Research outputs:

Examples of unwanted variation when characterising dissolved organic matter using direct injection electrospray mass spectrometry and chemometrics
Research output: Research - peer-review › Journal article – Annual report year: 2018

FluoRAS Sensor - Online organic matter for optimising recirculating aquaculture systems
Research output: Research - peer-review › Journal article – Annual report year: 2018

Investigating fluorescent organic matter composition as a key predictor for arsenic mobility in groundwater aquifers
Research output: Research - peer-review › Journal article – Annual report year: 2018

Organic matter fluorescence as a proxy for UV exposure dose in drinking water treatment
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2018

Photochemistry illuminates ubiquitous organic matter fluorescence spectra
Research output: Research - peer-review › Journal article – Annual report year: 2018

Quantifying the impact of solid-phase extraction on chromophoric dissolved organic matter composition
Research output: Research - peer-review › Journal article – Annual report year: 2018

Shifts in the source and composition of dissolved organic matter in Southwest Greenland lakes along a regional hydroclimatic gradient
Research output: Research - peer-review › Journal article – Annual report year: 2018

The response of fluorescent organic matter to ozone treatment in pilot freshwater RAS
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Unraveling the size-dependent optical properties of dissolved organic matter
Research output: Research - peer-review › Journal article – Annual report year: 2018

Assessment of drinking water quality at the tap using fluorescence spectroscopy
Research output: Research - peer-review › Journal article – Annual report year: 2017

Calibration, standardization, and quantitative analysis of multidimensional fluorescence (MDF) measurements on complex mixtures (IUPAC Technical Report)
Research output: Research - peer-review › Journal article – Annual report year: 2017
Carbon bioavailability in a high Arctic fjord influenced by glacial meltwater, NE Greenland
Research output: Research - peer-review › Journal article – Annual report year: 2017

Changes in distributional patterns of plaice Pleuronectes platessa in the central and eastern North Sea; do declining nutrient loadings play a role?
Research output: Research - peer-review › Journal article – Annual report year: 2017

Distributions of dissolved organic matter in the central Arctic Ocean
Research output: Research › Conference abstract for conference – Annual report year: 2017

Ecological effects of scrubber water discharge on coastal plankton: Potential synergistic effects of contaminants reduce survival and feeding of the copepod Acartia tonsa
Research output: Research - peer-review › Journal article – Annual report year: 2017

Ecological effects of scrubber water discharge on coastal plankton: Potential synergistic effects of contaminants reduce survival and feeding of the copepod Acartia tonsa
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Evidence of local and regional freshening of Northeast Greenland coastal waters
Research output: Research - peer-review › Journal article – Annual report year: 2017

Extraction of microplastic from biota: recommended acidic digestion destroys common plastic polymers
Research output: Research - peer-review › Journal article – Annual report year: 2016

Global distribution of dissolved organic matter along the aquatic continuum: Across rivers, lakes and oceans
Research output: Research - peer-review › Journal article – Annual report year: 2017

Insight into understanding water mass circulation and origins in the central Arctic Ocean using dissolved organic matter as a tracer
Research output: Research › Conference abstract for conference – Annual report year: 2017

Spectral signature of suspended fine particulate material on light absorption properties of CDOM
Research output: Research - peer-review › Journal article – Annual report year: 2017

The effect of increased loads of dissolved organic matter on estuarine microbial communities and functions
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

The effect of increased loads of dissolved organic matter on estuarine microbial community composition and function
Research output: Research - peer-review › Journal article – Annual report year: 2017

The one-sample PARAFAC approach reveals molecular size distributions of fluorescent components in dissolved organic matter
Research output: Research - peer-review › Journal article – Annual report year: 2017

Anoxia-mediated release of dissolved organic matter from Baltic coastal sediments stimulate further hypoxia
Research output: Research › Poster – Annual report year: 2016

An porewater dissolved organic matter lend insight into the role of the coastal filter over time?
Research output: Research › Poster – Annual report year: 2017
Characterization and fate of dissolved organic matter in the Lena Delta Region, Siberia
Research output: Research › Poster – Annual report year: 2016

Coupling bacterioplankton populations and environment to community function in coastal temperate waters
Research output: Research › peer-review › Journal article – Annual report year: 2016

Drivers of fluorescent dissolved organic matter in the global epipelagic ocean
Research output: Research › peer-review › Journal article – Annual report year: 2016

Effect of arctic sea-ice melt on inherent optical properties and vertical distribution of solar radiant heating - possible feedbacks on ice melt
Research output: Research › Poster – Annual report year: 2016

Effects of an Arctic under-ice phytoplankton bloom on bio-optical properties of surface waters during the Norwegian Young Sea Ice Cruise (N-ICE2015)
Research output: Research › Poster – Annual report year: 2016

Experimental insights into the importance of aquatic bacterial community composition to the degradation of dissolved organic matter
Research output: Research › peer-review › Journal article – Annual report year: 2016

Linkages between the circulation and distribution of dissolved organic matter in the White Sea, Arctic Ocean
Research output: Research › peer-review › Journal article – Annual report year: 2016

Quantum yields of natural organic matter and organic compounds: Implications for the fluorescence-based interpretation of organic matter composition
Research output: Research › Conference abstract for conference – Annual report year: 2016

Sediment extracted organic matter fluorescence: an archive of organic matter flux and origins?
Research output: Research › Poster – Annual report year: 2016

The compositional change of Fluorescent Dissolved Organic Matter across Fram Strait assessed with use of a multi-channel in situ fluorometer
Research output: Research › Poster – Annual report year: 2016

Using fluorescent dissolved organic matter to trace and distinguish the origin of Arctic surface waters
Research output: Research › peer-review › Journal article – Annual report year: 2016

Abundance, size and polymer composition of marine microplastics ≥10μm in the Atlantic Ocean and their modelled vertical distribution
Research output: Research › peer-review › Journal article – Annual report year: 2015

A critical assessment of visual identification of marine microplastic using Raman spectroscopy for analysis improvement
Research output: Research › peer-review › Journal article – Annual report year: 2015

Ændringer i habitatkvalitet for rødspætteyngel i kystområder langs Nordsøen
Research output: Research › Conference abstract for conference – Annual report year: 2015

A model of extracellular enzymes in free-living microbes: Which strategy pays off?
Research output: Research › peer-review › Journal article – Annual report year: 2015

An approach to estimate the freshwater contribution from glacial melt and precipitation in East Greenland shelf waters using colored dissolved organic matter (CDOM)
Anoxia-mediated release of dissolved organic matter from sediments in the Baltic Sea
Research output: Research › Conference abstract for conference – Annual report year: 2015

Biotilgængelighed og mikrobiel nedbrydning af organisk materiale i en højtaktisk fjord, Young Sound - NØ Grønland
Research output: Research › Conference abstract for conference – Annual report year: 2015

Changes in the composition and bioavailability of dissolved organic matter during sea ice formation
Research output: Research › Journal article – Annual report year: 2015

Changes in the freshwater inventory of the Young Sound-Tyrofjord system (NE Greenland): evidence from 10 years of Greenland Ecosystem Monitoring
Research output: Research › Conference abstract for conference – Annual report year: 2015

Changes in the freshwater inventory of Young Sound-Tyrofjord system (NE Greenland): Evidence from 10 years of Greenland Ecosystem Monitoring
Research output: Research › Conference abstract in proceedings – Annual report year: 2015

Characterising organic matter in recirculating aquaculture systems with fluorescence EEM spectroscopy
Research output: Research › Journal article – Annual report year: 2015

Contrasting optical properties of surface waters across the Fram Strait and its potential biological implications
Research output: Research › Journal article – Annual report year: 2014

Effect of sea-ice melt on inherent optical properties and vertical distribution of solar radiant heating in Arctic surface waters
Research output: Research › Journal article – Annual report year: 2015

Fluorescence quantum yields of natural organic matter and organic compounds: Implications for the fluorescence-based interpretation of organic matter composition
Research output: Research › Journal article – Annual report year: 2015

From fresh to marine waters: Characterization and Fate of Dissolved Organic Matter in the Lena River Delta Region, Siberia
Research output: Research › Journal article – Annual report year: 2016

Kulstof i havet - en tynd kop te?
Research output: Communication › Journal article – Annual report year: 2015

Mass and UV-visible spectral fingerprints of dissolved organic matter: sources and reactivity
Research output: Research › Journal article – Annual report year: 2015

Microbially-mediated fluorescent organic matter transformations in the deep ocean: Do the chemical precursors matter?
Research output: Research › Journal article – Annual report year: 2016

Monitoring RAS organic matter by fluorescence EEM spectroscopy
Research output: Research › Conference abstract in proceedings – Annual report year: 2015

Predicting spectral and PAR light attenuation in Greenlandic coastal waters
Research output: Research › Conference abstract for conference – Annual report year: 2015
Recent decrease in DOC concentrations in Arctic lakes of southwest Greenland: Decreasing DOC in Arctic lakes
Research output: Research - peer-review › Journal article – Annual report year: 2015

Struktur og aktivitet af det mikrobielle samfund gennem den isfrie periode i en højarktisk fjord (Young Sund, NØ Grønland)
Research output: Research › Conference abstract for conference – Annual report year: 2015

The influence of glacial melt water on bio-optical properties in two contrasting Greenlandic fjords
Research output: Research - peer-review › Journal article – Annual report year: 2015

The optical properties of DOM in the ocean
Research output: Research - peer-review › Book chapter – Annual report year: 2015

Turnover time of fluorescent dissolved organic matter in the dark global ocean
Research output: Research - peer-review › Journal article – Annual report year: 2015

Bioavailability and radiocarbon age of fluvial dissolved organic matter (DOM) from a northern peatland-dominated catchment: effect of land-use change
Research output: Research - peer-review › Journal article – Annual report year: 2014

Biological origins and fate of fluorescent dissolved organic matter
Research output: Research - peer-review › Book chapter – Annual report year: 2014

Chemometric analysis of organic matter fluorescence
Research output: Research - peer-review › Book chapter – Annual report year: 2014

Controls of dissolved organic matter quality: Evidence from a large-scale boreal lake survey
Research output: Research - peer-review › Journal article – Annual report year: 2014

Links between implementation of Water Framework Directive and changes in plaice distribution along the Danish west coast
Research output: Research › Conference abstract for conference – Annual report year: 2014

OpenFluor - an online spectral library of auto-fluorescence by organic compounds in the environment
Research output: Research - peer-review › Journal article – Annual report year: 2014

Physical and bacterial controls on inorganic nutrients and dissolved organic carbon during a sea ice growth and decay experiment
Research output: Research - peer-review › Journal article – Annual report year: 2014

Processing of humic-rich riverine dissolved organic matter by estuarine bacteria: effects of predegradation and inorganic nutrients
Research output: Research - peer-review › Journal article – Annual report year: 2014

Production and transformation of dissolved neutral sugars and amino acids by bacteria in seawater
Research output: Research - peer-review › Journal article – Annual report year: 2014

Radiocarbon dating of fluvial organic matter reveals land-use impacts in boreal peatlands
Research output: Research - peer-review › Journal article – Annual report year: 2014

Seasonal contribution of terrestrial organic matter and biological oxygen demand to the Baltic Sea from three contrasting river catchments
Research output: Research - peer-review › Journal article – Annual report year: 2014
Tracing the long-term microbial production of recalcitrant fluorescent dissolved organic matter in seawater
Research output: Research - peer-review › Journal article – Annual report year: 2014

Analyse af marint affald i sild og hvilling fra det nordlige Storebælt
Research output: Commissioned › Report – Annual report year: 2013

Bioavailability of riverine dissolved organic matter in three Baltic Sea estuaries and the effect of catchment land use
Research output: Research - peer-review › Journal article – Annual report year: 2013

Bright light, white light...right light?: Hvordan få vi en bedre beskrivelse at lys forholdene i modeller
Research output: Research › Conference abstract for conference – Annual report year: 2013

Coupling the UV-visible spectroscopic properties of dissolved organic matter to its chemical characteristics evidence across contrasting environments
Research output: Research › Conference abstract for conference – Annual report year: 2013

En spektral lysdæmpningsmodel for 2 grønlandske fjorde
Research output: Research › Conference abstract for conference – Annual report year: 2013

Fluorescence spectroscopy and multi-way techniques, PARAFAC
Research output: Research - peer-review › Journal article – Annual report year: 2013

Inner filter correction of dissolved organic matter fluorescence
Research output: Research - peer-review › Journal article – Annual report year: 2014

Linking optical and chemical properties of dissolved organic matter in natural waters
Research output: Research - peer-review › Journal article – Annual report year: 2013

Mikrobiel dannelse af sværtnedbrydelige organiske humustoffer i arktiske egne
Research output: Research › Conference abstract for conference – Annual report year: 2013

Radiocarbon age, lability and optical fingerprints of riverine dissolved organic matter exported from a northern peat-dominated catchment
Research output: Research › Conference abstract for conference – Annual report year: 2013

Riverine dissolved organic matter in three boreal estuaries entering the Baltic Sea
Research output: Research › Conference abstract for conference – Annual report year: 2013

Selective incorporation of dissolved organic matter (DOM) during sea ice formation
Research output: Research - peer-review › Journal article – Annual report year: 2013

Characteristics of colored dissolved organic matter (CDOM) in the Arctic outflow in Fram Strait: assessing the changes and fate of terrigenous CDOM in the Arctic Ocean
Research output: Research - peer-review › Journal article – Annual report year: 2012

Dissolved organic matter sources in large Arctic rivers
Research output: Research - peer-review › Journal article – Annual report year: 2012

Lake metabolism scales with lake morphometry and catchment conditions
Research output: Research - peer-review › Journal article – Annual report year: 2012
Linking CDOM spectral absorption to dissolved organic carbon concentrations and loadings in boreal estuaries
Research output: Research - peer-review › Journal article – Annual report year: 2012

Oceanographic regime shift during 1997 in Disko Bay, Western Greenland
Research output: Research - peer-review › Journal article – Annual report year: 2012

Seasonal changes in the optical properties of dissolved organic matter (DOM) in large Arctic rivers
Research output: Research › Poster – Annual report year: 2012

The freshwater composition of the Fram Strait outflow derived from a decade of tracer measurements
Research output: Research - peer-review › Journal article – Annual report year: 2012

The optical properties of greenlandic coastal waters: Modelling light penetration in a changing climate
Research output: Research › Poster – Annual report year: 2012

The spectral optical properties and relative radiant heating contribution of dissolved and particulate matter in the surface waters across the Fram Strait
Research output: Research › Poster – Annual report year: 2012

Analysis of DOM at the catchment scale: Two European case studies
Research output: Research › Book chapter – Annual report year: 2004

A potential approach for monitoring drinking water quality from groundwater systems using organic matter fluorescence as an early warning for contamination events
Research output: Research - peer-review › Journal article – Annual report year: 2011

AQUA fingeraftryk. On-line detektion og karakterisering af fækale forureninger i vandtaknisk system.
Research output: Research › Report – Annual report year: 2011

Assessing the dynamics of chromophoric dissolved organic matter in a subtropical estuary using parallel factor analysis
Research output: Research - peer-review › Journal article – Annual report year: 2011

DOM sources and microbes in lakes and coastal waters
Research output: Research › Book chapter – Annual report year: 2004

Effects of DOM in marine ecosystems
Research output: Research › Book chapter – Annual report year: 2004

Global trends in the fluorescence characteristics and distribution of marine dissolved organic matter
Research output: Research - peer-review › Journal article – Annual report year: 2011

Linking the chemical and optical properties of dissolved organic matter in the Baltic-North Sea transition zone to differentiate three allochthonous inputs
Research output: Research - peer-review › Journal article – Annual report year: 2011

Monitoring organic loading to swimming pools by fluorescence excitation–emission matrix with parallel factor analysis (PARAFAC)
Research output: Research - peer-review › Journal article – Annual report year: 2011

Phytoplankton growth and microzooplankton grazing along a sub-Arctic fjord (Godthåbsfjord, West Greenland)
Research output: Research - peer-review › Journal article – Annual report year: 2011
Seasonal dynamics and conservative mixing of dissolved organic matter in the temperate eutrophic estuary Horsens Fjord
Research output: Research - peer-review › Journal article – Annual report year: 2011

Shedding light on a black box: UV-visible spectroscopic characterization of marine dissolved organic matter
Research output: Research - peer-review › Book chapter – Annual report year: 2011

The characteristics of dissolved organic matter (DOM) and chromophoric dissolved organic matter (CDOM) in Antarctic sea ice
Research output: Research - peer-review › Journal article – Annual report year: 2011

The supply and characteristics of colored dissolved organic matter (CDOM) in the Arctic Ocean: Pan Arctic trends and differences
Research output: Research - peer-review › Journal article – Annual report year: 2011

Using fluorescence to characterize dissolved organic matter in Antarctic sea ice brines
Research output: Research - peer-review › Journal article – Annual report year: 2011

Frigivelse af ammoniak fra havet
Research output: Research › Journal article – Annual report year: 2010

Measurement of dissolved organic matter fluorescence in aquatic environments: An interlaboratory comparison
Research output: Research - peer-review › Journal article – Annual report year: 2010

Tracing water mass mixing in the Baltic–North Sea transition zone using the optical properties of coloured dissolved organic matter
Research output: Research - peer-review › Journal article – Annual report year: 2010

Fluorescence intensity calibration using the Raman scatter peak of water
Research output: Research - peer-review › Journal article – Annual report year: 2009

The use of PARAFAC modeling to trace terrestrial dissolved organic matter and fingerprint water masses in coastal Canadian Arctic surface waters
Research output: Research - peer-review › Journal article – Annual report year: 2009

Characterizing dissolved organic matter fluorescence with parallel factor analysis: a tutorial
Research output: Research - peer-review › Journal article – Annual report year: 2008

Distinguishing between terrestrial and autochthonous organic matter sources in marine environments using fluorescence spectroscopy
Research output: Research - peer-review › Journal article – Annual report year: 2008

Characteristics of dissolved organic matter in baltic coastal sea ice: Allochthonous or autochthonous origins?
Research output: Research - peer-review › Journal article – Annual report year: 2007

Photochemical production of ammonium and transformation of dissolved organic matter in the Baltic Sea
Research output: Research - peer-review › Journal article – Annual report year: 2007

The conservative and non-conservative behavior of chromophoric dissolved organic matter in Chinese estuarine waters
Research output: Research - peer-review › Journal article – Annual report year: 2007
The effect of evapoconcentration on dissolved organic carbon concentration and quality in lakes of SW Greenland
Research output: Research - peer-review › Journal article – Annual report year: 2007

Dissolved organic matter (DOM) export to a temperate estuary: Seasonal variations and implications of land use
Research output: Research - peer-review › Journal article – Annual report year: 2006

Handling of Rayleigh and Raman scatter for PARAFAC modeling of fluorescence data using interpolation
Research output: Research - peer-review › Journal article – Annual report year: 2006

Limfjordens miljøtilstand 1985 til 2003. Sammenhæng mellem næringsstoftilførsler, klima og hydrografi belyst ved empiriske modeller
Research output: Research › Report – Annual report year: 2006

Modeling absorption by CDOM in the Baltic Sea from season, salinity and chlorophyll
Research output: Research - peer-review › Journal article – Annual report year: 2006

Research output: Research › Report – Annual report year: 2006

Interactions between algal-bacterial populations and trace metals in fjord surface waters during a nutrient-stimulated summer bloom
Research output: Research - peer-review › Journal article – Annual report year: 2005

Resolving the variability in dissolved organic matter fluorescence in a temperate estuary and its catchment using PARAFAC analysis
Research output: Research - peer-review › Journal article – Annual report year: 2005

Tracing the production and degradation of autochthonous fractions of dissolved organic matter by fluorescence analysis
Research output: Research - peer-review › Journal article – Annual report year: 2005

Changes in fulvic acid redox state through the oxycline of a permanently ice-covered Antarctic lake
Research output: Research - peer-review › Journal article – Annual report year: 2004

Fate of DOM in estuaries
Research output: Research › Book chapter – Annual report year: 2004

Marine områder 2003 - Miljøtilstand og udvikling
Research output: Research - peer-review › Book – Annual report year: 2004

Marine områder 2003 - miljøtilstand og udvikling. NOVA-2003
Research output: Research › Report – Annual report year: 2004

Behaviour of the optical properties of coloured dissolved organic matter under conservative mixing
Research output: Research - peer-review › Journal article – Annual report year: 2003

Fate of terrigenous dissolved organic matter (DOM) in estuaries: Aggregation and bioavailability.
Research output: Research - peer-review › Journal article – Annual report year: 2004

Tracing dissolved organic matter in aquatic environments using a new approach to fluorescence spectroscopy
Research output: Research - peer-review › Journal article – Annual report year: 2003
The optics of chromophoric dissolved organic matter (CDOM) in the Greenland Sea: An algorithm for differentiation between marine and terrestrially derived organic matter
Research output: Research - peer-review › Journal article – Annual report year: 2001

Mariager Fjord – primærproduktion, iltomstøtning og blåmuslinger efter iltsvindet i 1997
Research output: Research › Report – Annual report year: 2000

Optical properties and signatures of chromophoric dissolved organic matter (CDOM) in Danish coastal waters
Research output: Research - peer-review › Journal article – Annual report year: 2000

Projects:

Investigation into online microbial water quality measurements (39471)
Project: Research

Arctic Research Icebreaker Consortium (ARICE) (39506)
Project: Research

Aqua Fingerprint - Early warning for contamination of drinking water (38966)
Project: Research

Supporting the national monitoring of Marine Strategy Framework Indicators (39304)
Project: Research

Fluorescence analysis and monitoring of recirculating aquaculture systems (FAMoRAS) (39177)
Project: Research

Resolving the chemical structures responsible for the UV-visible spectroscopic properties of dissolved organic matter in aquatic environments
Project: PhD

Investigation of causes for declines in fish abundance in coastal areas (Kystfisk II) (39164)
Project: Research

Nutrient cocktails in coastal zones of the Baltic Sea (COCOA) (39145)
Project: Research

Linking the optical properties of DOM to its characteristics and origins (LOCO) (39110)
Project: Research

Reactivity of terrestrially derived dissolved organic matter in aquatic systems - relation to molecular composition and bacterial community structure (38927)
Project: Research

Cruise with RV Dana. North Atlantic-Arctic Ocean Coupling: Deep water overflows and surface water outflow (NAAO) (38928)
Project: Research

Optical properties of Greenlandic coastal waters: modeling light penetration in a changing climate (38931)
Project: Research
North Atlantic - Arctic coupling in a changing climate: Impacts on ocean circulation, carbon cycling and sea-ice (NAACOS)
(38888)
Project: Research

Center for Ocean Life (COOL) - a Villum-Kahn Rasmussen Centre of excellence for the study of life in a changing ocean
(38960)
Project: Research

Activities:

EGU 2017
Activity: Talks and presentations › Conference presentations

Havet, Klima og Kulstof: hvordan hænger det sammen?.
Activity: Talks and presentations › Conference presentations

"Havet, Klima og Kulstof: hvordan hænger det sammen?.
Activity: Talks and presentations › Conference presentations

Nordic-Baltic IHSS Symposium
Activity: Talks and presentations › Conference presentations

Gordon Research Conference: Polar Marine Science
Activity: Talks and presentations › Conference presentations