



**Keynote Speaker: Prof. Kjersti Engan | University of Stavanger (UiS)**

Prof. Kjersti Engan is a distinguished professor in the Department of Electrical Engineering and Computer Science at the University of Stavanger (UiS). She earned her bachelor's degree in electrical engineering from Bergen University College in 1994, followed by her MSc

and PhD degrees in electrical engineering from UiS in 1996 and 2000, respectively. Prof. Engan's research focuses on signal and image processing, machine learning, and their applications in the medical field. She leads the Biomedical Data Analysis Lab (BMDLab) at UiS, where she collaborates with local and international hospitals and companies on different projects. Past and current projects involve cardiac MRI, brain MRI, CT perfusion imaging, and histopathological image analysis. Her work also extends to analyzing fetal heart rate signals, ECG, and ventilation signals, as well as video analysis for activity detection during resuscitation. She is a senior member of IEEE and has served in the IEEE IVMSM committee, in various editorial roles, including as an associate editor for IEEE signal processing letters and the SIAM Journal on Imaging Sciences. Prof. Engan is also a member of the Norwegian Academy of Technological Sciences, and AAIA fellow.



**Keynote Speaker: Dr. Morten Kjeldsen | Flow Design Bureau (FBU)**

Dr. Morten Kjeldsen is a prominent figure in the field of hydropower engineering. He is associated with Flow Design Bureau (FBU) in Stavanger, Norway. Dr. Kjeldsen has a strong academic background, having earned his MSc in 1991 and PhD in 1996 in Mechanical Engineering from NTNU Trondheim, both with a focus on cavitation. His career includes a period as a professor at NTNU and lately contributions to the development of digital twins for hydropower plants. Dr. Kjeldsen's work involves using engineering simulations to create virtual sensors that help operators monitor and optimize the performance of hydropower stations in real-time. This innovative approach is beneficial for managing the complex dynamics of large-scale hydropower systems.



**Keynote Speaker: Dr. Knut Erik Teigen  
Giljarhus | University of Stavanger (UiS) and  
NablaFlow AS**

Dr. Knut Erik Giljarhus is an Associate Professor at the University of Stavanger (UiS) in the Department of Mechanical and Structural Engineering and Materials Science. He

specializes in computational fluid dynamics (CFD) and holds a PhD from the Norwegian University of Science and Technology (NTNU), where his research focused on the separation of water from oil using electrical fields and surface-active agents. After completing his PhD, Dr. Giljarhus worked at SINTEF Energy, developing methods for fluid-structure interaction in CO<sub>2</sub> pipelines. He later joined Lloyd's Register (now Vysus Group), where he led simulations of gas dispersion, fires, and explosions. In 2014, he began teaching at UiS and became a full-time Associate Professor in 2018. Dr. Giljarhus's research interests include multiphase flow, aerodynamics, turbulence modeling, and the application of CFD in various fields such as urban wind environments and blood flow in medical applications. He is also a co-founder of NablaFlow, a company that provides advanced simulation models for industry.