YOUNG RESEARCHER'S DAY 2024



Detailed Program

24 May 2024DTU Lyngby, Building 101A, Glassalen









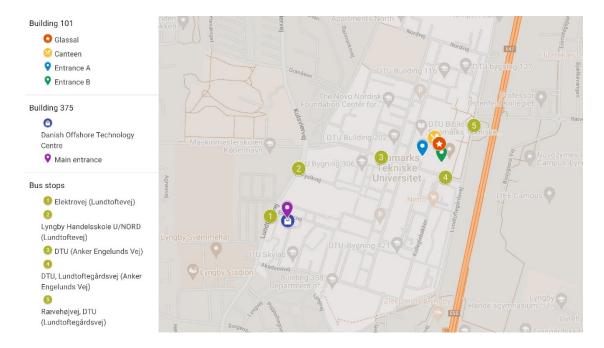


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Practical Information

The Young Researcher's Day is a great opportunity to share your research with other young researchers and learn about their studies. Here you find practical information on the event. The main session will take place at the Glassal in DTU building 101, in the canteen area. The registration will open from 08:30. There you will receive your nametag and will be pointed to where you can attach your poster, if you have one, and that has not been done prior to the event. The afternoon/evening part of the event will take place in DTU Offshore (Elektrovej 375). This part of the event is exclusively for the presenters that have registered for dinner.



The Glassal is located in the North-East quadrant of DTU (building 101), and DTU Offshore is located in the South-West quadrant (building 375). Link to the map: https://bit.ly/3Jp9uzl.

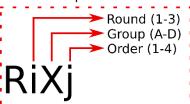
Schedule of the Event

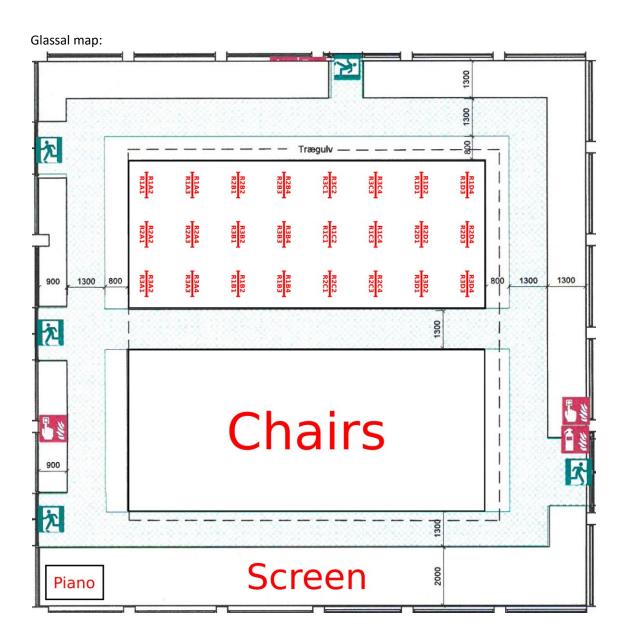
Friday, 24 May 2024

08:30 - 09:00	Registration and icebreaker with coffee and tea
09:00 – 09:15	Welcome speech
09:15 – 10:00	Elevator pitches (round 1)
10:00 – 10:45	Poster session (round 1)
10:45 – 11:30	Elevator pitches (round 2)
11:30 – 12:15	Poster session (round 2)
12:15 – 12:45	Lunch
12:45 – 13:30	Elevator pitches (round 3)
13:30 – 14:15	Poster session (round 3)
14:15 – 14:30	Coffee break
14:30 – 15:00	Best poster award and closing of scientific session
15:00 – 15:15	Meet and walk together to building 375 (presenters only)
15:15 – 17:30	Team building (presenters only)
17:30 – 21:00	Drinks, dinner, and socializing (presenters only)

Posters map

Code for the posters:





Round 1 elevator pitches

09:15 [A.1] Membranes for carbon capture – a radical innovation Bastian Kirkebaek, Alborg University

[A.2] Multiphysics Modeling for CO₂ Storage in the Depleted Chalk Reservoir Behzad Hosseinzadeh, DTU Offshore

[A.3] History matching of CO_2 and water relative permeability and capillary pressure curves in chalk

Eugenio Pescimoro, DTU Offshore

[A.4] CO₂ Hydrate formation in chalk investigation

Safa Khojamli, DTU Offshore

[B.1] Effect of Impurities on Carbon capture and sequestration

Komeil Ghahramani Shojaei, DTU Offshore

[B.2] Reactive transport modeling of impure CO2 in overburden layers

Hamed M. Kermani, DTU Offshore

[B.3] A high-temperature high-pressure microfluidic setup for rapid screening of CO₂-switchable surfactants

Ariadni Elmaloglou, DTU Offshore

[B.4] Fault Leakage Assessment During CCS Project

Armin Abdollahi Chahardah Cheriki, DTU Offshore

[C.1] A Numerical Tool for Modeling Leakage Rate from Oil/Gas Wells and Probability Risk Assessment of Leakage Rates

Aliakbar Roozshenas, DTU Offshore

[C.2] Corrosion Inhibition Properties of Black Tea Extract as an Eco-Friendly Inhibitor under Sweet Conditions

Ghada Shaban, DTU Construct

[C.3] Reactive transport modeling of CO₂ in fractured cement

Saeid Barzegarkhordehbalagh, DTU Chemical Engineering

[C.4] Subsurface CO₂ hydrate formation

Qian Ouyang, DTU Chemical Engineering

[D.1] Investigation of bio-chemical clogging in geothermal reservoirs

Ehsan Sabooniha, DTU Offshore

[D.2] Estimation of nonlinear structural response during extreme events via Kalman Filtering

Luigi Caglio, DTU construct

[D.3] Do Offshore Wind Farms Function as Spawning Grounds for Cod

Mathis Olesen, DTU Aqua

[D.4] Electrical properties of chalks and diatomites

Ermis Proestakis, DTU Offshore

Round 2 elevator pitches

10:45

[A.1] Biohydrogen production in the energy transition

Josephine Boel Andresen, DTU Offshore

[A.2] An integrated study of bioclogging

Hossein Younesian-Farid, DTU Offshore

[A.3] Does elevated levels of H₂S in produced gas indicate a thermogenic origin for souring in hydrocarbon reservoirs?

Bhavya Ravinder, DTU Offshore

[A.4] Seabed biofilm reactor for offshore produced water treatment: from lab to pilot scale

Ana Rita Ferreira, DTU Sustain

[B.1] Chalk compaction micromechanics through particle breakage

Kamal Nanda, DTU Offshore

[B.2] Understanding the connection between reservoir fluids and built-up fluid in the B-section of Dan oil wells in Danish North Sea

Sahar Hafizi, DTU Offshore

[B.3] Exploring fish assemblages at oil and gas platform foundations in the North

Bruno Ibanez-Erquiaga, DTU Aqua

[B.4] Chemisorption of molecular oxygen using metal-organic frameworks

Deepthy Krishnan, DTU offshore

[C.1] Multi-variate metal-organic frameworks for adsorption perfluorinated pollutants

Frederikke Glerup Christensen, DTU offshore

[C.2] Guardians of the Ocean: MOF-QCM Sensor Prototype for Detecting Methane Leaks

Clara Davila Duarte, DTU Construct

[C.3] Challenges with On-Site Acid Production

Frederick Christensen, Arhus University

[C.4] Temporary blocking of low permeability chalk reservoirs using a novel organic polymer gel

Hamed Movahedi, DTU Offshore

[D.1] The effect of confining pressure on the permeability of chalk

Anne Sofie Darket, DTU Offshore

[D.2] Environmentally friendly polymer plug for oil well abandonment

Magdalena Skowyra, DTU Chemical Engineering

[D.3] Thermosetting, durable and environmentally friendly polymer plug for oil well abandonment purpose

Maria Echarri Giacchi, DTU Chemical Engineering

[D.4] LoCo2; potential ecological effects of CO₂ leakage on life in seabed sediments

Asta Heidemann, DTU offshore

Round 3 elevator pitches

12:45 [A.1] Qualitative analysis of BTEX in water by fluorescence and chemometrics Isabelle Viegas, DTU Offshore

[A.2] Effects of inorganics in PW

Neri Bonciani, DTU Offshore

[A.3] Analysis on produced water production chemicals

Matteo Ottaviani, DTU Offshore

[A.4] Determination of levels of production chemicals in water phase using capillary electrophoresis

Liridon Aliti, DTU Offshore

[B.1] Numerical Approach to Understanding Oil Droplet dynamics in the Ocean Waqas Aleem, DTU Offshore [B.2] Recovery of MEA-triazine from spent and unspent H₂S scavengers using nanofiltration membranes Alaa Khalil, Alborg University [B.3] Applied Structural Health Monitoring in Offshore Infrastructure Emmanouil Lydakis, DTU Construct [B.4] Factors Contributing to Permeability Reduction during Produced Water Reinjection Tinku Saikia, NTNU [C.1] An Efficient Method for Calculation Slamming Loads on Offshore Jacket **Structures under Extreme Waves Utilizing Simulated Wave Kinematics** Nikolas Anastasiadis, DTU Construct [C.2] Computational modelling of droplet coalescence with applications to oilwater emulsion Tobias Simonsen, Alborg University [C.3] Evaluation of efficiency of novel green scavengers Karolina Szlek, Alborg University [C.4] Hydrothermal Oxidation of Spent H₂S Scavengers on a Continuous-flow Reactor: Effect of Reactor Temperature and Feed type on the liquid and gas effluents Alessandro Perrucci, Alborg University [D.1] Development of Halophyte Biocide for microbiologically Influenced Corrosion (MIC) mitigation Jakob Stein, Alborg University [D.2] Multifunctional biomass-based chemicals: Anti-Corrosion Asger Munk Koue, Copenhagen University [D.3] Microfluidic methods for studying microscale phenomena of gas flotation Anil Hatiboglu, NTNU [D.4] Diatomite - Improved Oil Recovery in Tight Reservoirs Veronika Abdulina, Stavanger University