



EuroTech Universities

Excellence in Science and Technology



SYMPOSIUM

EuroTech Universities: An alliance working for global sustainability

MARCH 28TH, 2023





AGENDA OUTLINE:

Climate change is happening, and the growing environmental crisis calls for rapid action to reduce greenhouse gas emissions, phase out fossil fuels, transit to renewable energy, and shift to sustainable consumption and production patterns.

Their primordial role in increasing and imparting knowledge, educating future citizens, and conducting research places universities at the forefront of advancing sustainable development to mitigate climate change. Universities draw on the research conducted in their laboratories in disciplines across the board, and are therefore well placed to drive innovation and harness new findings and discoveries for the green transition.

Sustainability is very high on the agenda of higher education institutions. Many initiatives have been taken to integrate sustainability in the curriculum so as to educate students on the underlying causes of climate change, to facilitate interdisciplinary research and to share knowledge, to foster innovation and to bring about new solutions.

Given the size and urgency of the challenge, we must increase the speed and scale of action and delivery. Such an objective can only be achieved if we join forces. The complexity of the challenge is such that there is no panacea. The successful transition towards sustainable solutions requires careful consideration of a broad range of local and evolving constraints.

On March 28, 2023, researchers and leaders of the six EuroTech universities will convene at École Polytechnique to discuss their institutions' initiatives and Eurotech's common plan of action to implement and accelerate the shift towards sustainability.

The agenda of the symposium will put the spotlight on EuroTech research groups and centers dedicated to sustainability, and on the initiatives and work of students, PhD candidates, and their associations, instrumental in driving the transition towards sustainability. The program comprises round table discussions on the meaning of "Sustainability" and the implications of alternate and co-existing definitions. Each institution will share insights on its actions to involve its community in sustainable development – be it by driving the transition towards a green campus, teaching, research, or entrepreneurship.

Placing collaboration at the center of the exchange, the symposium will enable the EuroTech Alliance to define future joint research projects and a joint action plan towards sustainable development.



8:30 A.M.

OPENING SESSION : **Kees van der Beek**, VP Research, École Polytechnique

WELCOME : **Eric Labaye**, Chairman of the Board and President of École Polytechnique and Institut Polytechnique de Paris

8:45 A.M.

SETTING THE SCENE: SUSTAINABLE DEVELOPMENT AT THE EUROTECH UNIVERSITIES TODAY

A presentation of each EuroTech University's global strategy for sustainability

Moderator: **Kees van der Beek**, Vice-Provost for Research, École Polytechnique

- **Eric Labaye**, President of l'École polytechnique and President of the EuroTech Universities Alliance
- Provost **Rasmus Larsen**, DTU Sustainability Report author
- Prof. **Werner Lang**, TUM Vice President for Sustainable Transformation
- Prof. **Avner Rothschild**, Deputy Senior Vice President for Sustainability, Technion
- **Anna Wieczorek**, TU/e Sustainability Ambassador

9:45 A.M. - COFFEE BREAK - POSTER EXHIBIT IN THE MAIN HALL

10:15 A.M.

GETTING A GRASP ON SUSTAINABILITY: DEFINING OUR GOALS, OUR AMBITIONS, AND OUR LIMITATIONS

Where do we stand now? Which limits do we have? To what extent can technology provide answers?

Understanding sustainability at a global scale requires us to understand complex systems and their connection to society. Will a better definition of sustainability help us to define concrete projects?

Moderator: **Thierry Rayna**, Professor at École Polytechnique and head of IP Paris Chair "Technology For Change"

- Prof. **Avner Rothschild**, Deputy Senior Vice President for Sustainability, Technion
- **Michael Zwicky Hauschild**, Director of the DTU Centre for Absolute Sustainability
- **Thomas Hamacher**, Chair of Renewable and Sustainable Energy Systems, TUM
- **Anna Wieczorek**, TU/e Sustainability Ambassador
- **Patricia Crifo**, Deputy director of the Energy4Climate (E4C) interdisciplinary center, Head of the Research initiative on sustainable finance and responsible investment) - École Polytechnique
- **Agnès Le Tiec**, Deputy to the Vice-President at EPFL, Vice presidency for Responsible Transformation at EPFL

11:20 A.M.

GREEN CAMPUS: SHARING OUR MOST PROMISING ACTIONS

Presentation of each EuroTech university's most remarkable sustainability projects on the campus level and their implementation.

Moderator: **Prof. Avner Rothschild**, Head of the Technion Sustainability Frontier, Technion

- **Lisa Weber**, Climate Action Manager, TUM Sustainability Office
- **Orly Mulla**, Sustainability coordinator, Technion Sustainability Center
- **Sindy Harks**, Real Estate- head of strategy & consultancy, TU/e
- **Philippe Drobinski**, Professor and researcher, Head of the "Energy for Climate" Interdisciplinary Center, École Polytechnique and IP Paris
- **Anders B. Møller**, Director of Real Estate and Facilities at DTU
- **Aurore Nembrini**, Sustainability and Operations Manager; "EPFL sustainable campus"

12:30 P.M. - LUNCH - POSTER EXHIBIT IN THE MAIN HALL

Salon d'honneur (Grand Hall)

An exhibition of posters presenting PhD and student projects and initiatives will be displayed in the main hall.

14:00 P.M.

CUTTING-EDGE RESEARCH AT THE SERVICE OF SUSTAINABILITY

The EuroTech universities present their most successful research on the topic of sustainability, environmental, and climate action.

Moderator: **Provost Rasmus Larsen**, DTU Sustainability Report author

- Prof. **Anders Baun**, Professor, Head of Section Circularity and Environmental Impact, DTU
- **Magnus Fröhling**, Head, Professorship Circular Economy, TUM
- **Sebastian Fendt**, Coordinator TUM.Hydrogen and PtX, TUM
- Dr **Antoine Fromentin**, former Vice-Director of the EPFL Energy Center, EPFL
- Prof. **Eran Friedler**, Head of the Grand Water Institute, Technion
- Prof. **Charlotte Vogt**, principal investigator, Center for Sustainable Processes & Catalysis, Technion
- **Richard van de Sanden**, scientific director, Eindhoven Institute for Renewable Energy Systems (EIRES), TU/e
- Prof. **Yoav Livney**, director of the Technion's Sustainable Protein Research Center, Technion
- **Thierry Rayna**, Professor at École Polytechnique and head of IP Paris Chair "Technology For Change"
- **Jordi Badosa**, Laboratoire de Météorologie Dynamique, Technical Director at E4C, École Polytechnique

15:30 P.M. - COFFEE BREAK

16:00 P.M.

BEYOND AWARENESS: ENGAGING THE COMMUNITY TO STRIVE FOR SUSTAINABILITY

How can we engage the academic community as a whole in sustainable behaviour and actions? This concerns us all: students, academics, researchers at all levels and disciplines.

Moderators: **Revital Rivkin**, Environmental Department Student Representation (Technion) and **Nikan Manschadi**, Environmental Department Student Representation (TUM)

- Students from Technion and TUM - **Liby Manash** (Technion) **Khalid Tafla** (Technion) and **Sina-Marie Rupp** (TUM)
- **Dr. Atar Herziger**, Assistant Professor at the Faculty of Data and Decision Sciences, Technion
- **Pilar Acosta**, Professor at École Polytechnique, Management, innovation and entrepreneurship department
- **Mélanie Studer**, Project manager on Education for sustainability, EPFL
- **Greg Nocton**, Department of Chemistry, École Polytechnique
- Provost **Rasmus Larsen**, DTU Sustainability Report author

17:00 P.M.

SUSTAINABLE SKILLS FOR SUSTAINABLE DEVELOPMENT: TRAINING CURRENT AND FUTURE ENGINEERS

Sustainability and current life cycle assessment, challenge-based learning, as well as interdisciplinary and entrepreneurial skills for sustainability and environmental, and climate action will be addressed.

- **Thomas Hamacher**, Chair of Renewable and Sustainable Energy Systems, TUM
- **Isabelle Reymen**, Scientific Director of TU/e innovation Space, TU/e
- **Riwal Plougouven**, Professor and Head of Education Committee for Sustainability, École Polytechnique
- **Anne Lyck Smitshuysen**, Industrial PhD Student, Department of Energy Conversion and Storage, DTU

18:00 P.M. - RECEPTION COCKTAIL ON THE CAMPUS

20:00 P.M. - END

EUROTECH UNIVERSITIES ALLIANCE

The six EuroTech Universities – Technical University of Denmark (DTU), École Polytechnique (L’X), Eindhoven University of Technology (TU/e), Technical University of Munich (TUM), Ecole polytechnique fédérale de Lausanne (EPFL) and Technion Israel Institute of Technology – are at the forefront of developing solutions to the grand challenges of society, spanning from health (the fight against COVID-19 and cancer) over digitalisation (tapping the full potential of artificial intelligence), industrial competitiveness (additive manufacturing, including automation, simulation and new materials) to the numerous challenges of creating a sustainable society. Contributing to making the European Green Deal a success is a core part of our activities. As technical universities, we connect the dots, bring together all stakeholders, and deliver the integrated approach necessary to leave no one behind.