# DHRTC Summer School, Week 32 – Technical University of Denmark, Lyngby

## Preliminary Programme

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday 05/08</td>
<td>08.00</td>
<td><strong>Welcome</strong></td>
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<tr>
<td>Sunday 05/08</td>
<td>08.45</td>
<td><strong>Welcome</strong></td>
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<tr>
<td>Monday 06/08</td>
<td>09.00-11.00</td>
<td>Challenges, development, Management Total</td>
<td>DTU (101, room 509)</td>
<td>Karen Feilberg</td>
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<tr>
<td>Monday 06/08</td>
<td>11.00-13.30</td>
<td>Challenges, development, Management Total</td>
<td>DTU (101, room 509)</td>
<td>Rojan Ambat</td>
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<td>Monday 06/08</td>
<td>13.30-15.00</td>
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<td>Klaus Potsch</td>
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<td>Monday 06/08</td>
<td>15.00-16.30</td>
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<td>DTU (101, room 509)</td>
<td>Philip Fosbøl, Simon Ivar Andersen</td>
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<tr>
<td>Tuesday 07/08</td>
<td>08.30-10.30</td>
<td>Field trip to Stevns Klint</td>
<td>DTU (101, room 509)</td>
<td>Peter Frykman</td>
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<td>Tuesday 07/08</td>
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<td>DTU (101, room 509)</td>
<td>Theis Sølling</td>
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<td>Klaus Mosegaard, Thomas Hansen</td>
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<td>Wednesday 08/08</td>
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<tr>
<td>Sunday 12/08</td>
<td>18.00-20.00</td>
<td>Departure for Esbjerg</td>
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### Activities
- **Chemistry in Mature Fields**
- **Corrosion and Scale**
- **Mature Fields**
- **Technical University of Denmark, Lyngby**

### Venue
- **Accommodation at Hotel Postgarden**
### Preliminary Programme

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<tr>
<th>Sunday 12/08</th>
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<th>Tuesday 14/08</th>
<th>Wednesday 15/08</th>
<th>Thursday 16/08</th>
<th>Friday 17/08</th>
<th>Saturday 18/08</th>
<th>Sunday 19/08</th>
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<tr>
<td>Arrival and accommodation at Danhostel Esbjerg</td>
<td>Aalborg University (Esbjerg) C1 – room 117</td>
<td>Monitoring and Automation in offshore Oil &amp; Gas exploitation and production</td>
<td>Aalborg University (Esbjerg) C1 – room 117</td>
<td>Excursion Esbjerg Port</td>
<td>Aalborg University (Esbjerg) C1 – room 117</td>
<td>Assignment in groups</td>
<td>Departure and transport to CPH from Esbjerg</td>
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#### Monday 13/08

**8.00-8.45**
- Welcome
- Topside process systems (facilities and operations)

**9.00-10.45**
- 1. General info of Oil and Gas EDU and R&D activities at AAU
- 2. Introduction to topside operations
- Jens Bo Holm-Nielsen
- Jens Muff

**11.00-12.30**
- Overview of Topside Gas/Oil/Water Separation Units
- Process Design of Separation Train
- Issues on Oil/Water Separation
- Day at Port of Esbjerg: Oil and Gas companies and activities.
- Marco Maschietti
- Zhen Yu

**12.30-13.30**
- Lunch (Cantina, building A, room 150)
- Lunch (Cantina, building A, room 150)
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- Lunch (Cantina, building A, room 150)

**13.30-15.00**
- Potential Applications of Membrane Technologies within Oil & Gas Production Units
- Robotics for offshore DG applications (inline robot, ROVs and drones)
- Jens Bo Holm-Nielsen et al., Ramboll, SEMCO and Total
- Ole Rønø Clausen NN

**15.00-16.30**
- Production Chemistry – an overview of applications and challenges
- Lab testing pilot plants, advanced instruments and equipment
- Start up of case study assignment: Identify a chalk reservoir, and suggest well locations
- Rud Nielson
- Simon Pedersen
- Stefan Jespersen
- Ole Rønø Clausen NN

**18.00-22.00**
- Social event

#### Tuesday 14/08

**8.00-8.45**
- Reflection seismics: Theory, usability and pitfalls
- Ole Rønø Clausen NN

**9.00-10.45**
- Reflection seismics: How to do?
- Ole Rønø Clausen NN

**11.00-12.30**
- Emerging & advanced real-time monitoring and control techniques (Oil-in-Water, TSS, dissolved-oxygen, microscopy tech, fluorescence tech, tomography tech, MIMO control, robust control)
- Zhen Yu

**12.30-13.30**
- Lunch (Cantina, building A, room 150)
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**13.30-15.00**
- Geological interpretation and use of Petrophysical well logs
- Ole Rønø Clausen NN

**13.30-15.00**
- Group work on assignment
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- Group work on assignment

**15.00-16.30**
- Group work on assignment
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- Group work on assignment
- Group work on assignment
- Presentation and discussions of results

**18.00-22.00**
- Social event