<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
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<tbody>
<tr>
<td>10:30</td>
<td>REGISTRATION (continues during poster session)</td>
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<tr>
<td>11:30</td>
<td>LUNCH</td>
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<tr>
<td>13:00</td>
<td>Introduction by NHF chairman Gunilla Rosenqvist</td>
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<tr>
<td>13:20</td>
<td>Ursula Schauer, Alfred-Wegener Inst., Germany. The changing Arctic ocean</td>
</tr>
</tbody>
</table>
| 14:00 | Anna Nikolopoulos & Robert S. Pickart  
Where did all the water go? – A study of the western Arctic boundary current  
Kristina Sundbäck  
Retention of nutrients in non-tidal sediments – role of algae and denitrification |
| 14:20 | Haakon Hop & Olga Pavlova  
Potential loss of ice-associated biomass transport from the Arctic Ocean to Fram Strait and the Barents Sea due to climate warming  
Signe Ingvardsen et al.  
Foraminiferal denitrification in the oxygen minimum zone off Chile |
| 14:40 | Lene Buhl-Mortensen & Pål B. Mortensen  
Distribution of megafauna and indications of fisheries damage revealed from visual inspections during the first MAREANO cruise in the southern Barents Sea  
Dale, Barrie  
The sedimentary record of dinoflagellate cysts in Scandinavian coastal waters: Sorting out the signals |
| 15:00 | Kristin Hatlen et al.  
Biological effects of water soluble fraction of oil on the Arctic sea ice amphipod Gammarus wilkitzkii  
Jussi Evertsen  
Functional chloroplasts in herbivore opisthobranchs - robust cytoplasts with their own lunch |
<p>| 15:20 | COFFEE/FRUIT |
| 15:40 | Short presentations given by exhibiting companies Plenary room. Chair: Anders Tengberg |
| 16:30 | POSTER SESSION I (room 4) with COMPANY EXHIBITION AND CONTINUED REGISTRATION |
| 18:00 | RECEPTION |
| 19:30 | DINNER |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Session A</th>
<th>Session B</th>
<th>Session C</th>
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</thead>
</table>
| 09:00 | Introduction of the day | Tom Fenchel, Univ. Copenhagen, Denmark.  
*Microbial motile behaviour* |  |
| 09:05 | S2A. Microbes and plankton Plenary  
room chair: Fredrika Norrbin | S2B. Physical oceanography Holmen room chair: Philip Axe | S2C. Fish and environment Cinema room chair: Lena Bergström |
| 09:40 | Jarone Pinhassi & Thomas Pommier  
Phylogenetic diversity and biogeography of marine bacteria in the Bacteriodetes phylum | Anders Engqvist  
Archipelagian medley | Einar Svendsen et al  
An ecosystem modeling approach to predicting cod recruitment |
| 10:00 | Larsen, Aud et al.  
Cell sorting - an important tool for investigating central processes in marine microbial ecology. | Torsten Hanson & Øyvind Saetra  
Do winter storms heat the ocean surface? | Selma Pacariz et al  
Cod spawning grounds in the Kattegat and the hydrographical influence on the early life stages |
| 10:20 | Lene Friis Møller & Hans Ulrik Riisgård  
Bioenergetics in the common jellyfish, Aurelia aurita, and two hydromedusae - effects of mass occurring species in Limfjorden, Denmark Nils | Anders Tengberg  
Sampling versus continuous logging: are we measuring at the right frequencies? | Leif Pihl and Håkan Wennhage  
Effects of eutrophication on benthic fish ecology along the Swedish Skagerak coast. |
| 10:40 | Hege Vestheim & Stein Kaartvedt  
Plasticity in coloration as an antipredator strategy among zooplankton | Tone Falkenhaug & Kåre Mosgren  
Exploring marine life on the mid-Atlantic ridge: the MAR-ECO project | Jen Edgren (Dyrssenpriset)  
Effects of a no-take reserve in the Baltic Sea on the top predator, northern pike (Esox lucius) |
| 11:00 | COFFEE/FRUIT |  |  |
| 11:30 | Kerstin Johannesson, Univ. Gothenburg, Sweden.  
*Are species incompatible with evolution?* |  |  |
### Thursday, Nov. 2nd, morning, continued

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Abstract</th>
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<tbody>
<tr>
<td>12:05</td>
<td>S3A</td>
<td>S3A. Life-history, diversity, Plenary room chair: Gunilla Rosenqvist</td>
<td>Johanna Järnegren et al</td>
<td>Similar reproductive cycles and life-history traits in congeneric limid bivalves with different modes of nutrition</td>
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<tr>
<td></td>
<td>S3B</td>
<td>S3B. Physical oceanography/modelling Holmen room Chair: Terje Thorsnes</td>
<td>Ingrid Ellingsen &amp; Thomas McClimans</td>
<td>Modelling the physical and biological responses of a stratified fjord to a submerged freshwater discharge</td>
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<td></td>
<td>S3C</td>
<td>S3C. Chemistry Cinema room Chair: Kristin Lindell</td>
<td>Svetlana Pakhomova et al.</td>
<td>Dissolved iron and manganese species fluxes across the bottom water-sediment interface at various redox conditions in near-bottom water and for different types of sediment</td>
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<tr>
<td>12:25</td>
<td></td>
<td></td>
<td>V.M. Khaitov et al</td>
<td>Morphological differences between females of different Jaera species (Crustacea: Asellota: Isopoda) in the White Sea: a possible solution to an old problem</td>
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<tr>
<td></td>
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<td>Jon Albretsen &amp; Lars Petter Reed</td>
<td>Hydrography and circulation in the Skagerrak: Impact of freshwater effluence and model validation</td>
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<td></td>
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<td>E.V. Yakushev</td>
<td>Analysis of the seasonal variability of the biogeochemical processes in the Black and Baltic Seas water column oxic/anoxic interface with a redox layer model</td>
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<tr>
<td>12:45</td>
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<td></td>
<td>Sofia A. Wikström et al</td>
<td>Diversity of filamentous algae - functional importance or more of the same?</td>
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<td></td>
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<td>Ellen Soldal et al</td>
<td>Statistical models and predictions of channelled wrack (Pelvetia canaliculata) distribution using GIS-modelled predictor variables</td>
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<td></td>
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<td>Hancke K., et al.</td>
<td>Temperature effects on photosynthesis - light responses measured by O2-evolution, 14C-assimilation and pulse amplitude modulated (PAM) fluorescence</td>
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<tr>
<td>13:05</td>
<td></td>
<td>LUNCH</td>
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### Thursday, Nov. 2nd, afternoon

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Abstract</th>
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<tbody>
<tr>
<td>14:30</td>
<td></td>
<td>POSTER SESSION II/ COMPANY EXHIBITION (room 4) and COFFEE/FRUIT</td>
<td>Tone Falkenhaug &amp; Kåre Mosgren: MAR-ECO and interactive multimedia presentation</td>
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<tr>
<td>16:00</td>
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<td>ANNUAL MEETING NHF Plenary room</td>
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<td>17:30</td>
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<td>ANNUAL MEETING SHF Holmen room</td>
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<td>19:30</td>
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<td>BOARD MEETING NMA</td>
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<tr>
<td>17:30</td>
<td></td>
<td>Time for rest, spa and getting ready for the evening</td>
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<tr>
<td>19:30</td>
<td></td>
<td>BANQUET with songs and speeches, live music afterwards Toast master: Hartvig Christie.</td>
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<tr>
<td>Time</td>
<td>Session</td>
<td>Speaker(s)</td>
<td>Title</td>
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<tr>
<td>09:00</td>
<td>Introduction of the day</td>
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<tr>
<td>09:05</td>
<td>Pedersen, Rolf B., Univ. Bergen.</td>
<td><em>Hydrothermal hot-spots in the Arctic: from mantle to microbes to plankton</em></td>
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<tr>
<td>09:40</td>
<td>Hylland, Ketil.</td>
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<td><em>Measuring impacts of pollution in marine ecosystems - mission impossible?</em></td>
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<tr>
<td>10:00</td>
<td>Elin Lindhoff &amp; Edna Granéli</td>
<td></td>
<td>*Utilization of DOM by <em>Prymnesium parvum</em> <em>from anthropogenic sources, detected by stable isotopes, and effects on cell toxicity.</em></td>
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<tr>
<td>10:20</td>
<td>Holth TF et al.</td>
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<td><em>Development of responses in Zebrafish (Danio rerio) during produced water exposure</em></td>
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<tr>
<td>11:00</td>
<td>COFFEE/FRUIT</td>
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<tr>
<td>11:30</td>
<td>Valerie Bellec &amp; Margaret Wilson</td>
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<td><em>Seabed sediment mapping in the Barents Sea - Results from the first Mareano campaign</em></td>
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<tr>
<td>11:50</td>
<td>Silvennoinen, H. et al.</td>
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<td><em>River and estuary sediments of the northern Baltic Sea - Are they efficient filters of anthropogenic nitrogen?</em></td>
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<td></td>
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<td>*Trophic interactions within <em>Zostera marina</em> <em>beds along the Swedish coast</em></td>
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<td><em>Harmful algae in the Skagerrak, experiences from regular monitoring since 1989</em></td>
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<td>Time</td>
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<td>Speaker(s)</td>
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<td>12:10</td>
<td>S5A. Sediments, resuspension, Baltic studies contd.</td>
<td>Anders Omstedt &amp; Bo Gustafsson</td>
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<td></td>
<td>Assessment of Climate Change for the Baltic Sea Basin: The BACC project 1.</td>
<td>Bruce Hackett</td>
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<tr>
<td>12:30</td>
<td>S5B. Coastal ecology/Large scale projects contd.</td>
<td>Kai Sørensen et al.</td>
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<tr>
<td>12:50</td>
<td>Summing up the meeting. Gunilla Rosenqvist and Anders Tengberg</td>
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<tr>
<td>13:00</td>
<td>LUNCH (individually paid) and DEPARTURE</td>
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**Sessions**

**S1A. Changing Arctic**

**S1B. Sediments, Denitrification**

**PI. Poster session I**

**S2A. Microbes and plankton**

**S2B. Physical oceanography**

**S2C. Fish and environment**

**S3A. Life-history and morphology**

**S3B. Physical oceanography/modelling**

**S3C. Chemistry**

**PII. Poster session II**

**S4A. Toxicology**

**S4B. Coastal ecology**

**S5A. Sediments, chemistry**

**S5B. Large scale projects**

**Wednesday after lunch**

**Wednesday after lunch**

**Wednesday afternoon**

**Thursday morning**

**Thursday morning**

**Thursday after coffee**

**Thursday after coffee**

**Thursday after lunch**

**Friday before coffee**

**Friday before coffee**

**Friday after coffee**

**Friday after coffee**
Talks: authors, titles and sessions


Bellec, V. & M. Wilson. Seabed sediment mapping in the Barents Sea - Results from the first Mareano campaign S5A

Buhl-Mortensen L. & P. B. Mortensen. Distribution of megafauna and indications of fisheries damage revealed from visual inspections during the first MAREANO cruise in the southern Barents Sea S1A

Edgren, J. (Dyrssenpriset). Effects of a no-take reserve in the Baltic Sea on the top predator, northern pike (Esox lucius) S2C

Engvist, A.: Archipelagian medley S2B

Evertsen, J.. Functional chloroplasts in herbivore opisthobranchs – robust cytoplasts with their own lunch S1B

Dahl, E., et al. Harmful algae in the Skagerrak, experiences from regular monitoring since 1989 S5B

Dale, B.. The sedimentary record of dinoflagellate cysts in Scandinavian coastal waters: Sorting out the signals S1B

Ellertsen, M., et al. Does the composition of amphipods associated to epiphytes on kelp change with depth? S4B

Ellingsen, I. & T. Mccliman. Modelling the physical and biological responses of a stratified fjord to a submerged freshwater discharge S3B

Falkenhaug, T. & K. Mosgren. Exploring marine life on the mid-Atlantic ridge: the MAR-ECO project. S2B

Fenchel, T.. Microbial motile behaviour. Keynote S2

Hackett, B.. Towards an Information and Decision Support System for the Norwegian Marine Environment S5B

Hancke, K., et al. Temperature effects on photosynthesis - light responses measured by O2-evolution, 14C-assimilation and pulse amplitude modulated (PAM) fluorescence S3C

Hanson, T. & Å. Saetra. Do winter storms heat the ocean surface? S2B

Hatlen, K., et al. Biological effects of water soluble fraction of oil on the Arctic sea ice amphipod Gammarus wilkitzkii S1A

Holth T.F., et al. Development of responses in ZebraFish (Danio rerio) during produced water exposure S4A

Hop, H. & O. Pavlova. Potential loss of ice-associated biomass transport from the Arctic Ocean to Fram Strait and the Barents Sea due to climate warming S1A

Hylland, K.. Measuring impacts of pollution in marine ecosystems – mission impossible? S4A

Ingvarsdson, S., et al. Foraminiferal denitrification in the oxygen minimum zone off Chile S1B

Jephson, T. (hedersomnämnande Dyrssen). Trophic interactions within Zostera marina beds along the Swedish coast S5B

Johannesson, K.. Are species incompatible with evolution? Keynote S3

Jörnsten, J. et al. Similar reproductive cycles and life-history traits in congeneric limulid bivalves with different modes of nutrition S3A

Khaitov, V.M., et al. Morphological differences between females of different Jaera species (Crustacea: Asellota: Isopoda) in the White Sea: a possible solution to an old problem S3A


Lindhoff, E. & E. Granelli. Utilization of DOM by Prymnesium parvum from anthropogenic sources, detected by stable isotopes, and effects on cell toxicity. S4A

Moy, F. E. & H. Christie. Recent decline in sugar kelp (Saccharina latissima) vegetation along the south coast of Norway S4B

Møller, L. Friis & H. U. Riisgård. Bioenergetics in the common jellyfish, Aurelia aurita, and two hydromedusae - effects of mass occurring species in Limfjorden, Denmark S2A

Nikolopoulos, A. & R. S. Pickart. Where did all the water go? - A study of the western Arctic boundary current S1A

Omsmedt, A. & B. Gustafsson. Assessment of Climate Change for the Baltic Sea Basin: The BACC project I. S5A

Pacariz, S., et al. Cod spawning grounds in the Kattegat and the hydrographical influence on the early life stages S2C

Pakhomova, S., et al. Dissolved iron and manganese species fluxes across the bottom water-sediment interface at various redox conditions in near-bottom water and for different types of sediment S3C

Pedersen, R. B. Hydrothermal hot-spots in the Arctic: from mantle to microbes to plankton. Keynote S4

Pihl, L. & H. Wennhage. Effects of eutrophication on benthic fish ecology along the Swedish Skagerrak coast. S2C

Pinhasi, J. & T. Pommier. Phylogenetic diversity and biogeography of marine bacteria in the Bacteriodetes phylum S2A


Schauer, U.. The changing Arctic ocean. Keynote S1

Silvennoinen, H., et al. River and estuary sediments of the northern Baltic Sea - Are they efficient filters of anthropogenic nitrogen? S5A
Soldal, E. et al. Statistical models and predictions of channelled wrack (Pelvetia canaliculata) distribution using GIS-modelled predictor variables S3B
Sundbäck, K. Retention of nutrients in non-tidal sediments - role of algae and denitrification S1B
Svendsen, E. et al. An ecosystem modeling approach to predicting cod recruitment S2C
Sørensen, K. et al. Operational network of Ferrybox systems in the North Sea/Skagerrak and the Norwegian Sea. S5B
Tengberg, A. Sampling versus continuous logging: are we measuring at the right frequencies? S2B
Vestheim, H. & S. Kaartvedt. Plasticity in coloration as an antipredator strategy among zooplankton S3A
Wikström, S. A. et al. Diversity of filamentous algae - functional importance or more of the same? S2A
Yakushev, E.V. Analysis of the seasonal variability of the biogeochemical processes in the Black and Baltic Seas water column oxic/anoxic interface with a redox layer model S3C

Posters:
Aarre, I. et al. Transfer of contaminants from sediment to Atlantic cod via benthic organisms PII
Alling, V. et al. The use of d34S for tracing terrestrial DOM in marine environments PI
Axe, P. et al. A new data model for hydrographic data PI
Bergström, L. Offshore wind power - effects on fish and fisheries PI
Beylich, B. et al. Time-course of responses in individual cod to contaminant exposure PII
Blomqvist, M. Comparison of Swedish, Danish and Norwegian national methods of assessing ecological status based on benthic invertebrates PI
Buhl-Mortensen L. et al. The response of hyperbenthos and infauna to hypoxia in fjords along the Norwegian Skagerrak coast: Quantitative estimates of species-loss due to eutrophication. PII
Dekere, Z.. Macrophyte depth distribution in the Gulf of Riga, Baltic Sea, Latvia PI
Eikrem, W. et al. Morphology and ultrastructure of Chattonella aff. verruculosa (Dictyochophyceae). PII
Eroshenko, D.. The recent and postglacial sedimentation in the southern part of Gotland Basin, Baltic Sea. PI
Fagerberg, T. et al. Growth stimulation of the toxic dinoflagellate Alexandrium minutum by 10-100 kDa dissolved organic matter. PI
Fossing, Henrik et al. Methane distribution and CH4 net oxidation determined by seismic mapping of the seafloor In Aarhus Bay (Denmark) PI
Gaardsted, Frank et al. The structure and variability of the East Greenland Current in the Fram Strait: Results from direct measurements PI
Hancke, T. B. et al. The use of PAM fluorescence and bio-optical characteristics to estimate oxygen production in phytoplankton PII
Haukås, M. et al. Bioaccumulation of per- and polyfluorinated alkyl substances (PFAS) in selected marine species from the Barents Sea food web PI
Hedman, J. et al. Fate of contaminants in Baltic Sea sediment ecosystems: An experimental study on the role of macrofaunal bioturbation and settling organic matter PI
Heiaas, H. Hasle et al. In situ monitoring of macrophyte photosynthetic efficiency PII
Hufthammer, A.K., et al. Mesolithic seasonal sea temperatures revealed from stable isotope analysis of cod otoliths PI
Huseby, S. Spatial variation of hydrological, chemical and biological variables along the Bothnian Bay coast PII
Hylland, K. et al. Marine Research Station Solberstrand (NIVA). PII PII
Iversen, K. Rokkan. Complex plankton responses to small-scale turbulence and nutrients in a mesocosm experiment PII
Kaasalainen, H. et al. Dynamics of Fe, Mn and P at the sediment water-interface in the Gulf of Finland (Baltic Sea) measured using DGT PII
Khaïtov, V.. Long-term cyclic changes in the intertidal mussel beds of the White Sea PII
Kling, H. & K. Döös. An advective large-scale 3D model for sediment transport, applied to the Baltic Sea PI
Knutson, I. & K. Sjøtun. Feeding preferences and behaviors of the periwinkle Littorina littorea in sheltered intertidal communities PII
Kumblad, L. et al. Pools and fluxes of organic matter in a boreal landscape - implications for a safety assessment of a repository for nuclear waste PII
Kuznetsov, I.S. & E.V. Yakushev. Modelling study of the consumption of dissolved oxygen in the water column of seas with anoxic conditions. PII
Lukkari, K. & M. Leivuori. Phosphorous fractions in some Baltic Sea sediments with varying environmental properties. PII
Mosgren, K. & T. Falkenhaug. MAR-ECO and interactive multimedia presentation PII
Nilsson, J. & G. Björk. Heat flux from the Atlantic waters to the Arctic ice cover PI
Nygaaard, K.. NIVA CIENS a new large research center in Oslo. PII
Olsson, M. (Hedersomnämnande Djyssen). Does the algal diet affect trematode parasitism in the herbivorous gastropode Littorina littorea? PII
Oug, E. & B. Rygg. Temporal trends in soft bottom macrofauna in Skagerrak, southern Norway, in relation to environmental factors PI
Palumbo, A.. Environmental monitoring of the pelagic in the Gulf of Bothnia PII
Pettersen, C. & A. Omstedt. Reconstructing the annual maximal ice cover extent in the Baltic Sea (MIB) during the 16th and 17th century PI
Pettersen, I. H. Do the Russian king-crab in the Barents-sea and the fjords of Finnmark have the potential to affect the cod populations in these areas? Preliminary report PII
Risberg, I. & B. Edvardsen. Genetic variation in ribosomal DNA of Chattonella aff. verruculosa, a new harmful dictyochophyte forming recurrent blooms in Scandinavian waters PII
Salman, N. A.. ECOTOXICITY IN THE SOUTHERN MARSHES OF IRAQ: Their Impact on Riverine and Coastal Ecosystem PII
Serrano, I. & S. Lars. Revealing salmon and trout migratory secrets PI
Simonov, Y. Change of the Russian northern rivers water inflow into the Arctic Ocean PII
Sneli, J-A. et al. The life style of a deep-sea sponge, Chondrocladia giganthea (Hansen, 1885) PI
Sogn Andersen, G. & S. Fredriksen. Kelp associated epiphytes and their level of biomass production in relation to wave-exposure and season. PI
Sørflaten, A.. Modeling of artificial inlets impact on tides in fjords. PI
Tandberg, A. H. S. et al. Extended parental care in Metopa glacialis associated with Musculus discors? PII
Tødt, C.. Biomineralsation in the radula of the aplacophoran mollusc Helicoradomenia (Solenogastres) PI
Torstensen, E.. Maturity classification in herring- an exchange of digital images. PI
Werner, M.. AquAliens, a presentation of a research program on introduced aquatic species PII
Wesslander, K. & A. Omstedt. The carbon and oxygen dynamics in the surface waters of the open Baltic Sea PII

Exhibiting Companies
Aanderaa Data Instruments http://www.aanderaa.com
EIVA http://www.eiva.dk/
Kongsberg Maritime http://www.km.kongsberg.com/
MacArtney http://www.macartney.com/
Nortek http://www.nortek-as.com/
Fugro/Oceanor http://www.geos.com/services/monitoring/rtenvironmental.asp
Presens http://www.presens.de/
SAIV http://www.saivas.no/default.asp
Unisense http://www.unisense.com/