KEYNOTE-SPEAKER



Nicole Jansen / Innova Market Insights

Nicole Jansen is Team Manager Insights & Innovation at Innova and holds a Master Degree in Food Quality Management. She works hand in hand with clients and guides them in retrieving relevant insights from Innova's Database and its affiated platforms. Through frequent communication with customers she identifies their information needs and supports them with the cutting edge intelligence solutions to help professionals with strategies to grow their business.

Ivo Rzegotta / Good Food Institute





Prof. Dr. Felix Schottroff / TU Berlin

Since June 2023 Felix Schottroff holds the position of tenure track professor for Integral Food Processing at the Technical University of Berlin. Before, he was a Post-Doc at the Institute of Food Technology, University of Natural esources and Life Sciences (BOKU), Vienna and head of the BOKU Core Facility Food & Bio Processing.

Dr. Hanno Slawski / Consultant for raw materilas in feed

Aquaculture expert with 19 years of experience in fish farming, aquafeed industry and raw materials. As head of R&D for the international aquafeed producer Aller Aqua, for twelve years he had been investigating and commercially applying various raw materials in feed for more than 40 aquatic species. Today, he works as consultant in the raw materials sector.



Dr. Alexander Stephan / Protein Expert

Dr. Alexander Stephan is a trained master butcher, food chemist and toxicologist. While working several years in R&D, Raw Material Science and Quality Assurance in the spice industry, he earned his doctorate studying the functionality and biotechnology of fungi protein. As a protein expert, his research focuses on techno-functionality of proteins of both animal and plant origin. He is among others the Chairman of IVLV e.V. Protein Group and lecturing Justus-Liebig-Universität Giessen (Germany).

Dr. Christian van Hoof / One Planet Research Center

Dr. Christian van Hoof is General Manager of the OnePlanet Research Center in Gelderland. He is also Vice President R&D at imec. Chris believes preventive health, personalised nutrition, sustainable food production and reduced waste are essential enablers of improving our world for the generations to come. And he is convinced that technology (hardware and AI) are key tools to make that happen.





Prof. Dr. Karen Helen Wiltshire (TBD) / Alfred-Wegener-Institut

Prof. Dr. Karen Wiltshire is Vice-Director of Alfred-Wegener-Insitute (awi) and she is Professor of Shelf Ecosystems at the Christian-Albrechts-Universität zu Kiel. She investigates the structure and function of coastal systems in terms of changing nvironmental conditions. Her research group provides scientific and stakeholder expertise on Wadden Sea, North Sea and

Guðmundur Stefánsson / Matís

Dr Stefánsson is the director for research groups at Matís. He recently coordinated (2015-2019) an European Union's Horizon 2020 research and innovation project, PrimeFish, on enhancing the economic sustainability of European fisheries and aquaculture sectors (grant agreement No 635761). Other research projects include shark fermentation, product development and value addition of pelagic fish species, such as blue whiting and mackerel.



PROJECT PARTNERS





































NextGen Proteins

12, Vínlandsleið 113, Reykjavík, Iceland nextgenproteins@matis.is

Conference Venue

ATLANTIC Hotel Sail City Am Strom 1 27568 Bremerhaven Germany





@NextGenProteins #nextgenproteins #ngpconference2023 #alternativeproteins



his project has received funding from he European Union's Horizon 2020 research and innovation programme under grant agreement no. 862704.



The FU H2020 funded research projects NextGenProteins, ProFuture, smart protein and SUSINCHAIN and the EU Horizon Europe funded research projects GIANT LEAPS and LIKE-A-PRO collaborate as Horizon4Proteins





CONFERENCE **PROGRAMME**

NEXT GENERATION PROTEINS CONFERENCE

New Proteins – New Food, Feed & Products – New Perspectives September 7th and 8th, 2023

ATLANTIC Hotel Sail City, Bremerhaven



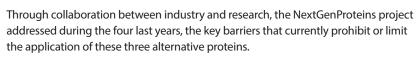
ABOUT THE NEXTGEN PROTEINS PROJECT

Meeting Protein Demand Sustainably through Innovative Technologies

Demand for proteins is increasing for food and feed applications. Production will have to double by 2050. However, the current protein production, both animal- and plant-based, leads to negative environmental impact – e.g. greenhouse gas emissions, land and water use and biodiversity loss.

Moreover the European Union is not self-sufficient when it comes to protein production and a large proportion of the demand is currently met by importing proteins – despite concerns regarding food security and competitiveness. It is therefore of vital importance to develop alternative protein sources that can be sustainably produced in quantities that meet the growing demand.

NextGenProteins has identified microalgae, single cell protein and insects as three promising sources of alternative proteins that can be produced through innovative and environmentally sustainable bioconversion processes using scarcely used by-products of the food and forest industry.



The project demonstrated the suitability and economic viability of the alternative proteins in food and feed value chains and explored their market opportunities with the industry, stakeholders, policy makers and consumers.



Sustainability & Aquaculture, mental Science and Resource management at Matís Ohf. His main research expertise is

Birgir Örn Smárason

GUEST OF HONOR



Svandís Svavarsdóttir / Minister of Food, Agriculture and Fisheries, Government of Iceland

Svandís Svavarsdóttir serves as Minister of Food, Fisheries and Agriculture. She has been Minister of Health from 2017 to 2021, Minister for the Environment and Natural Resources from 2012-2013 and Miinister of Environment from 2009-2012.

ABOUT THE NEXTGEN PROTEINS CONFERENCE

New Proteins – New Food, Feed & Products – New Perspectives

The Next Generation Proteins Conference 2023 provides an overview of current developments in the field of ALTERNATIVE PROTEINS: technologies, raw materials, applications, legal aspects, consumer acceptance.

FOLLOW latest discussion in thrilling Keynotes and comprehending parallel sessions around Food, Feed, and legal, consumer,

- Raw materials and technologies for production of alternative proteins, new and emerging resources
- Application of alternative proteins in food, feed and ingredients for human and animal nutrition
- Safety of alternative proteins (safety requirements; challenges for food security)
- Regulation of alternative proteins (legal/regulatory landscape and challenges;
- Sustainability of alternative proteins (challenges of global food and feed systems; circularity;
- Economic feasibility of alternative protein production (upscaling and feasibility for mass production;
- Consumer acceptance and trust in alternative proteins (eating behaviours, consumer and stakeholder

JOIN practitioners and decision makers from the international protein, food and feed industry, as well as academics and policymakers, in a creative atmosphere in Bremerhaven, one of Germany's leading food and feed innovation hotspots and **CONTRIBUTE** to the future of the protein sector.

Steering Committee:

Birgir Örn Smárason (Matís ohf., Iceland), Sveinn Agnarsson (Sjókovin Blue Resource, Faroe Islands), Charilaos Xiros (Rise Processum AB, Sweden), Kolbrún Sveinsdóttir(Matís ohf., Iceland), Alessio Bonaldo (Alma Mater Studiorum-Universita di Bologna, Italy), Jaakko Paasi (VTT Technical Research Centre of Finland, Finland), Hafþór Ægir Sigurjónsson (KPMG EHF, Iceland), Marie Shrestha (ttz Bremerhaven, Germany), Guðmundur Stefánsson (Matís ohf., Iceland), Imke Matullat (ttz Bremerhaven, Germany), Martin Schüring (ttz Bremerhaven, Germany), Benjamin Küther (Hochschule Bremerhaven, Germany), Barbara Kleine-Kalmer (Hochschule Bremerhaven, Germany)

Local Organising Committee

Martin Schüring, Imke Matullat, Marie Shrestha, Christina Dietz and Linda Böhm (ttz Bremerhaven), Birgir Örn Smárason (Matís), Ann-Kristin Schwarze (Biozoon)

SPONSORS



















PROGRAMME NGP CONCLUDING SYMPOSIUM

| HURSDAY, SEPTEMBER 07. Overall moderation: | | Overall moderation: | Guðmundur Stefánsson | |
|--|---|---------------------|---|---|
| :00- :00 h | Welcome Prof. Dr. Gerhard Schories, Head of Institue, ttz Bremerhaven Prof. Dr. Rabea Diekmann, Vice-Rector for Research, Transfer & Continuing Education, Bremerhaven University of Applied Science Svandis Svavarsdóttir, Minister of Food, Agriculture and Fisheries, Government of Iceland, tbc Birgir Örn Smárason – Research Group Leader for Sustainability & Aquaculture, matís & Coordinator of NextGenProteins project Worldwide Protein Trends Nicole Jansen, Innova Market Insights The three pillars of the future of protein: Plant-based, cultivated and fermentation-made meat, eggs and dairy Ivo Rzegotta, Good Food Institutes | | | |
| | 11:00-11:30 h coffee-break, poster session, drawing competition | | | |
| | Session 1: Food – prot chair: Dr. Kolbrún Sveinsd matís (Iceland) | | Session 2: Feed – protein sources chair: Dr. Charilaos Xiros, RISE Processum AB (Sweden) | Session 3: Legal and societal frameworks for research & innovations of alternative proteins chair: Barbara Kleine-Kalmer, Hochschule Bremerhaven (Germany) |
| :30- :30 h | Functional, sensorial and nutritional properties of alternative proteins, Margrét Geirsdóttir, matís (Iceland) Icelandic Ultra Spirulina (IUS)- Not your grandmother's Spirulina, Isaac Berzin, VAXA (Iceland) Reformulation of food products with the addition of microalgae: effects on the physicochemical, nutritional, and sensory properties, Dr. Fabio Fanari, IRTA (Spain) | | Production of Single Cell Protein (SCP) and feed relevant enzymes by Paecilomyces variotii from forestry residues hydrolysate, Abhishek Bhattacharya, RISE Processum AB (Sweden) Protein Production from CO2 and H2: Sustainable Solution for Aquafeed and Fish Alternatives, Dr. Ludger Weß, 350 PPM Biotech GmbH (Germany) By-products of black soldier fly larvae (Hermetia illucens) production and their | Production of alternative proteins in a greening EU: Regulation and challenges, Sveinn Agnarsson, Sjókovin (Faroe Islands) Responsible Research and Innovation process of Next Generation Proteins development project, Nina Wessberg, VTT Technical Research Centre of Finland (Finland) The Role of Alternative Proteins in Sustainable Food Systems, Hafthor Aegir |

potential as feed ingredients for Pacific

Dr. Enno Fricke, awi (Germany)

Whiteleg Shrimp (Litopenaeus vannamei),

Sigurjonsson, KPMG (Iceland)

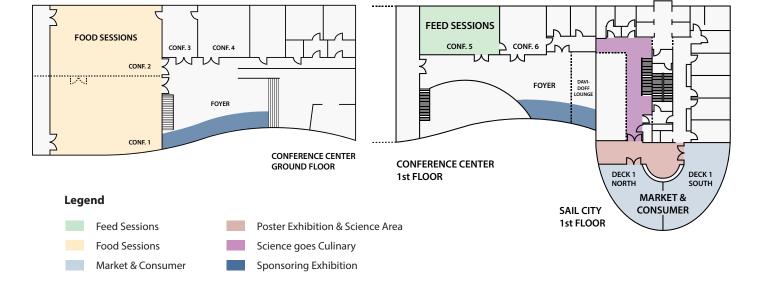
| | 12:30 | -13:15 h lunch-break, poster session, drawing compe | tition | |
|-------------------|---|--|--|--|
| 13:15- 13:55 h | Alternative proteins in feed, Dr. Hanno Slawski, Consultant for raw materials in feed | | | |
| | Session 4: Food - safety and analytical aspects of alternative proteins | Session 5: Feed - alternative proteins in fish feed | Session 6: Consumer acceptance / attitudes | |
| | chair: Margrét Geirsdóttir, Matís (Iceland) | chair: Birgir Örn Smárason, Matís (Iceland) | chair: Imke Matullat, ttz Bremerhaven (Germany) | |
| 14:00- 15:00 h | Food safety starts with raw materials - analytical strategies for alternative proteins, Elisabeth Dytkiewitz, Eurofins, (Germany) Influence of pH and drying technique on the techno-functionality of different legume protein concentrates, Sofie De Man, ILVO (Belgium) Protein database – A tool for product development through objective and holistic characterization of protein ingredients, Dr. Daria Wohlt, Fraunhofer Institute for Process Engeneering and Packaging IVV (Germany) | Alternative proteins in seabream feed, Serena Busti, University of Bologna (Italy) Evaluation of three emerging raw materials in salmon grower feeds, Mia Berwick, Mowi Feed UK (Scotland) The effect of incorporating alternative protein sources within salmon feeds on flesh quality and consumer acceptance, Emily Purvis, Aquascot Limited (UK) | European consumer perceptions of next generation proteins for food, Jaakko Paasi, VTT (Finland) Will consumers accept novel proteins?, Melissa Tillotson, Waitrose (UK) How natural colors support the consumer trends in plant based products, Carolin Dunker, oterra (Denmark) | |

| Elisabeth Dytkiewitz, Eurofins, (Germany) Influence of pH and drying technique on the techno-functionality of different legume protein concentrates, Sofie De Man, ILVO (Belgium) Protein database – A tool for product development through objective and holistic characterization of protein ingredients, Dr. Daria Wohlt, Fraunhofer Institute for Process Engeneering and Packaging IVV (Germany) | Evaluation of three emerging raw materials in salmon grower feeds, Mia Berwick, Mowi Feed UK (Scotland) The effect of incorporating alternative protein sources within salmon feeds on flesh quality and consumer acceptance, Emily Purvis, Aquascot Limited (UK) | Jaakko Paasi, VTT (Finland) Will consumers accept novel proteins?, Melissa Tillotson, Waitrose (UK) How natural colors support the consumer trends in plant based products, Carolin Dunker, oterra (Denmark) | |
|---|--|---|--|
| 15:00-15:30 h coffee-break, poster session, drawing competition | | | |
| Session 7: Food - alternative proteins in snacks & ready to eat meals chair: Dr. Charilaos Xiros, Rise Processum AB (Sweden) | Session 8: Feed – alternative proteins in feed chair: Prof. Dr. Alessio Bonaldo, Alma Mater Studiorum -Universita di Bologna (Italy) | Session 9: Market situation chair: Benjamin Küther, Hochschule Bremerhaven (Germany) | |
| Including next generation proteins in grain-based snacks – product applications, sensory aspects, and consumer liking, Laura Pirkola, Fazer Sweden AB (Sweden) Alternative proteins in ready-to-eat meals, Grimur Gislason, Grimur Kokkur (Iceland) Incorporation of single cell protein into plant based burgers and sausages, Åsa Cliffordson, RISE (Sweden) Powder-based high protein vegan spreads containing torula yeast- A NextGenProteins approach, Ann-Kristin Schwarze, Biozoon GmbH (Germany) | New microalgae media formulated with completely recycled phosphorus originating from agricultural sidestreams, Albert Beyer, awi (Germany) Alternative protein sources in poultry diets: results of dose-response and in-field validation trials, M. Zampiga, University of Bologna (Italy) | Development of an insect company within NextGenProteins project, Côme Guidou, MUTATEC (France) Sentiment and Trend Analysis of Alternative Protein Tweets, Sari Vainikainen, VTT (Finland) Leveraging a European value chain approach to enable the deployment and commercialization of single cell proteins products at large scale, Nolwenn Paugam, ARBIOM (France) Economic Impact and Value Chain Risk of Alternative Proteins, Hafthor Aegir Sigurjonsson, KPMG (Iceland) | |

| 16:50- 17:30 h | Biodiversity: Climate, humans and seas Prof. Dr. Karen Wiltshire, Alfred-Wegener-Instituts, Helmholtz Zentrum für Polar- und Meeresforschung (AWI) | |
|-------------------|--|--|
| | 17:30 h End of day 1 | |
| 18:30- | Evening Event Culinary Journey around the world in the Klimahaus | |
| 23:00 h | Am Längengrad 8, 27568 Bremerhaven (www.klimahaus-bremerhaven.de/en) | |

| FRIDAY, SEPTEMBER 08. Overall moderation: Guðmundur Stefánsson | | | |
|---|--|---|--|
| 09:00- 09:40 h | Change with innovation Dr. Alexander Stephan Plant Protein Specialist | | |
| 09:40-10:00 h coffee-break, poster session, drawing competition | | | |
| | Session 10: Food – alternative proteins in dairy alternatives | Session 11: Food - alternative proteins in special applications | Session 12: Innovation and Sustainability of alternative proteins |
| | chair: Dr. Christina Dietz, ttz Bremerhaven (Germany) | chair: Dr. Jaakko Paasi, VTT Technical Research Centre of Finland (Finland) | chair: Sara Hritz-Hagenah, ttz Bremerhaven (Germany) |
| 10:00- 11:00 h | Influence of fermentation of selected protein sources with lactic acid bacteria on the volatile aroma compound profile, Prof. Dr. Ramona Bosse, HS Bremerhaven (Germany) Bambara groundnut - It's potential as a sustainable source of protein and use in dairy alternatives, Hauke Krause, ttz Bremerhaven (Germany) Exploring the use of plant-based flours and fermentation for the production of a legume-avocado based vegan cream cheese, Anastasia Palatzidini, University of Bozen (Italy) | Application of novel rapeseed meal protein isolate in texture-modified food products for elderly consumers: A critical evaluation, Petra Ondrejíčková, ENVIRAL (Slovakia) Low salt pea protein to act for a sustainable nutrition for all, Cécilia Autran, COSUCRA Group, (Belgium) Challenges for technologies for new, proteinbased products, Karsten Ollesch, Glass GmbH (Germany) | Circular Economy and Life Cycle Assessment of Alternative Proteins, Hafthor Aegir Sigurjonsson, KPMG (Iceland) Use of Future Radar to examine success factors and risks for Next Generation Proteins, Anu Seisto, VTT (Finland) Challenges for technologies for new, protein-based products, Karsten Ollesch, Glass GmbH (Germany) |
| | Roundtable | "What can alternative proteins contribute to the futu. | re of food?" |
| 11:00- 12:00 h | Patrick Bühr, Head of R & D, Rügenwalder Mühle Carl Müller GmbH & Co. KG Nicole Jansen, Innova Market Insights Online: Cindy Schoumacher, Policy Officer, European Commission DG Research & Innovation chair: Martin Schüring, ttz Bremerhaven (Germany) | | |
| | 12:00 | -13:00 h lunch-break, poster session, drawing compe | tition |
| 13:00- 13:40 h | Innovative and non-thermal to | echnologies for the production of future proteins | Prof. Dr. Felix Schottroff, TU Berlin |
| | Session 13: Extrusion applications for alternative protein production chair: Prof. Dr. Sveinn Agnarsson, Sjókovin Blue Resource (Faroe Islands) | Session 14: Food technologies applications for alternative protein production chair: Linda Böhm, ttz Bremerhaven (Germany) | Session 15: Food technologies applications for alternative protein production chair: Hafthor Aegir Sigurjonsson, KPMG (Iceland) |
| 13:40- 14:20 h | Twin screw extrusion as a key technology for the production of plant-based texturized proteins, Patrick Wittek, Coperion (Germany) Extrusion-based texturizing of sunflower press cake, Sophie Morejón Caraballo, TU Dresden (Germany) | High pressure assisted protein isolation from pumpkin seed press cake: Effects on protein yield and techno-functionality, Deniz Sert, TU Dresden (Germany) | Manufacturing of alternative protein products: Do's and Don'ts, Michael Betz, Dr. Albert Handtmann Maschinenfabrik GmbH & Co KG, (Germany) |
| 14:20- 15:00 h | Technology (hardware and AI) as key tools to enable sustainable food production for the generations to come Dr. Christian van Hoof, OnePlanet Research Center | | |
| | 15:00 - 15.15 h Closing ceremony including "Drawing contest award" | | |
| | | | Programme items: subject to modifications. |

FIND US HERE



POSTER EXHIBITION PROGRAMME

| IAME | TITEL POSTER |
|---|--|
| Leonhard Meyer-Wilmes, Katja Wilms, Dominik Krienke | Upscaling of Centrifugal Downstream Processes for vegetable, insect and microbial protein applications |
| Camille Malterre, Soukaina Hilali, Ann-Kristin Schwarze, Darleen Genuttis, Alexandru Rusu | Like-a-PRO EU-Project: From niche to mainstream – alternative proteins for everybody and everywhere |
| L. Viler, T. Paquignon, L. Etzbach, U. Schweiggert Weisz | Potential of selected common bean varieties (Phaseolus vulgaris L.) as raw material for the production of protein isolates |
| Tom Vanderborhght, Abdessamad Arrachid, Mercedes Brighenti | Challenges in the use of plant based protein for dairy alternative products |
| Alessandro Stringari, Hana Ameur, Andrea Polo, Kashika Arora, Emanuele Zannini, Raffaella Di Cagno and Marco Gobbetti | Exploitation of red lentil protein isolate for sourdough production to recycle pasta by-products |
| Dr. Stefano Tonini, University of Bolzano-Bozen (Italy) | Unlocking the Bioactive Potential of Lentil Protein Isolate: Exploring the Untapped Power of Hanseniaspora uvarum Yeast for the production of Bioactive Peptides |

SCIENCE GOES CULINARY

Curious about how science and cuisine can be combined? We will present various recipes to you in our action area on the first floor of the conference center! Every cooking and baking process is a scientific process that combines different flavors.

The recipes encourage you to discover new cooking techniques and, of course, ingredients: **new** types of proteins are the main theme.