EPT Day 2024

Industry, employees and students are invited to a full-day seminar on future-focused research, education and career paths at NTNU – Department of Energy and Process Engineering (EPT).

EPT Day 2024

EPT Day 2024 on Tuesday 19th November is a one-day seminar on future-focused research, education and career paths at the Department of Energy and Process Engineering (EPT), NTNU. As a former student / employee you will receive an invitation if you are a member of NTNU alumni. EPT employees and students will receive a personal invitation.

Photos from EPT day 2024

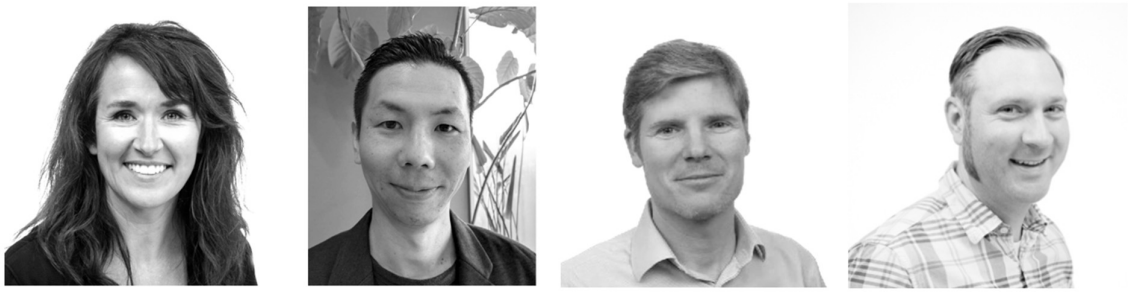
- **When:** 19th November, 09.00-15.00
- **Where:** KJ2 Kjelhuset, Gløshaugen, NTNU
- **For:** All, with a special invitation to students, alumni, industry and employees
- **Cost:** Free
- **Lunch** is served to pre-registered guests (first come, first served)

PROGRAM

08.45 – 09.00 Registration

09:00 – 11.10 Future-focused research at EPT

09:00-10:05



From left: Terese Løvås, Yuhiro Iwamoto, James R. Dawson, Thomas Alan Adams II.

- Welcome and intro: How is EPT contributing to the green transition by Terese Løvås (chair), Professor and Head of Department
- Challenge of Ferrofluid Hydrogen Production for Space Engineering by Yuhiro Iwamoto, Associate Professor at Nagoya Institute of Technology in Japan
- Hydrogen under pressure by James R. Dawson, Professor
- How to spend the next trillion dollars to fight climate change by Thomas Alan Adams II, Professor

10.05 - 10.20 Break

10.20 –11.10

From left: Francesca Verones, Laurent Georges, Anusha Sathyanadh and Yi Hui Tee.

- **Introduction** by Francesca Verones (chair), Professor
- **Smart control for energy flexible buildings** by Laurent Georges, Associate Professor
- **Exploring the Potential of Terrestrial and Oceanic Carbon Dioxide Removal (CDR) Using Earth System Models** by Anusha Sathyanadh, Postdoctoral Fellow
- **Dancing plastics in the ocean: how we planned for the EU Science Fair in Brussel** by Yi Hui Tee, Postdoctoral Fellow

11.10-12 Lunch

12 – 12.50 Lab tour

- **Waterpower lab** by Erik Langørgen, Senior Engineer

- **Fluid Mechanics** (wind tunnel and water channel) by Srikar Yadala V, Researcher
- **Thermal Energy Lab 1: Cooling and heating** (heat pump processes) by Ignat Tolstorebrov, Ass. Professor
- **Thermal Energy Lab 2: Batteries** by Steven Boles, Professor
- **Thermal Energy Lab 3: Indoor environment and climate control of buildings** (including C02 heat pumps for building heating and the operating room of the future) by Laurent Georges, Professor
- **Thermal Energy Lab 4: Combustion and carbon-free fuels** (ammonia, hydrogen) by Håkon Tormodsen Nygård, Researcher

12.50-13.00 Break

13 – 15.00 Green career paths, stories from EPT alumni

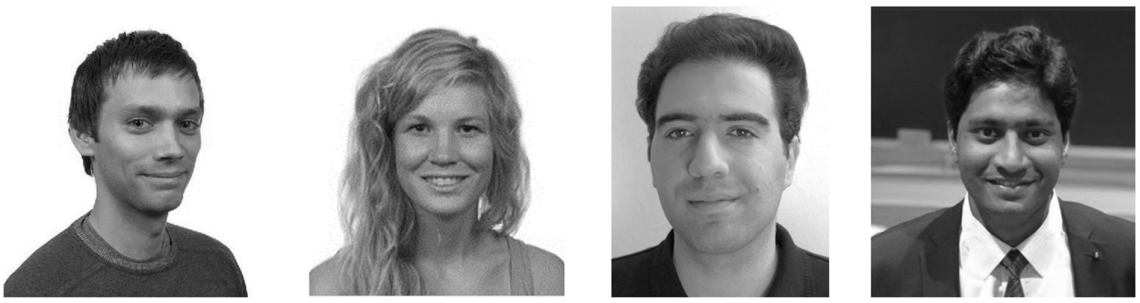
13.00 – 13.50

From left: Ignat Tolstorebrov, Joachim Schmidt, Marte Vestvik and Eline Klevjer, Francesca Verones.

- **Welcome and intro: Student life and work life at EPT** by Ignat Tolstorebrov (chair), Ass. Professor
- **From theory to rocket launch at Propulse NTNU** by Joachim Schmidt, Student, NTNU Propulse
- **What EPT taugth us and what we plan to do with it** by Marte Vestvik, and Eline Klevjer, Students
- **Gender Equality at EPT - the story of EPT Women in Science** by Francesca Verones, Professor

Break 13.42 – 14.00

14.00-14.50



From left: Bjørn Austebø, Anna Knutsen, Mehrad Rabani, Shareq Nazir.

- **Welcome and introduction: PhD study after EPT** by Bjørn Austbø, Ass. Professor
- **Carbon capture and storage (CCS): from research to large scale projects** by Anna Knutsen, Equinor
- **Green HVAC: Hybrid Ventilation Systems for Reduced Lifetime Emissions in Cold Climates** (video) by Mehrdad Rabani, Associate Professor OsloMet and Indoor Climate and Energy Consultant at MultiConsult
- **Life in academia after EPT** (video) by Shareq Nazir, Ass. Professor, KTH

Summing up by Terese Løvås, Professor and Head of Department

Welcome!