The Kitchen, ESA BIC and the Department of Geoscience would like to invite staff and students at the Department of Geoscience to

A GEOSCIENCE HACKATHON AT THE KITCHEN

24 HOURS

MEETING THE CLIMATE GOALS WITH GEOSCIENTIFIC SOLUTIONS

Friday March 4 - Saturday March 5 2022. From 3 pm - 3 pm.

For 24 hours, 60 staff and students will explore and build solutions to challenges presented by three major Danish companies.

All staff (including both VIP and TAP) and students at the Department of Geoscience are welcome to join the hackathon, but a maximum of 20 staff and 40 students can take part.

These participants will work in carefully selected groups of 4-5 on providing solutions to one of the cases presented below.

The groups will work in a problem-oriented way that is different from the solution-oriented approach, which we are used to.

The hackathon is sponsored by the Department of Geoscience, Kingspan ı Logster and Aalborg Portland. Participation is free of charge.

SIGN UP: https://bit.ly/3scP0lV

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KITCHEN

MEET THE COMPANIES

Aalborg Portland

The demand for cement is increasing worldwide, especially in Africa. In order to acknowledge this demand, new cement production facilities will have to be constructed here. The challenge is, however, to do this in a sustainable way. How can we either produce cement in Africa in a way that emits less CO2 or capture and store the CO2 that is produced at the facilities at low cost.

Kingspan ı Logster

District heating is one of the great potential solutions in the green transition. To meet the climate goals, however, need to reduce the loss in the pipes. Part of this loss comes from leaks in the pipes that are not detected in due time, as it is both costly and inconvenient to perform manual checks of pipes deep in the ground. Thus we seek solutions that combine different geoscientific solutions like transient electromagnetics, infrared drone surveillance, satellite remote sensing and geological modeling in order to detect the leaks from the surface.

Gas Storage Denmark

Hydrogen is expected to be an important piece in the green transition in Denmark as it can be used for storage and transport of energy. The plan is to produce hydrogen from windmill electricity and store it in subsurface reservoirs. This, however, poses a number of challenges associated with the behavior of hydrogen in the subsurface reservoirs and geochemical reactions caused by the hydrogen.

PROGRAM

FRIDAY MARCH 4

15:00 – Registration and welcome drink
15:30 – Introduction and icebreaker by facilitator Lasse Chor (Happy42)
16.00 – Presentations of cases by the companies
16:30 – Introduction to the groups and first assignment (problem definition and solution)
17:00 – Work in the groups
18:00 – Dinner
18:30 – Continue group work
21:00 – Wrap-up and good night

SATURDAY MARCH 5

8:00 – Breakfast
8:30 - Presentation by The Kitchen
9.00 – Introduction to the second assignment (pitch)
9:15 – Group work
12:00 – Working lunch
12:30 – Groups finalize presentations
13:00 – Presentation for a jury
14:30 – Announcement of the winners

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