

SEAFOOD SAFETY NEW FINDINGS & INNOVATION CHALLENGES INTERNATIONAL STAKEHOLDER EVENT & OPEN SCIENCE CONFERENCE

25-26 January 2017 / Royal Flemish Academy of Science and the Arts (KVAB), Brussels, Belgium



Seafood has been recognised as a nutritious, healthy and safe food type and is one of the most important food commodities consumed worldwide. However, seafood, like other food, can also be a source of harmful environmental contaminants with the potential to impact human health.

‘Seafood Safety: New Findings & Innovation Challenges’ is a unique event which marks the end of the European Union-funded **ECsafeSEAFOOD** research project. **ECsafeSEAFOOD** assessed food safety issues related to non-regulated contaminants present in seafood as a result of environmental contamination. Its results play an important role in ensuring consumer confidence and addressing public concern in relation to the availability of safe and high-quality food.

ECsafeSEAFOOD’s results are of particular interest to national and international policy makers in the fields of food safety, environment and public health, food safety authorities, the seafood industry and consumer organisations. The event therefore includes a dedicated half-day International Stakeholder Event addressing these stakeholder groups. Following the International Stakeholder Event, a one and a half day Open Science Conference will focus on presenting the latest scientific data on **ECsafeSEAFOOD** topics to a broad audience.

TOPICS

Consumer needs and concerns • Marine toxins in seafood and the environment • Toxicity and modelling of seafood contaminants • Evaluation of seafood monitoring data • Rapid detection tools for environmental contaminants • The future of seafood safety

EVENT OBJECTIVES

- Exchange the latest knowledge on seafood safety
- Identify the key issues associated with seafood safety in Europe
- Discuss strategies to mitigate seafood safety risks
- Present the latest developments in toxin detection tools
- Network with seafood safety experts and other stakeholders in the field

REGISTER ONLINE

at www.ecsafeseafoodconference.com

Deadline: 25 Jan 2017

REGISTRATION FEES

International Stakeholder Event (0.5 day):	€50
Open Science Conference (1.5 days):	€200
Full Event (2 days):	€250

SPECIAL ISSUE CONFERENCE PROCEEDINGS

Environmental Research will publish the proceedings of the conference in a Special Issue featuring high-quality and innovative articles based on a selection of presentations given at the conference.



SEAFOOD SAFETY: NEW FINDINGS & INNOVATION CHALLENGES PROGRAMME

Day 1: Wednesday, 25 January 2017, AM, International Stakeholder Event

09.00 International Stakeholder Event Registration

09.30 Opening Ceremony: ECsafeSEAFOOD Main Achievements

Dr. A. Marques, Instituto Português do Mar e da Atmosfera (IPMA), Portugal, ECsafeSEAFOOD coordinator; Dr. T. Robinson, Head of the Scientific Committee and Emerging Risks Unit, European Food Safety Authority (EFSA); Frank Swartenbroux, DG Health and Consumers, European Commission

10.00 Current Challenges in Seafood Safety - ECsafeSEAFOODs Responses and Impact

Dr. A. Marques, IPMA, Portugal, ECsafeSEAFOOD Coordinator

10.15 Seafood Safety Resources & Tools

Flash presentations and discussions around value for stakeholders

- Seafood safety guidelines
- Seafood contaminants database
- Interactive online benefits and risk tool

Facilitators: M. Reuver and T. Calis, AquaTT, Ireland

- Dr. A. Tediosi, Aefioria, Italy
- Dr. J. Robbins, Institute for Agricultural and Fisheries Research (ILVO), Belgium
- Dr. M. Nadal, Universitat Rovira i Virgili (URV), Spain

11.00 Interactive Coffee Break

11.15 Seafood Safety Knowledge Transfer - Discussion of Key Results

Parallel round table discussions on practical applications, end-users and impact

- The use of phycoremediation for contaminant removal or biotransformation
- Effects of cooking and processing on contaminant levels
- Bioaccessibility and bioavailability - validation using an *in vitro* digestion system
- Effect of microplastics on the toxicity of environmental contaminants
- Biotoxins - reference material and new detection methods

Facilitators: M. Reuver and T. Calis, AquaTT, Ireland

- Dr. S. Cunha, Universidade Nova de Lisboa (LAQV-REQUIMTE), Portugal
- Dr. K. Granby, Technical University of Denmark (DTU), Denmark
- Dr. T. Langerholc, University of Maribor (UM), Slovenia
- Dr. S. Rainieri, AZTI-Tecnalia, Spain
- Dr. J. Diogène, Institut de Recerca i Tecnologia Agroalimentàries (IRTA), Spain

12.15 Seafood Safety Knowledge Transfer - Results and Conclusions

Facilitators: M. Reuver and T. Calis, AquaTT, Ireland

12.30 Lunch



SEAFOOD SAFETY: NEW FINDINGS & INNOVATION CHALLENGES PROGRAMME (CONTINUED)

Day 1: Wednesday, 25 January 2017, PM, Open Science Conference

13.00 **Open Science Conference Registration**

13.20 **Welcome**

Dr. A. Marques, IPMA, Portugal; Dr T. Robinson, Head of the Scientific Committee and Emerging Risks Unit, EFSA and Prof. W. Verbeke, Head of the Agricultural Economics Department, Ghent University (UGent), Belgium

13.30 **Safe Seafood the Consumer can Trust: Protection in the New Era**

13.30 – 14.00: Seafood quality, safety perception and communication seen from the consumer's point of view

14.00 – 14.15: Occurrence of flame retardants in European seafood and consumer risk assessment

14.15 – 14.30: Pharmaceuticals and endocrine disruptors in raw and cooked seafood from European markets: human health risk assessment

14.30 – 14.45: Analysis and risk characterization of arsenic species in food supplements based on algae and marine animals.

14.45 – 15.00: MERLIN-Expo – new advanced tool for higher tier exposure assessment: Human exposure to seafood contaminated by dioxins and PCBs in Venice Lagoon

Facilitator: Prof. W. Verbeke, UGent, Belgium

Keynote speaker: Prof. K. Brunso, Aarhus University, Denmark

Dr. O. Aznar-Alemany, Consejo Superior de Investigaciones Científicas (CSIC), Spain

Dr. D. Alvarez Muñoz, Institut Català de Recerca de l'Aigua (ICRA), Spain

Dr. H. Demaegdt, Veterinary and Agrochemical Research Centre (CODA-CERVA), Belgium

Dr. S. Nicoleta, Università Cattolica del Sacro Cuore, Italy

15.00 **Coffee Break and Posters**

15.30 **Marine Toxins in Seafood and the Environment: Developments in Detection and Prediction**

15.30 – 16.00: Human health, marine toxins and seafood: the known and unknown

16.00 – 16.15: Risks to shellfish food safety from tetrodotoxins in the UK

16.15 – 16.30: Developments in the detection of known and unknown toxins in shellfish: tetrodotoxin as an example

16.30 – 16.45: High-Resolution Orbitrap Mass Spectrometry for the identification of emerging threats to seafood consumers in the Mediterranean area

16.45 – 17.00: Cyclic imines identification and confirmation in European commercial shellfish and seaweed samples

Facilitator: Dr. J. Diogène Fadini, IRTA, Spain

Keynote speaker: Prof. L. Fleming, University of Exeter, UK

Dr. A. Turner, Cefas, UK

Dr. A. Gerssen, RIKILT Wageningen University and Research (WUR), the Netherlands

Dr. C. Dell'Aversano, Università degli Studi di Napoli Federico II, Italy

Dr. M. Rambla-Alegre, IRTA, Spain

17.00 **Science Slam Session**

Four scientists will present their work on safe seafood in unorthodox and entertaining style. The presentations may surprise or amuse, but the serious message will linger in everyone's minds

Dr. T. Langerholc, UM, Slovenia

18.00 **End of Day 1**

20.00 **Conference Dinner (please confirm attendance when registering)**



SEAFOOD SAFETY: NEW FINDINGS & INNOVATION CHALLENGES PROGRAMME (CONTINUED)

Day 2: Thursday, 26 January 2017, Open Science Conference

09.00	Toxicity and Modelling: Tools and Limitations	<i>Facilitator:</i> Dr. T. Langerholm, UM, Slovenia
	09.00 – 09.30: EUToxRisk and development of integrated testing strategies for chemical safety assessment	<i>Keynote speaker:</i> Dr. B. van de Water, Leiden University, the Netherlands
	09.30 – 09.45: Toxicity of emerging chemical contaminants evaluated <i>in vivo</i> with classic and alternative approaches using the zebrafish animal model	Dr. S. Rainieri, AZTI-Tecnalia, Spain
	09.45 – 10.00: Bioaccessibility of contaminants of emerging concern in raw and cooked commercial seafood species: insights for food safety risk assessment	Dr. R. N. Alves, IPMA, Portugal
	10.00 – 10.15: Bioavailability of emerging contaminants in seafood	Dr. T. Langerholm, UM, Slovenia
	10.15 – 10.30: The influence of microplastic inclusion in feed on carryover of environmental pollutants from feed to seabass and salmon	Dr. K. Granby, DTU, Denmark
10.30	Coffee Break and Posters	
11.00	Rapid Detection Tools for Seafood Safety	<i>Facilitator:</i> Dr. A. Barranco, AZTI-Tecnalia, Spain
	11.00 – 11.30: Nanobiotechnology for <i>in vitro</i> diagnostics in food safety	<i>Keynote speaker:</i> Dr. M ^a P. Marco, Institute of Advanced Chemistry of Catalonia (IQAC-CSIC)
	11.30 – 11.45: Electrochemical immunosensors for the detection of marine toxins: tetrodotoxins in puffer fish and azaspiracids in mussels	Dr. M. Campàs, IRTA, Spain
	11.45 – 12.00: New recognition elements for the selective detection of environmental contaminants in seafood	Dr. A. Barranco, AZTI-Tecnalia, Spain
	12.00– 12.15: A novel nanoarray for enhancing seafood security	Dr. K. Campbell, Queen's University Belfast, UK
	12.15 – 12.30: Real time monitoring of sea contaminants by an autonomous lab-on-a-chip biosensor: The SEA-on-a-CHIP project	Dr. M. Farré, Institute of Environmental Assessment and Water research (IDAEA-CSIC), Spain
12.30	Lunch	
13.30	Identification and Characterisation of Seafood Contaminants	<i>Facilitator:</i> Dr. M. Kotterman, WUR, the Netherlands
	13.30 – 14.00: Contaminants in seafood, their analysis and potential trends	<i>Keynote speaker:</i> Dr. R. Hoogenboom, RIKILT WUR, the Netherlands
	14.00 – 14.15: Identification of an optimised protocol for extraction and characterisation of microplastics in seafood products	Dr. L. Hermabessiere, ANSES – Laboratoire de sécurité des aliments, France
	14.15 – 14.30: Prevalence, abundance and species diversity of anisakid nematode larvae in Atlantic cod are correlated with geographic area and fish size	Dr. M. Gay, ANSES – Laboratoire de sécurité des aliments, France
	14.30 – 14.45: Effect of cooking on levels of contaminants of emerging concern in commercial seafood	Dr. V. Barbosa, IPMA, Portugal
14.45	Coffee Break and Posters	
15.15	Emerging Approaches for Future Seafood Safety	<i>Facilitator:</i> Dr. K. Granby, DTU, Denmark
	15.15 – 15.45: Combining environmental modelling and suspect screening methods for identification of emerging pollutants in seafood	<i>Keynote speaker:</i> Dr. M. Schlabach, Norwegian Institute for Air Research (NILU)
	15.45 – 16.00: Can seafood safety be compromised in the ocean of tomorrow?	Dr. A. Maulvault, IPMA, Portugal
	16.00 – 16.15: Climate change as potential driver of emerging risks for seafood safety	Dr. A. Maggiore, EFSA
	16.15 – 16.30: Phycoremediation of diflubenzuron, lindane, copper and cadmium potential by <i>Laminaria digitata</i>	Dr. S. Cunha, Universidade Nova de Lisboa (LAQV-REQUIMTE), Portugal
	16.30 – 16.45: Effects of depuration on metal levels of bivalve species	Dr. P. Anacleto, IPMA, Portugal
	16.45 – 17.00: Effects of industrial processing on regulated and emerging contaminant levels in seafood	Dr. R. Romme Rasmussen, DTU, Denmark

17.00 Closing Ceremony

