## Lecturers at the UAK research school at UNIS 2 - 7 December 2018



Stein **Sandven** is research director at Environmental and Remote Sensing Center in Bergen, Norway and adjunct professor at University Centre in Svalbard (UNIS). He has more than 30 years experience in polar research with main expertise in marine and cryosphere remote sensing, polar oceanography and sea ice research. He works with development of operational observing systems for the Arctic using both satellite, in situ, and underwater sensors. He has been coordinator of many research projects funded by EU, ESA, Norwegian Space Centre, Norwegian Research Council and industry over the last 30 years. From 2011-2018 he was science leader of the ESA CCI project on sea ice climate data records. He is presently coordinator of the EU project INTAROS with about 47 partners from 20 countries. At UNIS he is leader of the Master/PhD course "Shipping in the Arctic".



Hanne Sagen is Research leader at the Nansen Environmental and Remote Sensing Center. Her expertise is in applied mathematics specialized within ocean acoustic. Her research interests are focused on using new technologies for observing the Arctic environment, such as acoustic tomography, passive acoustics, floats and gliders. Sagen has led the development of the Fram Strait Multipurpose Acoustic system starting in 2005. She has coordinated annual ocean/acoustic cruises to the Fram Strait since 2007 (involving open ocean vessel, icebreakers and aircraft missions). She is the deputy coordinator of the EU project INTAROS - Integrated Arctic Observation System. Currently, Sagen leads the Coordinated Arctic Acoustic Thermometry Experiment (CAATEX), which will run from 2018 to 2022. CAATEX is connected to MOSAiC and to INTAROS. She is member of the SCOR Working Group "International Quite Ocean Experiment."



Maribeth Murray is the Executive Director of the Arctic Institute of North America (AINA) and a Professor in the Department of Anthropology and Archaeology at the University of Calgary, Canada. Her research is focused on human and marine system dynamics in the Arctic and sub-Arctic, emphasizing the integration of climate, historic, oceanographic and ecologic data. In recent years, she has been engaged in the development of an Arctic Research Data Infrastructure for Canada, and an integrated Arctic Observing System that provides both scientific and societal benefits, including for Arctic Indigenous people, for adaptation planning, renewable resource management, and operational services. She is a member of the Board of Directors of Polar Knowledge Canada, the Board of Directors of the Arctic Research Consortium of the United States, and the EXCOM and Steering Committee of T-MOSAiC (Terrestrial Multidisciplinary Distributed Observatories for the Study of Arctic Connections)



Torill Hamre, is research leader at the Nansen Environmental and Remote Sensing Center. She holds a PhD in Informatics, from the University of Bergen, Norway (1995). She has more than 25 years of experience in software development and analysis of satellite data. Research interests include development of marine information systems using web GIS technologies, and marine data management. She is coauthor of 3 Java introductory programming books. She has been leader and participant in several projects funded by EU and Research Council of Norway. Presently, she is co-leader of the INTAROS WP5 Data management and Integration.



Søren Rysgaard. Professor and Canada Excellence Research Chair in Arctic geomicrobiology and climate change. Research interests: Marine microbiology and biogeochemistry in Arctic sea ice, ocean and sediments. Understanding carbon and nutrient cycling in Arctic marine ecosystems, sea ice processes and glacier-fjord-ocean interactions. Global change. Scientific leader - Arctic Science Partnership (ASP). Founding Director – Greenland Climate Research Centre (Greenland), Arctic Research Centre (Denmark). Led several large science projects in the Arctic (NOG, CAMP, Anoxia, Sea Ice dynamics, FreshLink, GCRC, ASP campaigns) and initiated two long-term marine monitoring programs (High- and Sub-arctic). Authored/co-authored 200 publications on arctic and biogeochemical processes



Mathilde B. Sørensen is Associate Professor in Seismology at Dept. of Earth Science, University of Bergen. Her research is mainly focused on earthquake and tsunami hazards, historical earthquakes and seismotectonics. She has a long experience teaching courses in geohazards, seismic hazard assessment and general geophysics.

She teaches at graduate level in geoscience, seismic Risk, and geohazards.



Kjell-Eivind Frøysa is professor at Western Norway University of Applied Sciences in Bergen, Norway. He teaches and supervises electrical engineering students on all levels from Bachelor to PhD. His main research interests are industrial and underwater measurement solutions, including acoustic and ultrasonic measurements. He is also involved in measurement science in a broader sense. In addition, he is involved in education of national authorities in Africa and Asia on measurement procedures, practice and requirements. Kjell-Eivind has earlier worked more than 20 years for an industrial research institute, CMR in Bergen. In that period he worked on development of industrial flow meters, evaluation of measurement solution and metering stations. He cooperated closely with industry companies in many sectors, including environmental, automotive, maritime and petroleum.



Dr. Peter Pulsifer is a research scientist at the National Snow and Ice Data Center, University of Colorado, where he leads the Exchange for Local Observations and Knowledge of the Arctic (ELOKA) and other projects. His research addresses questions around computer-based information representation with a particular focus on interoperability and sharing across knowledge domains. This includes examining technical and social aspects of data and information sharing. In his role as Chair of the international Arctic Data Committee, the co-chair of the U.S. Interagency Arctic Research Policy Committee, and a representative to the Arctic Science Forum at the upcoming Second Arctic Science Ministerial, Peter is active in leading the coordination of polar data resources. This includes co-chairing the international Polar Data Forum in 2015, the Polar Connections workshop on polar data interoperability in November 2016 and the Polar Data Planning Summit in May of 2018.



Lisbeth Iversen is presently a Public Sector PhDcandidate at Oslo School of Architecture, Institute for Urbanism and Landscape. She has a MSc in Regions and Regionalization, University of Bergen (MA) (2013), and a Master of Management, (MM), Norwegian Business School, Oslo; (2007). From 2003 to 2013 she was Commissioner in the Municipality of Bergen in the Department of Social - Housing and Local Development, (2011-2013), in the Department of Urban development, Climate and Environment (2007-2011), and in the Department of Environment, and Urban Development. (2003-2007). At present she is part-time employed at NERSC, working with Community based monitoring projects/political and socio-economic approach in the INTAROS project. She is leader of the Norwegian national pilot project-now a network, interacting between the municipality, the organization of municipalities of Norway, voluntary organizations, research and the private sector.



**Odile Crabeck** is postdoctoral fellow at the Centre for Earth Observation Science, University of Manitoba. Her research is in Geochemistry and Oceanography with a focus on sea ice. She developed a strong background in earth, ocean and atmospheric sciences, during her B.Sc. and M.Sc. degrees in Geography. During her PhD, she further gained experience in sea ice biogeochemistry and multidisciplinary study. Her expertise is focussed on transport of matter and formation of air bubbles in sea ice medium: including climate active gases such as CO2, CH4 and N2O.



Leendert Vergeynst is postdoctoral researcher at the Arctic Research Centre, Aarhus University. Engineering biochemical processes at the interplay between organisms and pollutants is his main research interest. He investigates consequences of environmental pollution and develops advanced technologies for combating environmental pollution. Currently, Leendert investigates oil spill biodegradation processes in Arctic marine environments (seawater, sea ice, sediment) by means of both laboratory experiments and field experiments in Greenland.



**Pedro Gonçalves** is Terradue director, a company started in 2006 as a spinoff of the European Space Agency following his postdoctoral work designing the Earth Observation Grid infrastructure, the ESA G-POD. Terradue is a leading Cloud Services provider supporting international organizations, research institutes and commercial companies in deploying their Earth Observation services into Cloud platforms tapping new computational and data resources.

With the participation in several European Commission and European Space Agency projects, Terradue is promoting a vision where scientific publications are fully reproducible, verifiable experiments and part of an interoperable ecosystem.