

Polytechnic Summit 2022

Hochschule Darmstadt - University of Applied Sciences

June 28 to 30

CET/ GMT+2	TUESDAY, 28. JUNE	CET/ GMT+2	WEDNESDAY, 29. JUNE	CET/ GMT+2	THURSDAY, 30. JUNE
		12:00 am - 1:00 pm	Lunchbreak		
		1:00 pm - 2:00 pm	Conference Registration/foyer on the second floor		
2:00 pm	Opening Reception - Arnd Steinmetz, President Darmstadt University of Applied Sciences	2:00 pm	Keynote - Klaus-Michael Ahrend, Executive Board HEAG Holding AG Investment Management of City of Darmstadt	2:00 pm	Keynote - Michael Lacourse, Provost and Vice President for Academic Affairs, Utah Tech University
2:15 pm	Welcome Speech Themis Christophidou, Director-General for Education, Youth, Sport and Culture, European Commission	2:30 pm	„Bridging the Research Practice Gap: A Practitioner's Views on University Education“	2:30 pm	“Designing an Open Polytechnic University”
2:15 pm	Roundtable Dialogue - Sophia Eriksson Waterschoot, Director for Youth, Education and Erasmus+, European Commission and Arnd Steinmetz, President Darmstadt University of Applied Sciences	2:40 pm	GPEA Leaders Roundtable - Elizabeth Barajas, Director of Globalization, Purdue Polytechnic Institute;	2:40 pm	Session A5 - Applied Research
2:45 pm	„Shaping the University of the future“	3:55 pm	Mike Murphy, Director, TU Dublin; Glendali Rodriguez, Provost and Vice Chancellor Academic Affairs, University of Wisconsin-Stout; Arnd Steinmetz, President Darmstadt University of Applied Sciences; Stephen Wittkopf, Head of International Relations of the Lucerne School of Engineering and Architecture, Lucerne University of Applied Sciences and Arts	3:40 pm	Session B5 Global Teaching
2:55 pm	Session A1 - Applied Research			3:40 pm	Coffee Break
3:55 pm	Session B1 Sustainability			4:00 pm	
3:55 pm	Coffee Break	3:55 pm	Coffee Break		
4:15 pm		4:15 pm			
4:15 pm	Session B2 - „COILS“	4:15 pm	Session A4 - Applied Research		
4:45 pm	Diana Hintea, Associate Head of School of Computing, Electronics and Maths, Coventry University	6:15 pm	Session B4 Sustainability	4:00 pm	Poster Presentation (virtually) - In Transition to a Pure Green Energy Economy
4:50 pm	Session A3 - Applied Research			6:00 pm	International Summer University Professorship: Sebastian Herold, Darmstadt University of Applied Science and Kevin Taylor, Purdue University
6:50 pm	Session B3 Practice Based Learning			6:00 pm	Closing Reception - Nicole Saenger, Vice President for Research and Sustainable Development, Darmstadt University of Applied Sciences
7:00 pm	Social Event <i>organized</i> Dinner at Schöffers	6:30 pm	Social Event <i>organized</i> Guided City Tour Mathildenhöhe	6:15 pm	
				6:30 pm	Social Event <i>not-organized</i> Darmstadt City festival „Heinerfest“ Opening

■: Plenary & Sessions B in Studierendenhaus C 23, Room 02.04

■: Sessions A in Studierendenhaus C 23, Room 02.03

■: Networking

TUESDAY, 28. JUNE

Paper Session A1 in C 23 02.03

Applied Research

Chaired by Mike Murphy

„Flow and Aura: Arts and Crafts philosophies made manifest in present-day, hands-on research“, Jonathan Alesch

„Hydraulic Gripper Designs for Enhancing Construction Robotics and Automation“ (virtually), Israa Azzam, Farid Breidi and Jiansong Zhang

„Monitoring Air Pollution Levels in Drive-thru across the UK“, Maher Shehadi and Anitha Chin-naswamy

Paper Session A3 in C 23 02.03

Applied Research & Design

Chaired by Elke Hergenröther

„Development of a Smart Clamping Control for Milling Machines“, Elke Hergenröther, Sven Appel, Fabian Brenner, Julius Weihe, Jakob Wagner, Marina Dervisopoulos, Jonas Bien and Thomas Lagemann

„Combination of CFD visualization and Mixed Reality environments for Fluid Power instruction“, Marvin Durango, Erick Borders, Farid Breidi, Brittany Newell and Jose Garcia-Bravo

„A New Schema of Logic Representation and Reasoning for Automated Building Code Compliance Checking“ (virtually), Fan Yang, Jiansong Zhang, Yunfeng Chen and Luciana Debs

„Improving quality inspections and pinion gear manufacturing processes using machine learning“, Darren Anderson, Gaurav Nanda, Ragu Athinarayanan and Chad Laux

„Curriculum Design: Envisioning a Learning and Workplace Alignment Model for Polytechnic Institutions“, Meenakshi Iyer

„Human-Centered Experiences in Digitally and Data Driven New Product Design and Development Spaces (virtually), David Richter-O'Connell

Paper Session B1 in C 23 02.04

Sustainability

Chaired by Nicole Saenger

„Sarnetz – Teaching fossil independence of a community with a fact based, online game, engaging groups of students for interdisciplinary teamwork“, Uwe W Schulz, Janina Woods and Richard Wetzel

„Women in STEM - A sustainable approach between best practice and challenging structural levels“, Anne Bentrup and Rosa Johanna Gruner

„Using the Community of Practice model to shape approaches to Education for Sustainable Development across disciplines in a Technological University context: A Roundtable Podcast“ (virtually), Dr. Olivia Freeman, Patrice Behan, Shaun Ferns, Sheona Foley, Odette Gabaudan, Alacoque McAlpine, Cormac McMahon and Lucia Walsh

Paper Session B3 in C 23 02.04

Practice-Based-Learning

Chaired by Bernd Steffensen

„Effective Learning with Fun: openArtBrowser“, Bernhard Humm

„Basics of Mathematics via Robotics“, Inna Mikhailova

„Practice-oriented Learning with Focus on Social Responsibility and Environmental Sustainability in Electrical Engineering“, Cosima Klischat and Prof. Dr. Manfred Strohmman

„Capstone Implementation as a Project-Based Learning Course in Engineering Technology Programs“, Maher Shehadi and Kevin Taylor

„Outdoor Education in Irish Primary Schools“ (virtually), Michaela Omojola

WEDNESDAY, 29. JUNE

Paper Session A4 in C 23 02.03

Applied Research

Chaired by Sandra Hartl

„Renewable Energy Storage: Blow-Out Behavior of Ammonia/Hydrogen/Nitrogen-Air Flames“, Martin Richter, Robin Schultheis, James R. Dawson, Andrea Gruber, Robert S. Barlow, Andreas Dreizler and Dirk Geyer

„Influence of Excitation Pulse Length on Laser Induced Breakdown Spectroscopy of Iron and Iron Oxide Particles“, Maximilian Dorscht, Konrad Koschnick, Benjamin Böhm, Andreas Dreizler and Dirk Geyer

„Towards scale reduced modeling of reactive multiphase flows for carbon-free energy supply“, Sören Dübal, Lisanne Gossel, Mathis Fricke, Dieter Bothe and Sandra Hartl

„Investigation of the Temperature dependent Cross Section of Gaseous Formaldehyde“, Kevin Dieter, Martin Richter, Konrad Koschnick, Frank Schael and Dirk Geyer

„Cellular structures of laminar lean premixed H₂/CH₄/air polyhedral flames“, Shuguo Shi, Adrian Breicher, Johannes Trabold, Sandra Hartl, Robert S. Barlow, Andreas Dreizler and Dirk Geyer

Paper Session B4 in C 23 02.04

Sustainability & Internationalization

Chaired by Cormac MacMahon

„Exclusivity as driver for sustainability-oriented knowledge transfer? A contrasting case study on two knowledge transfer projects“, Daniel Feser

„Applying Authentic Assessment to Sustainability Education : A Case Study from Mechanical Engineering“ (virtually), Thomas Treacy, Kevin Delaney, David Salter and Samuel Berry

„Wavelet Analysis and Directors' Dealings“, Michaela Kiermeier

„Shades of Green: Lessons in Sustainability from the Emerald Isle“ (virtually), Helen McNally and Kevin Berwick

„The Qualitative Research about University International Cooperation Trend, Path and Strategy“ (virtually), Zongsheng Chen and Cristinel Constant

THURSDAY, 30. JUNE

Paper Session A5 in C 23 02.03

Applied Research

Chaired by Maher Shehadi

„Molecular tools to study lysine deacylases“, Heinz Neumann and Petra Neumann-Staubitz

„Multidisciplinary Applied Research on Li-ion Battery Cathode Design through CVD Polymer Manufacturing“, Sunghwan Lee, Yuxuan Zhang and Han Wook Song

„The Challenges of Operating Electric Aircraft for Passengers Service Providers“ (virtually), Haoruo Fu, Dongyang Li and Chien-Tsung Lu

Paper Session B5 in C 23 02.04

Global Teaching

Chaired by Manfred Loch

„Two Jobs in One: An Examination of Rookie Teacher/Student Teacher Experiences“, Diane Klemme, Deanna Schultz and Debbie Stanislawski

„Virtual collaboration for Learners of German within EU+ Alliance: DaCaDu Interkulturell“, Catherine Spencer, Natalia Carbajosa, Stefanie Morgret and Uta Hameister

„Using Entrepreneurially Minded Learning to Develop Intercultural Competence as it Relates to Global and Corporate Culture“, Lisa Bosman and Bhavana Kotla