

Institute of  
Structural Mechanics,  
Faculty of  
Civil Engineering,  
Brno University of Technology (BUT)

AND

Dept. of Process, Energy and  
Environmental Technology,  
Faculty of Technology, Natural  
Sciences and Maritime Sciences,  
Univ. of South-Eastern Norway (USN)

## Seminar

Bilateral cooperation between USN and BUT

# Reliability and sustainability of structures

*Day 1 – Lectures and panel discussion*

**Thursday 23. 05. 2024, 9:30**

FCE BUT, Brno, Veveří 331/95, Room C421

*Lecturers:*

Hadi Amlashi	<i>Some aspects on the use of reliability techniques in offshore wind turbine design</i>
Lars Erik Øi	<i>Cost, size, and structure optimization of CO<sub>2</sub> absorber columns onshore and offshore</i>
Mequanent M. Alamnie	<i>Mechanistic asphalt pavement damage prediction and modelling for Sustainable roads</i>
Drahomír Novák	<i>Stochastic assessment of concrete structures: advanced FEM modelling and case studies</i>
David Lehký	<i>Determination of mechanical fracture parameters using machine learning-based inverse analysis</i>
Lukáš Novák	<i>Uncertainty quantification in structural mechanics: point estimates and surrogate models</i>

*Day 2 – Technical tours*

**Friday 24. 05. 2024, 9:30**

FCE BUT, Brno, Veveří 331/95, Room C421

*Visits:*

- Laboratory of Institute of Physics of Materials, Czech Academy of Science – Fatigue testing of materials
- Laboratory of Institute of Building Testing – Fracture tests of quasi-brittle materials