

# WEFTA 2019 CONFERENCE PROGRAMME

## MONDAY 14<sup>TH</sup> OCTOBER 2019

- 14:00 – 18:00** WEFTA Analytical Working Group Meeting  
**16:00 - 19:00** Registration at Hotel Føroyar  
**18:00 – 20:00** WEFTA National Representatives Meeting  
**19:30 – 21:00** Welcome Reception - Müllers Pakkhús (Council of Tórshavn/Tórshavnar Býráð)

## TUESDAY 15<sup>TH</sup> OCTOBER 2019

- 08:00 - 09:00** Registration at Hotel Føroyar  
**09:00 – 09:20** Opening Ceremony of WEFTA 2019  
Jákup Mørkøre, chair WEFTA 2019  
Welcome Minister of Fisheries - Jacob Vestergaard

### SESSION 1: Value creation from pelagic and demersal fisheries (Industry Session)

Chairpersons: John Fagan, BIM, Ireland and Ása Jacobsen, Fiskaaling, Faroe Islands

- 09:20 – 09:50** **KO1 - KEYNOTE ADDRESS:** Flemming Jessen, DTU Aqua, Denmark (WEFTA Award winner 2018)  
*Rigor mortis and seafood quality*
- 09:50 – 10:10** **KO2 - KEYNOTE ADDRESS:** Ole J. Marvik, Special Advisor for Life Sciences at Innovation, Norway  
*Exploring/unleashing business opportunities within new marine resources and advanced bio-refining*
- 10:10 – 10:30** **KO3 - KEYNOTE ADDRESS:** Michael Gallagher, Pelagic Sector Manager within BIM, Ireland  
*Developing higher value opportunities from an under-utilised resource: blue whiting*
- 10:30 – 10:45** **KO4 - KEYNOTE ADDRESS:** Bogi Jacobsen, Man. Dir. of Varðin Pelagic, Faroe Islands  
*Bigger production units in pelagic fish area – herring, mackerel and blue whiting - and especially VAS*

### 10:45 – 11:15 **Coffee break and poster viewing - Sponsored by LÍV**

### CONTINUATION SESSION 1: Value creation from pelagic and demersal fisheries (Industry Session)

- 11:15 – 11:35** **OP01** Maria Hayes, Teagasc, Ireland  
*Adding value to marine pelagic by-products: Functional foods and nutrition for pets*
- 11:35 – 11:55** **OP02** Mursalin Sajib, Chalmers University of Technology, Sweden  
*Towards optimized valorization of herring (*Clupea harengus*) filleting by-products to silages: effect of temperature and time on lipid oxidation, protein hydrolysis and TVB-N*
- 11:55 – 12:15** **OP03** Themistoklis Altintzoglou, Nofima AS, Norway  
*Why do consumers involved in food waste reduction need more convincing to become positive about products that include by-product ingredients?*
- 12:15 – 12:20** **OP04** Anni Nisov, VTT, Finland  
*Restructured fish meat from whole Baltic herring by high-moisture extrusion cooking*
- 12:20 – 12:25** **OP05** Bjørg Helen Nøstvold, Nofima, Norway  
*Social sustainability as a market driver*

## SESSION 2: Sustainable aquaculture – healthy production today and in the future

Chairpersons: Jasper van Houcke, HZ University of Applied Sciences, the Netherlands and Bjørn Tore Rotabakk, Nofima, Norway

**12:25 – 12:45** **KO5 - KEYNOTE ADDRESS:** Atli Gregersen, Man. Dir., Hidden Fjord, Faroe Islands  
*Faroese aquaculture from the beginning until today. The position of aquaculture today and the development in the future*

**12:45 – 12:50** **OP06** Julia Mougin, Institute Charles violette, France  
*"I will survive": when Vibrio harveyi in fish farming systems thinks he is Gloria Gaynor!*

**12:50 – 12:55** **OP07** Philip James, Nofima, Norway  
*AQUAVITAE: New species, processes and products contributing to increased production*

**12:55 – 13:00** **OP08** Agnes Mols-Mortensen, Fiskaaling, Faroe Islands  
*Exploring the potential of macroalgae in an integrated multi-trophic aquaculture system in the Faroe Islands*

**13:00 – 14:00** **Lunch - Sponsored by Høvdavirkid, FMP P/F**

## CONTINUATION SESSION 2: Sustainable aquaculture – healthy production today and in the future

**14:00 – 14:20** **OP09** Jasper van Houcke, HZ University of Applied Sciences, the Netherlands  
*Refinement of Pacific cupped oysters (Crassostrea gigas) by exogenous uptake of free amino acids*

**14:20 – 14:40** **OP10** Narcisa Bandarra, IPMA, Portugal  
*Lipid and mineral composition and elemental bioaccessibility of farmed oysters (Crassostrea gigas) fed different alga-based diets*

**14:40 – 15:00** **OP11** Alberto Maximiliano Crescitelli, NTNU, Norway  
*Computer vision approach used to build large datasets of fish species using video footages in fish farms environments*

**15:00 – 15:20** **OP12** Rúni Weihe, Havsbrún, Faroe Islands  
*An alteration of the "fish in fish out" model to a food productivity assessment: the case of farmed Atlantic salmon (Salmo salar L.)*

**15:20 – 15:50** **Coffee break and poster viewing - Sponsored by Oilwind P/F**

## CONTINUATION SESSION 2: Sustainable aquaculture – healthy production today and in the future

**15:50 – 16:10** **OP13** Gunnvør á Norði, Fiskaaling, Faroe Islands  
*Modelling the potential bio-mitigation by blue mussel at a commercial fish farm*

**16:10 – 16:30** **OP14** Ása Johannesen, Fiskaaling, Faroe Islands  
*Waves limit the space available to salmon in a salmon cage*

**16:30 – 16:50** **OP15** Ása Jacobsen, Fiskaaling, Faroe Islands  
*Gaping in salmon fillets - a different approach*

### SESSION 3: Zero waste production and biorefining

Chairperson: Margrét Geirsdóttir, Matis, Iceland

- 16:50 – 17:10**    **KO6 - KEYNOTE ADDRESS:** Sigurjón Arason, Matís, Iceland  
*Zero waste production and biorefining (total utilisation)*
- 17:10 – 17:15**    **OP16** Federico Casanova, DTU, Denmark  
*Potential application of gelatine from fish skin in food products: physico-chemical and colloidal approach*
- 17:15 – 17:20**    **OP17** Kristine Kvangarsnes, NTNU, Norway  
*Properties of hydrolysates made from stored heads of farmed trout (*Oncorhynchus mykiss*)*
- 17:20 – 17:25**    **OP18** Mohd Abual Taher, NTNU, Norway  
*Approaching SDG target 12.3: Post-harvest processing of Farmed Salmon in Norway*
- 17:25 – 17:30**    **OP19** Eirin Bar, NTNU, Norway  
*The efficiency of shelf life extension efforts to prevent food loss and waste of seafood products*

### WEDNESDAY 16<sup>TH</sup> OCTOBER 2019

#### CONTINUATION SESSION 3: Zero waste production and biorefining

Chairpersons: Veronique Bagnis-Verrez, Ifremer, France and Alexandre Descomps, Nofima, Norway

- 08:45 – 09:05**    **OP20** Haizhou Wu, Chalmers University of Technology, Sweden  
*Extending the shelf life of herring by-products to increase the possibilities for value-adding*
- 09:05 – 09:25**    **OP21** Fionn Ó Fearghail, Technical University of Dublin, Ireland  
*Exploring shellfish by-products as sources of blue bioactives*
- 09:25 – 09:45**    **OP22** Nina Gringer, Technical University Denmark, Denmark  
*The use of enzymes and autolysis to increase the protein concentration in blue mussel meal*
- 09:45 – 10:05**    **OP23** Mehdi Abdollahi, Chalmers University of Technology, Sweden  
*Turning the pH-shift process to a multiple product biorefinery platform to meet zero waste goal in seafood processing*
- 10:05 – 10:25**    **OP24** Diana Lindberg, Nofima, Norway  
*Rapid process measurements for process control and product quality optimization in the enzymatic protein hydrolysis industry*
- 10:25 – 10:45**    **OP25** Jingnan Zhang, Chalmers University of Technology, Sweden  
*CROSS - a novel concept for preventing lipid oxidation during pH-shift processing*
- 10:45 – 11:15**    **Coffee break and poster viewing - Sponsored by Faroe Origin P/F**

#### CONTINUATION SESSION 3: Zero waste production and biorefining

- 11:15 – 11:35**    **OP26** Margrét Geirsdóttir, Matis, Iceland  
*Chemical properties of the various parts of cod heads as effected by different processing methods*

**11:35 – 11:55**    **OP27** Silje Steinsholm, Nofima, Norway  
*Application of nuclear magnetic resonance (NMR) to assess the development of flavor attributes during enzymatic protein hydrolysis*

**11:55 – 12:00**    **OP28** Gudrun Svana Hilmarsdottir, University of Iceland, Iceland  
*Pilot flash-heat processing of Atlantic mackerel side-streams compared to traditional fishmeal production*

#### **SESSION 4: Health effects of seafood consumption and promotion of marine-based food**

Chairperson: Ingrid Undeland, Chalmers University of Technology, Sweden

**12:00 – 12:20**    **KO7 - KEYNOTE ADDRESS:** Pál Weihe, Director, Ph.D., Department of Occupational Medicine and Public Health, Faroe Islands, Health & Ocean (seafood)  
*Health & Ocean (seafood)*

**12:20 – 12:25**    **OP29** Jaakko Hiidenhovi, Natural Resources Institute Finland (Luke), Finland  
*Isolation of value-added fractions from Baltic herring side streams*

#### **SESSION 5: Seafood safety and authenticity (emerging risks)**

Chairperson: Alexandre Dehaut, Anses, France

**12:25 – 12:55**    **KO8 - KEYNOTE ADDRESS:** Tinka Murk, Wageningen University Research, the Netherlands  
*Microplastics in seafood, mega worries but a negligible health risk*

**12:55 – 13:00**    **OP30** Sónia Pedro, IPMA, Portugal  
*Limpets: nutritional composition and chemical and microbiological contamination*

**13:00 – 14:00**    **Lunch - Sponsored by Vestmanna Seafood P/F**

#### **CONTINUATION SESSION 5: Seafood safety and authenticity (emerging risks)**

Chairpersons: Johan Robbens, ILVO, Belgium and Isabel Sánchez-Alonso, ICTAN, Spain

**14:00 – 14:20**    **OP31** Alexandre Dehaut, Anses, France  
*Toward harmonization and good practices for the study of microplastics in seafood?*

**14:20 – 14:40**    **OP32** Ane Del Rio, AZTI, Spain  
*New molecular tool for tracing geographical origin of farmed mussels*

**14:40 – 15:00**    **OP33** Ole Mejlholm, Royal Greenland, Denmark  
*Smoked and marinated seafood: From high risk to low risk products - a review of more than 15 years of collaboration between research and the industry*

**15:00 – 15:20**    **OP34** Jørgen Lerfall, NTNU, Norway  
*A environmental friendly and healthy shift in cold-smoke processing of Atlantic salmon (*Salmo salar* L.)*

**15:20 – 15:25**    **OP35** Anita Nordeng Jakobsen, NTNU, Norway  
*Screening of lactic acid bacteria for inhibition of pathogenic bacteria in lightly processed seafood*

**15:25 – 15:30** **OP36** Vangelis Economou, Aristotle University of Thessaloniki, Greece  
*Evaluation of the shelf-life and the survival of halophilic pathogenic bacteria during salting and preservation of anchovy fillets*

**15:30 – 16:00** **Coffee break and poster viewing - Sponsored by Fiskamarknaður Føroya - Faroe Fish Market P/F**

**CONTINUATION SESSION 5: Seafood safety and authenticity (emerging risks)**

Chairperson: Jan Fritsche, Max Rubner-Institut, Germany

**16:00 – 16:20** **OP37** Mercedes Careche, ICTAN, Spain  
*Anisakis L3 Modifications in the resistance to the action of gastric enzymes after freezing treatments given to minces infected under controlled conditions*

**16:20 – 16:40** **OP38** Isabel Sánchez-Alonso, ICTAN, Spain  
*Absorption of Anisakis spp. proteins using human Caco-2 cellular model*

**16:40 – 16:45** **OP39** Aslı Cadun Yunlu, Ege University, Turkey  
*Occurrence of Anisakis in fish products in Turkey*

**16:45 – 16:50** **OP40** Ana G. Cabado, ANFACO-CECOPECA, Spain  
*Development and implementation of a detoxification procedure to reduce PSP toxins in mussels*

**16:50 – 16:55** **OP41** Sónia Pedro, IPMA, Portugal  
*Evaluation of nutritional value and contamination of the invasive tunicate species*

**19:00 – 23:00** **Conference dinner at Listsavn Føroya, National Gallery of the Faroe Islands - Sponsored by Nótaskip and JFK P/F**

**THURSDAY 17<sup>TH</sup> OCTOBER 2019**

**SESSION 6: Micro and macroalgae and future applications**

Chairperson: Narcisa Bandarra, IPMA, Portugal

**09:00 – 09:20** **K09 - KEYNOTE ADDRESS:** Ólavur Gregersen, Man. Dir., Ocean Rainforest/Syntesa, Faroe Islands  
*Seaweed cultivation and Blue Bioeconomy in the Faroe Islands*

**09:20 – 09:40** **OP42** Frederike Reimold, Prof. Dr., University of Applied Sciences, Bremen, Germany  
*Packaging concept based on macroalgae for food applications*

**09:40 – 09:45** **OP43** Urd Grandorf Bak, Ocean Rainforest Sp/F, Faroe Islands  
*An investigation of the biochemical composition of kelps cultivated in open-ocean in the Faroe Islands in a commercial perspective*

**SESSION 7: Advanced processing technologies and impact on quality of seafood**

Chairpersons: Mercedes Careche, ICTAN, Spain and Margrethe Esaiassen, UiT, Norway

**09:45 – 10:05** **OP44** Anlaug Ådland Hansen, Nofima, Norway  
*Quality and shelf life of anaerobic packaged mackerel fillets by use of recyclable packaging materials*

**10:05 – 10:25** **OP45** Janna Cropotova, NTNU, Norway  
*Effect of pulsed electric field (PEF) pre-treatment on quality parameters of salted sea bass*

**10:25 – 10:45** **OP46** Jonas Steenholdt Sørensen, National Food Institute, Denmark  
*Superchilling of Atlantic cod from Greenland extent shelf-life to more than 32 days and MAP (40% CO<sub>2</sub> /60 % N<sub>2</sub>) in combination with superchilling prevent microbial spoilage*

**10:45 – 11:15** **Coffee break and poster viewing - Sponsored by Oilwind P/F**

**CONTINUATION SESSION 7: Advanced processing technologies and impact on quality of seafood**

**11:15 – 11:20** **OP47** Cheryl Marie Cordeiro, Nofima, Norway  
*Market Access: A Keyword in Context Study*

**11:20 – 11:25** **OP48** Grete Hansen Aas, NTNU, Norway  
*Quality of monkfish from catch to market- Comparison of flake ice and slurry ice as chilling method*

**11:25 – 11:45** **OP49** Neil Anders, IMR, Norway  
*Physiological and flesh quality consequences of pre-mortem crowding stress in Atlantic mackerel (*Scomber scombrus*)*

**11:45 – 12:05** **OP50** Stein-Kato Lindberg, Nofima, Norway  
*Restitution of trawl-caught fish and its effect on blood concentration in fillets*

**12:05 – 12:25** **OP51** Turid Rustad, NTNU, Norway  
*Changes in quality characteristics of sous-vide cooked Atlantic salmon treated with natural antioxidants from Mediterranean plants during chilled storage*

**12:25 – 12:45** **OP52** Sherry Stephanie Chan, NTNU, Norway  
*Effect of superchilling on water holding properties throughout the whole value chain: from whole to cold-smoked Atlantic salmon (*Salmo salar* L.)*

**12:45 – 12:50** **OP53** Juan Benito Calanche Morales, IA2, Spain  
*Sensory quality of defrosted cod fillets using ultra sound technology, an opportunity to improve the process in the industry*

**12:50 – 12:55** **OP54** Marthe Jordbrekk Blikra, Nofima/DTU, Norway  
*Modelling with data from «The Internet of Fish»*

**12:55 – 13:00** **OP55** Janna Cropotova, NTNU, Norway  
*Assessing changes in quality parameters of sous-vide cooked Atlantic cod by spectroscopic techniques coupled with conventional methods of analysis*

**13:00 – 14:00** **Lunch - Sponsored by Tavan Sp/f**

**CONTINUATION SESSION 7: Advanced processing technologies and impact on quality of seafood**

Chairpersons: Nina Gringer, Technical University Denmark, Denmark and Tibor Janči, University of Zagreb, Croatia

**14:00 – 14:20** **OP56** Jan Fritsche, Max Rubner Institute, Germany  
*Formation and mitigation strategies of esterified and free monochloropropanediol (MCPD) in fried and smoked fishery products*

- 14:20 – 14:40** **OP57** Cécile Dargentolle, Matis, Iceland  
*Prediction modelling of sensory palatability of frozen Atlantic mackerel (*Scomber scombrus*) from chemical evaluations*
- 14:40 – 15:00** **OP58** Hildur Inga Sveinsdóttir, Matis, Iceland  
*Effect of antioxidants on the sensory quality and physicochemical stability of Atlantic mackerel (*Scomber scombrus*) fillets during frozen storage*
- 15:00 – 15:20** **OP59** Karsten Heia, Nofima, Norway  
*How can rapid non-destructive blood analysis, based on hyperspectral imaging, contribute to higher quality of landed fish?*
- 15:20 – 15:25** **OP60** Silje Kristoffersen, Nofima, Norway  
*Live-storage, feeding and quality of Atlantic cod (*Gadus morhua* L.)*
- 15:25 – 15:30** **OP61** Burcu Şen Yılmaz, Ege University, Turkey  
*Replacement of sodiumchloride with potassiumchloride in marinated shrimps*
- 15:30 – 16:00** **Coffee break and poster viewing - Sponsored by Fiskavirkkið P/F**

#### **CONTINUATION SESSION 7: Advanced processing technologies and impact on quality of seafood**

Chairperson: Jaakko Hiidenhovi, Luke, Finland

- 16:00 – 16:05** **OP62** Silvia Tappi, University of Bologna, Italy  
*Valorisation of *Squilla mantis* through the production of mechanically separated flesh and the extraction of chitosan*
- 16:05 – 16:10** **OP63** Khushboo, Amity University, India  
*Value Chain Mapping- A prerequisite for value creation in Indian Surimi value chain*
- 16:10 – 16:15** **OP64** Helena Maria Lourenço, IPMA, Portugal  
*Proximate composition, macro and trace elements in sea cucumber from south west Portugal coast*
- 16:15 – 16:20** **OP65** Bjørn Tore Rotabakk, Nofima, Norway  
*Melanosis of snow crab (*Chionoecetes opilio*) as an effect of high pressure processing*
- 16.20 - 16.25** **OP66** Marianne Svorken, Nofima , Norway  
*Increased utilization of residuals in the Norwegian white fish industry – how to get everything ashore?*

#### **CLOSING CEREMONY**

- 16:25 – 16:30** Report WEFTA national representatives meeting
- 16:30 – 16.35** Guillaume Duflos, Anses, France  
*Report WEFTA working group Analytical Methods*
- 16:35 – 16:40** Jasper van Houcke, HZ University of Applied Sciences, the Netherlands  
*WEFTA 2020 announcement*
- 16:40 – 16:45** Jákup Mørkøre  
*Closing WEFTA 2019*