]** [1]School of Engineering, University of Limerick, Ireland; [2]School of Education, University of Limerick, Ireland
3:45pm - 4:45pm	**Curriculum Redesign** Location: **AAC008** Session Chair: **Thies Johannsen**
	EXAMINING BEST PRACTICES IN CURRICULUM DESIGN: INSIGHTS FOR ENGINEERING EDUCATION **Asrun Matthiasdottir[1], Haraldur Audunsson[1], Valentina Dagienė[4], Siegfried Rouvrais[3], Arlinta Barus[4], Cecile Gerwel Proches[2]** [1]Reykjavik University, Iceland; [2]Graduate School of Business & Leadership (GSB&L); [3]IMT Atlantique; [4]Vilnius University
	Systems Change Lab: An experiment in radical collaboration to reimagine engineering degrees for the 21st century (Practice) **Jonathan Truslove, Emma Crichton** Engineers Without Borders UK, United Kingdom
	COLLABORATIVE COURSE (RE)DESIGN: ADAPTING ABC LEARNING DESIGN TO SUPPORT CURRICULUM TRANSFORMATION **Janet Y. King, Roseidys C.M. Primera, Marie-José Verkroost, Laura Cray, Lisanne Verheij, Justine I. Blanford** University of Twente, Netherlands, The
	A CRITICAL DISCUSSION OF ACTIVE LEARNING IS NEEDED **Jonte Bernhard** Linköping University, Sweden
3:45pm - 4:45pm	**Resilience & Emotional Capabilities** Location: **AAC014** Session Chair: **Roland Tormey**
	The Inclusion of Emotional Intelligence in Engineering Education: A Review **Natalie Wint** Centre for Engineering Education (CEE), UCL, United Kingdom
	(RE)DEFINING ENGINEERS' RESILIENCE: AN EXPLORATORY STUDY INTO HOW ENGINEERING STUDENTS UNDERSTAND RESILIENCE (RESEARCH) **Natalie Wint[1], Inês Direito[2]** [1]Centre for Engineering Education (CEE), UCL, United Kingdom; [2]University of Aveiro, Portugal
	Resilience in Context: A Comparative Study of Engineering Students in the United Kingdom and South Africa **Curwyn Mapaling[1], Natalie Wint[2]** [1]Department of Psychology, University of Johannesburg, South Africa; [2]Centre for Engineering Education, University College London, United Kingdom
	Intellectual Humility, Empathy, and Resistance to Change among Science and Engineering Students **Johannes Strobel, Emmanuel Sepulveda Guzman, Maartje Van den Bogaard, Mara N. Medina** University of Texas at El Paso, United States of America
3:45pm - 4:45pm	**WS session 3-3-05** Location: **AAC020**
	Leading the Development of EER Books and Special Issues **Shannon Chance[1,2], Adiya Johri[3], Tom Børsen[4], Diana Adela Martin[2], Kristina Edström[5], John E. Mitchell[2], Sally Male[6], Inês Direito[7,2]** [1]TU Dublin; [2]UCL; [3]George Mason University; [4]Aalborg University; [5]KTH Royal Institute of Technology; [6]University of Melbourne; [7]University of Aveiro

3:45pm - 4:45pm	**WS session 3-3-06** Location: **AAC108**
	Strengthening Student Learning: From Outcome-based to Process-based Learning **Peter Ruijten-Dodoiu, Ana Valencia, Eugenio Bravo** Eindhoven University of Technology, The Netherlands
3:45pm - 4:45pm	**WS session 3-3-07** Location: **AAC114**
	Evaluating and transforming you and your colleagues' assessments in an age of generative AI **Peter R Neal[1], Scott Daniel[2], Ghulam M. Hassan[3], Sarah Grundy[1], Rezwanul Haque[4], Sasha Nikolic[5], Marina Belkina[6], Sarah Lyden[7], Caz Sandison[5]** [1]School of Chemical Engineering, University of New South Wales, Sydney, Australia; [2]School of Professional Practice & Leadership, University of Technology Sydney, Sydney, Australia; [3]School of Computer Science & Software Engineering, University of Western Australia, Perth, Australia; [4]School of Science, Technology and Engineering, University of the Sunshine Coast, Sippy Downs, Australia; [5]Faculty of Engineering and Information Sciences, University of Wollongong, Wollongong, Australia; [6]College, Western Sydney University, Sydney, Australia; [7]School of Engineering, University of Tasmania, Hobart, Australia
3:45pm - 4:45pm	**WS session 3-3-08** Location: **AAC120**
	Game On: Inclusivity in STEM teacher training through interactive play **Ditte Strunge Sass, Malene Bolding** Technical University of Denmark, Denmark
3:45pm - 4:45pm	**WS session 3-3-09** Location: **AAC132**
	PROMOTING FRIENDSHIP THROUGH TEAMWORK IN UNDERGRADUATE ENGINEERING: EXPLORING TOGETHER THE ROLE OF THE INSTRUCTOR **Anita Lee Campbell[1], Mariam Makramalla[2], Aristides Pablo Carrillo Fernandez[3], Diana Bairaktarova[4]** [1]University of Cape Town; [2]Newgiza University; [3]Purdue University; [4]Virginia Polytechnic Institute and State University
3:45pm - 4:45pm	**WS session 3-3-10** Location: **AAC137**
	Workshop Students Taking Responsibility for Their Learning **Olga Ioannou, Sylvia Mooij, Caroline Wehrmann** Delft University of Technology, The Netherlands
3:45pm - 4:45pm	**WS session 3-3-11** Location: **AAC231**
	Creating experiential activities to teach transversal skills in your course with a backward design template **Siara Isaac, Joelyn de Lima, Valentina Rossi, Yousef Jalali** Ecole polytechinque Fédéerale de Lausanne, Switzerland
7:00pm - 11:30pm	**Gala Dinner** Location: **Aquatis**

Date: Thursday, 05/Sept/2024

7:30am - 9:00am	**Wellbeing Activities Thursday**
9:00am - 10:10am	**Donna Riley: Engaging Moral Imagination in Engineering Ethics Education** Location: **SG01** Session Chair: **Patrick Jermann**
10:10am - 10:30am	**Educating Responsible Engineers: Community and Action** Location: **SG01** Session Chair: **Patrick Jermann**
10:30am - 11:00am	**Refreshment Break 4-1** Location: **SG Main Hall**
11:00am - 12:00pm	**Teaching Responsible Engineering** Location: **SG01**
	Responsible Research and Innovation in Higher Education – An Approach to Strengthen the Social Responsibility of Engineering Students **Clara Lemke, Carmen Leicht-Scholten** RWTH Aachen, Germany
	USING DELIBERATE DISCUSSIONS TO DEVELOP A RESPONSIBLE ENGINEERING MINDSET AMONG STUDENTS **Aditya Johri, Ashish Hingle** George Mason University, United States of America
	Rewarding Responsibility: Constructing a Responsible Artificial Intelligence Competition for Future Engineers **Robin Ann Downey[1], Marco Rossi[2], Silvan Schwaller[3]** [1]Bilkent University, Turkiye; [2]MathWorks; [3]FİGES
	Preparing Future Engineers for Responsible Technology Development by Disciplinary Irritation in Inter- and Transdisciplinary Teaching **Ina Peters, Tim Hildebrand, Sabine Ammon** Technische Universität Berlin, Germany
11:00am - 12:00pm	**Simulations in Engineering Education** Location: **SG0211** Session Chair: **Aditi Kothiyal**
	Can you Teach Cell Biology using Computer Simulations? **Julian Charles Shillcock** Ecole polytechnique fédérale de Lausanne, Switzerland
	How to deploy simulations to enhance practical engineering education **Chalak Omar, Andrew Garrard, Edward Browncross** The University of Sheffield, United Kingdom
	LARGE GROUP AR LAB EXPERIMENT SIMULATION TO INCREASE STUDENT PARTICIPATION **Edward Browncross, Krys Bangert, Matteo Di Benedetti** The University of Sheffield, United Kingdom

11:00am - 12:00pm

Teaching for Inclusivity in Engineering programmes
Location: **SG0213**
Session Chair: **Joelyn de Lima**

EQUITY AND EXAMINATION TIME PRESSURE IN FIRST YEAR MATHEMATICS FOR ENGINEERS

Roland Tormey[1], Alexandra Niculescu[1], Himanshu Verma[2], Cécile Hardebolle[1], Simone Deparis[1]
[1]Ecole polytechnique fédérale de Lausanne, Switzerland; [2]TU Delft, Netherlands

FIRST-YEAR ENGINEERING STUDENTS' MATHEMATICAL SKILLS AND PERCEPTIONS OF STUDYING MATHEMATICS

Riikka Kangaslampi[1], Terhi Elina Kaarakka[1], Paula Immonen[2], Mikko Äijälä[2], Jani Hirvonen[1], Barkat Bhayo[2], Markku Kuosa[2], Johanna Naukkarinen[2]
[1]Tampere University, Finland; [2]Lappeenranta-Lahti University of Technology LUT, Finland

Teaching with a gender lens: insights from a guide to inclusive practices in civil engineering

Irene Josa[1], Ivet Ferrer[2], Esther Real[3]
[1]The Bartlett School of Sustainable Construction, University College London, United Kingdom; [2]GEMMA - Group of Environmental Engineering and Microbiology, Department of Civil and Environmental Engineering, Universitat Politècnica de Catalunya (BarcelonaTech); [3]Department of Civil and Environmental Engineering, Universitat Politècnica de Catalunya (BarcelonaTECH)

11:00am - 12:00pm

Critical approaches in Project based learning
Location: **AAC008**

ENHANCING ENGINEERING STUDENT ENGAGEMENT WITH INNOVATIVE FINANCIAL INVESTMENT METHOD FOR PEER ASSESSMENT: A PILOT STUDY

Andrius Jurelionis, Gintarė Stankevičiūtė, Ignacio Villalon Fornes, Lina Morkūnaitė
Kaunas University of Technology, Lithuania

NAVIGATING THE UNKNOWN: INTRODUCTION OF AN ANALYSIS METRIC FOR THE SPRINT PLAN AND SPRINT REVIEW IN EDUCATIONAL AGILE DEVELOPMENT PROJECTS

Mark Oliver Zander, Mirko Meboldt
Product Development Group Zurich, Department of Mechanical and Process Engineering, ETH Zurich, Zurich, Switzerland

Critical thinking and problem-solving: challenges for students

Malin Wiger, Björn Oskarsson
Linköping University, Sweden

EDUCATING FUTURE ENGINEERS THROUGH MULTIDISCIPLINARY PROJECT WEEKS TO ETHICALLY AND INCLUSIVELY ADDRESS THE GLOBAL CHALLENGE OF SUSTAINABILITY

Raja Toqeer, Chalak Omar, Michael Wright, Stephen Beck, Andrew Garrard
University of Sheffield, United Kingdom

11:00am - 12:00pm

Building Thinking Capacity
Location: **AAC014**
Session Chair: **Arjan Lock**

EVALUATING IDEA GENERATION HEURISTICS BY MEANS OF SCHEMATA AND SEARCH

Gavin Buskes[1], Iouri Belski[2]
[1]The University of Melbourne, Australia; [2]Royal Melbourne Institute of Technology

INTEGRATING VARIATION THEORY AND COGNITIVE THEORY IN ENGINEERING CLASSROOMS: EFFECT ON STUDENT ACHIEVEMENT

Mahbub Hasan, Aysha Siddika, Nafiz Imtiaz Bin Hamid, Md. Shahadat Hossain Khan
Islamic University of Technology, Bangladesh

Intended Learning Outcomes on Process Level in an Engineering Course with Knowledge-Based Learning Outcomes

Peter Ruijten-Dodoiu, Ana Valencia, Eugenio Bravo
Eindhoven University of Technology, The Netherlands

11:00am - 12:00pm

WS Session 4-12 Sponsor WS
Location: **AAC020**

AI in the Classroom: A Tool for Lecturers or a New Discipline?

Stefano Olivieri, Alex Tarchini
MathWorks, Italy

11:00am - 12:00pm

WS Session 4-06
Location: **AAC108**

ENGINEERING EDUCATION RESEARCH: REVIEWING JOURNAL MANUSCRIPTS FAIRLY, CONSTRUCTIVELY, AND EFFECTIVELY

Kristina Edström[1], David Knight[2], Joyce Main[3], Sally Male[4], Gareth Thomson[5], Jonte Bernhard[6], Maartje van den Bogaard[7], Shannon Chance[8], Xiangyun Du[9], Greet Langie[10], Diana Martin[11], John Mitchell[11]
[1]KTH Royal Institute of Technology, Sweden; [2]Virginia Tech, USA; [3]Purdue University, USA; [4]University of Melbourne, Australia; [5]Aston University, UK; [6]Linköping University, Sweden; [7]The University of Texas at El Paso, USA; [8]TU Dublin, Ireland; [9]Aalborg University, Denmark; [10]KU Leuven, Belgium; [11]UCL, UK

11:00am - 12:00pm

WS Session 4-07
Location: **AAC114**

Establishing centra for engineering education development – sharing experiences

Reidar Lyng, Elizabeth Bogal-Allbritten, Gabrielle Hansen, Guri Korpås, Geir Egil Dahle Øien
NTNU Norwegian University of Science and Technology, Norway

11:00am - 12:00pm

WS Session 4-08
Location: **AAC120**

EXPLORING DEI IN TEACHER PROFESSIONAL DEVELOPMENT IN ENGINEERING EDUCATION: WHAT, HOW AND WHY?

Becky Bergman[1], Esther Ventura-Medina[2], Caroline Vonk[2], Kathinka Rijk[2], Jan Van Maele[3]
[1]Chalmers University of Technology, Sweden; [2]Eindhoven University of Technology; [3]KU Leuven

11:00am - 12:00pm

WS Session 4-09
Location: **AAC132**

PUT A FILTER ON IT…the art of reframing practical teaching activities

Harry Day, Andrew Garrard
University of Sheffield, United Kingdom

11:00am - 12:00pm	**WS Session 4-10** Location: **AAC137** **Addressing issues related to running and assessment of group work in engineering education - Workshop** **Maria del Pilar Garcia Souto**, **Ademola Odunsi**, **Justin Siefker**, **Fiona Truscott**, **Alan Seatwo** UCL, United Kingdom
11:00am - 12:00pm	**WS Session 4-11 Sponsor WS** Location: **AAC231**
12:15pm - 1:15pm	**Awards and Closing Ceremony** Location: **SG01** Session Chair: **Patrick Jermann**