First International Marine Ingredients Conference


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 conference hotel Holmenkollen Park Hotell RICA in the old part of the hotel built in the Norwegian "dragon-style", and the 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

## RUBIN

RUBIN is a foundation established in Norway in 1992, and works for increased and more profitable utilization of byproducts 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 biomarine industry in Norway.

## Reception at the Holmenkollen Park Hotel RICA

The reception will be held at the conference hotel, Holmenkollen Park Hotel RICA, in the old part of the hotel. Dating back to 1894, this old part is built in the Norwegian "dragonstyle" - a worthy architectural sight.

A light meal and drinks will be served.

## Sponsors

## seaf̂arden <br> arctic seafood ingredients

www.seagarden.no

## 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.

www.calanus.no

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.

## ๑: nutrimar

www.nutrimar.no

## pronova <br> BIOPHADMA

www.pronova.com
Onofima
www.nofima.no
SINTEF
www.sintef.no

www.nordlaks.no

www.gea-westfalia.no
AkerBioMarine
www.akerbiomarine.com

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

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

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

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

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

GEA Westfalia Separator is one of the world leading companies in separation techniques to food industry, industrial-, environmental-, marine- and offshore processes.

Aker BioMarine is a vertically integrated company that manufactures bio-tech products based on Antarctic krill. Aker Bio-Marine`s, human product, Superba® Krill Oil is high on omega-3 phospholipids and antioxidant astaxanthin. Qrill® is Aker BioMarine's brand name for the aquaculture and pet food market.

Flottweg is one of the leading manufacturers of high quality centrifuges for the food and beverage industry, the environmental protection and many other industries.

## Programme

## Sunday 19th September

16:00 Registration desk opens<br>18:00-20:00 Welcome Reception at Holmenkollen Park Hotel

## Monday 20th September

08:30 Registration desk opens
10:00-10:05 Sigrun Bekkevold, RUBIN, Norway Leader of the programme committee: Opening and welcome.
10:05-10:25 Fride Solbakken, Political adviser at the Ministry of Fisheries and Coastal Affairs, Norway. 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 <br> Chair: Karl Almås

12:00-12:30 Hordur Kristinsson, Matis, Iceland. Marine hydrolysates - products and potentials.
12:30-12:50 Bjørn Skjævestad, Altavida, Norway. Human health and nutrition products, untapped potential for marine protein ingredients.
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 Technologyl 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, Italy. 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. Chalmers University of Technology, Sweden. 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
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\begin{array}{ll}\text { 12:00-12:30 } & \begin{array}{l}\text { Michael Crawford, London Metropolitan } \\
\text { University, United Kingdom. The } \\
\text { sustainability of human intelligence } \\
\text { depends on the sustainability of Marine }\end{array}
$$ <br>

Ingredients.\end{array}\right\}\)| 12:30-12:50Adam Ismail, Global Organization for <br> EPA and DHA omega-3 (GOED), USA. <br> An overview of EPA/ DHA omega-3 <br> markets and innovation. |
| :--- |
| 12:50-14:00Lunch |
| 14:00-14:20Odd Ivar Lekang, Norwegian University <br> of Life Sciences, Norway. Alternative <br> sources for omega-3 oils, potentials and <br> 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 Revilija Mozuraityte, SINTEF Fisheries and Aquaculture, Norway. Pro-oxidants and anti-oxidants in oxidation of marine phospholipids.
15:50-16:10 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: Jarle Wang-Andersen

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 Sørlie, Norwegian University of Life Sciences/ Kjell Värum, NOBIPOL, NTNU, Norway. The many faces and applications of chitosan.
10:10-10:45 Coffee break
10:45-11:05 Otto Pulz, IGV Institut für Getreideverarbeitung GmbH, Deutchland. Industrial scale production of microalgae biomass for valuable substances.
11:05-11:25 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

- Bjarte Langhelle, Seagarden, Norway. Seagarden ASA - a global supplier of marine savoury and bioactive ingredients
- Jan Raa, Calanus, Norway. Calanus finmarchicus: A pre-eminent source of novel marine ingredients, including an oil with remarkable effects on obesity related disorders.
- Ivar Storra, SINTEF Fisheries and Aquaculture, Norway. From offal to profit - potential in pelagic industry.
- Gjermund Vogt, Nofima, Norway. Next generation of Omega-3 oils and their applications
- Björn Strandwitz, Biopolymer Products of Sweden AB, A unique multipurpose glue from the common blue mussel for medical and technical applications
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

## Bernt T. Walther

Professor at Department of Molecular Biology, University of Bergen, Norway

Dimitri Sclabos Katevas General Manager Tharos' Ltd., Chile



Kurt Ingar Draget Prof II / Res. Scientist Norwegian Biopolymer Laboratory, NTNU, Norway


Bjørn Skjævestad CEO Altavida AS, Norway


## Bente Ruyter

Senior Scientist Nofima Marin, Norway


## Michael Crawford

Dir. of The Institute of Brain Chemistry and Human Nutrition, London Metropolitan University, UK


André Marette
Professor of Medicine at Laval University, Canada


Fride Solbakken Political adviser at the Ministry of Fisheries and Coastal Affairs, Norway


Edel Elvevoll
Professor at the University of Tromse, Norway


## Hordur Kristinsson

Director of Biotechnology and Biomolecules Division at Matis, Iceland


## Bjørn Liaset

Scientist at NIFES, Norway


Charlotte Jacobsen
Head of Section for Aquatic Lipids and Oxidation at the DTU, Denmark



## Niels-Henrik Norsker

 Researcher at Wageningen Universitet, Netherlands

## Rolf Kristian Berge

Professor Department of Clinical Biochemistry, University of Bergen, Norway

## Nils Hoem

Vice President Pharma Aker BioMarine ASA, Norway


## Albert Tacon

Visiting Professor Aquaculture Reserch Group University of Las Palmas, Spain


Odd Ivar Lekang
Associate Professor at IMT, Norwegian University of Life Sciences, Norway


## Xuebing Xu

Professor in Agro-Biotechnology Science, Aarhus University, Denmark

## over the world...



## Morten Sørlie

 Professor at IKBM Norwegian University of Life Sciences, Norway

Elisabeth Holen
Scientist at Aquaculture
Nutrition, NIFES, Norway


Ingrid Undeland
Associate professor Ch
Associate professor Chalmers University of Technology, Sweden


Ragnar Hovland Director Discovery Research at Pronova BioPharma, Norway


Gjermund Vogt Researcher at Nofima Mat, Norway


Revilija Mozuraityte Scientist at SINTEF Fisheries and Aquaculture


Bjarte Langhelle Commercial Director, Seargarden, Norway
Serorn, Norwa

Adam Ismail
Executive Director of the
GOED, United Kingdom


## Study tour to Omegaland in the Âlesund 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 Vital Seafood 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!

## Programme:

- Opening session, by Robert Wolff, Project Manager of Omegaland
- Visiting Vital Seafood
- Lunch
- Visiting EPAX
- Gathering dinner


## Date

22.     - 23. of September following the main conference.

## How to reach Ålesund

The easiest way to reach Ålesund is to travel by air. Both SAS and Norwegian operates from Gardermoen to Vigra, Ålesund. Delegates have to book and pay for their own flight. We recommend you to travel from Oslo at evening the 21. If you want a memorable voyage, you can travel from Ålesund by the coastal express Hurtigruten either southward to Bergen (00:45 am) or northward to Trondheim ( $15: 00 \mathrm{pm}$ ), and then by airplane or train back to Oslo. This is not organised by Omegaland.

## Hotel

We will stay at Raddisson Blu Hotel. Special offer for delegates are NOK 1120,- for single room and NOK 1320,- for double room. Delegates have to pay for their own accommodation. Reservation will be done once you have registered.

## Price

Total cost for study tour is NOK 1500,-. This includes lunch, study tour and gathering dinner.
If you only will attend dinner, the cost is NOK 350,-.
For more information and registration: www.omegaland.no or link from www.marineingredients2010.net. and / or contact Project Manager at Omegaland, Robert Wolff:
robert.wolff@omegaland.no Phone: +47994 49579

## 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 3300 (approx euro 400)
Registration between June 15 - August 20: NOK 4300 (approx euro 520)

## Accomodation, 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 2830
Full board Double room 20.-21.September NOK 4930
*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 4025
Double room 19.-21. September (full board for two persons 20-21 + room with breakfast 19-20) NOK 6226

Single room 20.-22.September (full board 20-21 + room with breakfast 21-22) NOK 4025
Double room 20.-22. September (full board for two persons 20-21 + room with breakfast 21-22) NOK 6226
Single room 19.-22.September (full board 20-21 + room with breakfast 19-20 and 21-22) NOK 5220
Double room 19.-22. September (full board for two persons 20-21 + room with breakfast 19-20 and 21-22) NOK 7522
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

Holmenkollen Park Hotel RICA in Oslo

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