

First International
Marine Ingredients Conference
Norway



Programme



Holmenkollen Park Hotel, Oslo
20 - 21 September 2010



Dear conference delegate

The First International Marine Ingredient Conference takes place in Oslo in September 2010. The ambition is to establish this event as "THE" most important and innovative meeting place for the international marine industry and other interested players.

We proudly present a very interesting programme which addresses challenges and introduces perspectives for the international marine ingredient industry. Many industry experts and researchers from all over the world will present marine innovations and developments of bioactive and nutritional marine ingredients for use in foods, functional foods, food and feed supplements, biotechnology, pharmaceuticals and other applications. International market trends and business opportunities for marine ingredients will be focused, and also challenges within documentation, regulatory issues, health, sustainability, food safety, food security and environmental issues.

Obviously, such an international conference includes more than the formal program. A "get together" reception will be held at the Norwegian Skimuseum at Holmenkollen – located at the spectacular, newly built ski-jump, and a conference dinner will take place at the hotel. There will be plenty of time for face-to-face contact with interesting and possible new collaborating partners during the conference. And for those of you who like to add practical industry input to your conference attendance, we invite you – after the conference, to visit Omegaland, (a cluster of marine ingredients enterprises). Hop on a plane from Oslo and go to beautiful Ålesund on the West coast of Norway. A nice conference bonus!

Welcome to a unique and unforgettable conference in Oslo!

Sigrun Bekkevold

Leader of the programme committee

Jostein Refsnes

Programme committee and organiser

Trude Olafsen

Coordinator of the conference

Programme committee and organisers



Sigrun Bekkevold
General Manager
RUBIN



Jostein Refsnes
Chairman
MARING Forum



Gunnar Berge
Director Business
Development Pronova
BioPharma



Kjartan Sandnes
R & D Manager
Marine Bioproducts



Marit Aursand
Research Director
SINTEF Fisheries and
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Jarle Wang-Andersen
Manager Bio-Lab
Nofima Ingredients



Trude Olafsen
Senior Adviser
SINTEF Fisheries and
Aquaculture

RUBIN

RUBIN is a foundation established in Norway in 1992, and works for increased and more profitable utilization of by-products and rest raw materials from the fisheries and fish farming in Norway.

MARING Forum

MARING Forum is a group within the Norwegian Seafood Federation organizing companies in the increasing bio-marine industry in Norway.

Reception at the Ski Museum in Holmenkollen

The Ski Museum is the world's oldest museum specialising in skis and the history of skiing. The museum is situated inside the actual Holmenkollen ski jump 500 m from the hotel, where visitors can experience a magnificent view of Oslo.

A light meal and drinks will be served.



Industrial sponsors



Main sponsor:

Seagarden is a leading supplier of high quality marine ingredients to customers worldwide. Seagarden's competitive advantages reside in its wide range of powders and extracts as regards both marine savoury ingredients and marine bioactives, its high quality standards and competitive prices.

Seagarden has several production plants along the Norwegian coastline that allow the company to secure full control of the manufacturing process and its high quality, and can rely on an extensive international sales and distribution network.



Calanus AS is a biomarine company which develops unique health- and nutrition products based on the marine copepod *Calanus finmarchicus*, the largest renewable and harvestable resource in the North Atlantic Ocean. As the first mover in this field, the company has had to engage itself in developing the entire value chain, including harvesting, processing and product formulations.



www.nutrimar.no

Nutrimar is a producer of oil and other products based on rest raw material from salmon and other marine sources.



www.marinebio.no



www.pronova.com

Pronova is a global leader in the research, development and manufacture of marine-originated omega-3 derived pharmaceutical products.



www.novozymes.com



www.nofima.no

Nofima is a business oriented research group working in research and development for the aquaculture, fisheries and food industry in Norway.



www.firmenich.com



www.sintef.no

As a well known independent and industrial research institute, SINTEF Fisheries and Aquaculture has knowledge and broad competence in the field of utilization of renewable marine resources.



www.fmctechnologies.com



www.nordlaks.no

Now Nordlaks is processing salmon and trout oil and protein from super fresh raw material from own slaughter house and VAPfactory next door.



www.gea-westfalia.no

Programme

Sunday 19th September

18:00 - 20:00 Welcome Reception at the Ski Museum in Holmenkollen

Monday 20th September

08:30 Registration and Presenters Preparation Desk opens

10:00 – 10:05 *Sigrun Bekkevold, RUBIN*, Leader of the programme committee: Opening and welcome.

10:05 – 10:25 *Fride Solbakken, Political adviser at the Ministry of Fisheries and Coastal Affairs*, Political goals and challenges.

Session 1

Setting the Marine Ingredient Scene

Chair: Jostein Refsnes

10:25 – 11:55 *Albert Tacon, University of Las Palmas, Spain*. Food from our oceans: raw material availability and opportunities for marine feed ingredients – a global overview.

10:55 – 11:15 *Robert Wahren, Core Competence, Sweden*. Industrial status for marine ingredients – market trends and success factors.

11:15– 11:35 *Gunn Harriet Knutsen, FHL Maring, Norway*. Regulatory framework for food and feed – Consequences for biomarine ingredients industry.

11:35 – 12:00 Coffee break and poster session

Parallel session 2A

Proteins and peptides; the new megatrend

Chair: Karl Almås

12:00 - 12:30 *Hordur Kristinsson, Matis, Iceland*. Marine hydrolysates – products and potentials.

12:30 – 12:50 *Bjørn Skjævestad, Altavida, Norway*. Market trends in marine nutrition- and health products in the US.

12:50 – 14:00 Lunch

Industry

14:00 – 14:20 *Rolf Berge, Marine Bioproducts, Norway*. Tailor-making and documenting marine bioactive peptides.

14:20 – 14:40 *Bernt Walther, Aqua Bio Technology/ University of Bergen, Norway*. Three billion years of Life without Health Care: Commercial and Medical uses of Marine Proteins.

14:40 – 15:00 *Michael Doolan, Complete Filtration Resources, US*. Recovery of added value protein fractions.

15:00 – 15:30 Coffee break and poster session

R&D

15:30 – 15:50 *André Marette, Laval University Quebec, Canada*. The effect of fish proteins and peptides on type 2 diabetes and related metabolic disorders.

15:50 – 16:10 *Bjørn Liaset, National Institute of Nutrition and Seafood Research, Norway*. Modulation of bile acid metabolism in the prevention of obesity related diseases – a novel mechanism for dietary FPH.

16:10 – 16:30 *Edel Elvevoll, University of Tromsø, Norway*. Marine Bioactive Peptides from digestion and their relation to cardiovascular markers.

16:30 – 16:45 *Ingrid Undeland, Associate professor in Chemistry and Bioscience at Chalmers University of Technology*. Production of protein isolates from underutilized marine raw materials using pH-shift processing.

16:45 – 17:00 *Harald Breivik, Neperdo Biomarine, Norway*. International standard for protein hydrolysates.

17:00 – 17:15 Questions and discussion
17:15 Closing remarks day 1

19:30 Conference dinner

Parallel session 2B

Omega-3, marine lipids - latest developments and trends.

Chair: Gunnar Berge

- 12:00 - 12:30 *Michael Crawford, London Metropolitan University, United Kingdom.* The sustainability of human intelligence depends on the sustainability of Marine Ingredients.
- 12:30 - 12:50 *Adam Ismail, Global Organization for EPA and DHA omega-3 (GOED), USA.* An overview of EPA/DHA omega-3 markets and innovation.
- 12:50 - 14:00 Lunch
- 14:00 - 14:20 *Odd Ivar Lekang, Norwegian University of Life Sciences, Norway.* Alternative sources for omega-3 oils, potentials and limitations.

Industry

- 14:20 - 14:40 *Nils Hoem, Aker Biomarine, Norway.* Phospholipids from Antarctic Krill - their production, structural chemistry and areas of use.
- 14:40 - 15:00 *Ragnar Hovland, Pronova Biopharma, Norway.* Marine ingredients in pharmaceutical products- barriers and opportunities.
- 15:00 - 15:30 Coffee break and poster session

R&D

- 15:30 - 15:50 *Ivar Storrø, SINTEF Fisheries and Aquaculture, Norway.* Pro-oxidants and anti-oxidants in oxidation of marine phospholipids.
- 16:50 - 16:10 *Xuebing Xu, University of Aarhus, Denmark.* Process development for enzymatic upgrading of Omega-3 oils.
- 16:10 - 16:30 *Charlotte Jacobsen, Technical University of Denmark.* Oxidation stability in foods enriched with omega-3 fatty acids.
- 16:30 - 16:50 *Bente Ruyter, Nofima, Norway.* Low oxidised oils and potential health advantages.
- 16:50 - 17:20 Questions and discussion
- 17:20 Closing remarks day 1
- 19:30 Conference dinner

Tuesday 21th September

Session 3

Runner ups in the marine ingredient family

Chair: ?

- 09:00 - 09:30 *Dimitri Sclabos, Tharos Ltd, Chile.* South American (Antarctic) Marine Ingredients. Processing, Supply and Demand Outlook.
- 09:30 - 09:50 *Kurt Draget, NOBIPOL NTNU, Norway.* Physical properties of gelatines from marine cold water fish species as function of extraction conditions.
- 09:50 - 10:10 *Morten Sørli, Norwegian University of Life Sciences/ Kjell Vårum, NOBIPOL, NTNU, Norway.* The many faces and applications of chitosan.
- 10:10 - 10:25 Coffee break
- 10:25 - 10:45 *Otto Pulz, IGV Institut für Getreideverarbeitung GmbH, Deutschland.* Industrial scale production of microalgae biomass for valuable substances.
- 10:45 - 11:05 *Nils Henrik Norsker, University of Wageningen, Netherlands.* Microalgae as ingredients in food and nutraceuticals.
- 11:25 - 11:45 *Elisabeth Holen, National Institute of Nutrition and Seafood Research, Norway.* Nucleotides from cod roe, effects on humane immune cells.
- 11:45 - 12:00 Questions and discussion
- 12:00 - 13:00 Lunch

Session 4

Marine Ingredient Industry - case studies

Chair: Kjartan Sandnes

- 13:00 - 15:00
- *Seagarden*
 - *Calanus*
 - *SINTEF Fisheries and Aquaculture*
 - *NOFIMA*
 - *Nutrimarine Life Science, Einar Lied,* Marine peptides in functional and therapeutic nutrition
 - *Others TBC*
- 15:00 - 15:20 Questions and discussion
- 15:20 - 15:30 "Best poster"
- 15:30 - 15:45 Closing address

Reputable industry experts and researchers from all



Sigrun Bekkevold
General Manager RUBIN,
Norway



Kurt Ingar Draget
Prof II / Res. Scientist Nor-
wegian Biopolymer Labora-
tory, NTNU, Norway



Bjørn Skjævestad
CEO Altavida AS, Norway



André Marette
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Fride Solbakken
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Bente Ruyter
Senior Scientist Nofima
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Michael Crawford
Dir. of The Institute of Brain
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Bjørn Liaset
Scientist at NIFES, Norway



Charlotte Jacobsen
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Lipids and Oxidation at the
DTU, Denmark



Dimitri Sclabos Katevas
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Edel Elvevoll
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Ivar Storro
Senior researcher at SINTEF
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Kjell Vårum
Professor at Department of
Biotechnology, NTNU,
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Niels-Henrik Norsker
Researcher at Wageningen
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Nils Hoem
Vice President Pharma
Aker BioMarine ASA,
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Odd Ivar Lekang
Associate Professor at IMT,
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Otto Pulz
Head of the biotechnology
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Robert Wahren
CEO Core Competence AB,
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Rolf Kristian Berge
Professor Department of
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versity of Bergen, Norway



Albert Tacon
Visiting Professor Aquacul-
ture Reserch Group Univer-
sity of Las Palmas, Spain



Xuebing Xu
Professor in Agro-Biotech-
nology Science, Aarhus
University, Denmark



Gunn Harriet Knutsen
FHL Maring, Norway



Harald Breivik
CEO in Neperdo Biomarine,
Norway

over the world...



Morten Sørli
Professor at IKBM
Norwegian University of
Life Sciences, Norway



Ingrid Undeland
Associate professor Chalmers
University of Technology,
Sweden



Elisabeth Holen
Scientist at Aquaculture
Nutrition, NIFES, Norway

Michael Doolan
Divisional Director
Europe Complete Filtration Resources,
USA

Ragnar Hovland
Director Discovery Research at Pronova BioPharma,
Norway

Adam Ismail
Executive Director of the GOED, United Kingdom

Einar Lied
Owner and Man Dir of Nutrmarine
Life Science AS and Professor at
University of Bergen-Institute of Medicine,
Norway



Study tour to Omegaland in the Ålesund area

There will be arranged a one day study tour after the conference to Ålesund - a city in the Western part of Norway. Omegland - a network organising the marine ingredient industry in the area - are the formal organiser of the study tour. We can promise interesting industry visits to Firmenich Børge Biomarin and EPAX and you will learn more about the network Omegaland. Nice sight-seeing in a spectacular part of Norway and good food are included!

For those of you that are interested, it is possible to travel by "Hurtigruten" or the Coastal Express from Ålesund to Bergen or Trondheim after the tour. This is not organised by Omegaland.

Terms of registrations

All registrations are to be made online. At time of registration it is mandatory to pay the whole conference fee. The secure online payment system accepts all major credit cards: Master, VISA, AMEX and Diners. Hotel booking for Holmenkollen Park Hotel Rica must be made through the conference registration form.

Deadline for registration is 20 August 2010.

Conference fees

The conference registration fee includes all meeting material, including a folder of abstracts.

Early registration will give you a considerable discount:

Registration before 15 June 2010: NOK 3 300 (approx euro 400)

Registration between June 15 - August 20: NOK 4 300 (approx euro 520)

Accommodation, meals and social events

(in addition to the conference fee)

A limited number of rooms have been reserved for MIC 2010 at Holmenkollen Park Hotel RICA- to a reduced price.

Reception 19 September (a light meal and drinks included): NOK 450

Full board* Single room 20.-21.September NOK 2 830

Full board Double room 20.-21.September NOK 2 465

*Full board includes room with breakfast, lunches 20-21 Sept and conference dinner 20 Sept

Single room 19.-21.September (full board 20-21 + room with breakfast 19-20) NOK 4 025

Double room 19.-21.September (full board for two persons 20-21 + room with breakfast 19-20) NOK 6 226

Single room 20.-22.September (full board 20-21 + room with breakfast 21-22) NOK 4 025

Double room 20.-22.September (full board for two persons 20-21 + room with breakfast 21-22) NOK 6 226

Single room 19.-22.September (full board 20-21 + room with breakfast 19-20 and 21-22) NOK 5 220

Double room 19.-22.September (full board for two persons 20-21 + room with breakfast 19-20 and 21-22) NOK 7 522

Hotel expenses (lunches and coffee breaks) without overnight lodging for the whole conference and without conference dinner - day 1 and 2: NOK 1.230

Conference dinner, drinks included (for those with no accommodation at the hotel): NOK 650

NB! Hotel expenses (full board) are paid directly to the hotel when checking out. Meals and social events for non residents are paid online at registration.

Cancellation policy

MIC 2010 holds one uniform cancellation policy for the registration fee, hotel bookings and optional program items all alike. Cancellations must be made directly by e-mail to mic2010@videre.ntnu.no.

The cancellation fee will be NOK 500 administration charge for cancellation received within 20 August. For cancellation after 20 August, the fees must be paid in full.

Contact

All registrations, changes, cancellations and payment are handled by mic2010@videre.ntnu.no.

Organizing Secretariat

For general inquiry:

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Meeting site

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