

## Aquaculture Horizons 2025

International Conference and Exhibition on Aquaculture , Polytechnic University of Setubal, Portugal  
DAY – 1, 28 April 2025

**08:00-09:00 Official Opening**

### ROOM-A

09:00 - 09:25 **Keynote**

**Title:** Innovations in Sustainable Aquaculture: Strategies for Global Impact  
**Sulaiman Olan Oladokun**, Alfred Wegener Institute (AWI), Germany

**09:25-09:30 Crustacean and Shellfish Innovation Session- Chair Greg Smith, University of Tasmania, Australia**

09:30-09:50 **Title:** Larval culture of the tropical spiny lobster *Panulirus homarus*; a new candidate species for aquaculture in Oman

**Mohamed Al Wahaibi**, Center for Excellence in Marine Biotechnology, Sultanate of Oman

09:50-10:10 **Title:** *Palinurus elephas* culture – fishery restoration and farming?

**David J Fletcher**, RAS Aquaculture Research Ltd, UK

10:10-10:30 **Title:** Molecular Insights into the Life History of the Ornate Lobster (*Panulirus ornatus*): A Breakthrough in Decapod Research

**Tomer Ventura**, University of the Sunshine Coast, Australia

10:30-10:50 **Title:** The Benefits and Pitfalls of Ozone Use in Marine Hatchery Systems

**Greg Smith**, University of Tasmania, Australia

**10:50 - 11:20 Refreshment Break**

11:20-11:40 **Title:** Microbial flocculation : Exploring the avenue in green and smart aquafarming

**Babitha Rani. A. M**, ICAR-Central Institute of Fisheries Education, India

11:40-12:00 **Title:** Trade-off between fisheries utilization and environmental protection in lakes of China

**Jiashou Liu**, Institute of Hydrobiology, China

12:00-12:20 **Title:** Into the Wild: A New Approach to the Aquaculture Production of Brown Trout (*Salmo trutta* L.) to Promote Restocking Success

**Carlos M. Alexandre**, Universidade de Evora, Portugal

12:20-12:40 **Title:** Bridging Conservation and Fisheries: Restorative Aquaculture in Tasmania

**Andrew Trotter**, University of Tasmania, Australia

12:40-13:00 **Title:** Advances in the management of cannibalism in the Ornate Rock Lobster *Panulirus ornatus*

**Quinn Fitzgibbon**, University of Tasmania, Australia

**Title:** Variation in Reproductive Traits of the Mud Crab (*Scylla olivacea*) Across the Indo-Pacific:

13:00-13:20 Implications for Aquaculture and Sustainable Fisheries Management

**Sukree Hajisamae**, Prince of Songkla University, Thailand

**13:20 - 14:10 Lunch Break**

14:10-14:30 **Title:** Environmental effect on oyster growth in the Sado Estuary (Portugal)

**Dina Galhanas**, Escola Superior de Tecnologia de Setubal, Portugal

14:30-14:50 **Title:** Conserving the European Black Lobster (*Homarus gammarus*) through Breeding, Research, and Community Engagement at the North Sea Oceanarium, Denmark

**Martin Riis**, Nordsøen Oceanarium, Denmark

14:50-15:10 **Title:** European Lobster *Homarus gammarus* aquaculture: Technical developments, opportunities and requirements

**Adam Powell**, Institute of Aquaculture, University of Stirling, UK

15:10-15:30 **Title:** Effect of *Artemia* prey size, type of prey and V-UV irradiation on survival and growth performance of European lobster larvae

**Ivar Lund**, Danish Technical University (DTU), Denmark

**15:30 - 16:00 Refreshment Break**

16:00-16:20 **Title:** Shape your body: early-life environment shapes claw bilateral asymmetry in the European lobster (*Homarus gammarus*)

- Gioia Burini**, University of Tuscia, Italy  
**Title:** Does genetic bottlenecking undermine European lobster hatchery stocking?
- Charlie Ellis**, University of Exeter, UK  
**Title:** Toward optimised stunning protocols of Pacific whiteleg shrimp, *Penaeus vanamei*, during commercial harvesting
- Adam Powell**, Institute of Aquaculture, University of Stirling, UK  
**Title:** Role of DNA Barcoding in governance and Risk management
- Asma Karim, Graduate College of Science, Pakistan  
**Title:** A Hybrid Approach to Global Governance for Aquaculture: Integrating Hierarchical, Market-Driven, and Participatory Models
- Hamid Reza Mojtabavi**, Sustainable Aquatic Development Institute (SADI), Saudi Arabia

**Aquaculture Horizons 2025**  
**DAY – 2, 29 April, 2025**

**Technical Tour**

Exporsado, Aquanostra and Aquanostra-Bivalve

**ROOM-A**

- 0830 - 0855 **Keynote**  
**Title:** Healthy Fish for Healthy People: Global Veterinary Efforts to Support Responsible Growth of Aquaculture  
**Dusan Palic**, Ludwig-Maximilians-University Munich, Germany
- 08:55 - 09:00 **AI in Aquaculture**
- 09:00 - 09:20 **Title:** Revolutionizing Aquaculture Health Monitoring with AI-Powered Diagnostics  
**Ihor Feoktistov**, Leven Vision B.V, Netherland
- 09:20 -09:40 **Title:** Parasites And Health Condition Of Marine Resources In A Framework Of Global Change: Cases Of Study In The Catalan Coast (Nw Mediterranean)  
**Carmen Gilardoni**, Instituto de Ciencias del Mar, Italy
- 09:40 - 10:10 **Title:** Sudden Unusual Mortality Syndrome (SUMS) in eastern oyster aquaculture across the southeastern United States  
**Tal Ben Horin**, NC State University, USA
- 10:10 -10:30 **Title:** Vertical FISH Project – Impact of Anisakis spp. infection levels on the European Hake (*Merluccius merluccius*) fillet quality  
**S. Gomes**, Universidade do Porto, Portugal
- 10:30 -10:50 **Title:** Development of oral vaccines for aquaculture using spore-surface-display technology  
**Claudia R. Serra**, CIIMAR, Portugal
- 10:50 - 11:10 Refreshment Break**
- 11:10-11:30 **Title:** The feasibility of agricultural wastes on optimizing water quality and natural bait by regulating microbial loop  
**Chunlei Song**, Institute of Hydrobiology, China
- 11:30-11:50 **Title:** Improving Marine FinFish Seedstock Production  
**Marty Riche**, Florida Atlantic University, USA
- 11:50-12:10 **Title:** Fostering collaboration in the Blue Economy  
**Cristina Baciero Fernandez**, OCNARK
- 12:10-12:30 **Title:** Introducing CADMUS to HACCP  
**Roy D. Palmer**, Association of International Seafood Professionals, Australia
- 12:30 - 13:15 Lunch Break**
- 13:15 - 15:15 **Panel:** Aquatic Animal Welfare Forum  
**New Frontiers in Animal Welfare: Emerging Tools and Techniques**  
 Andreia Rodriguez; Dusan Palic, Francesc Padros Bover & Billo Heinzpeter Studer  
**Title:** Fish welfare: ensure well-being or reduce suffering?  
**Billo Heinzpeter Studer**, think.fish, Italy

**15:15 - 15:45 Refreshment Break**

15:45 -16:05 **Title:** Effects Of Replacing Fish Oil And Fishmeal With Microbial Diets On Salmon Growth, Lipid Composition And Gene Expression  
**Christopher C. Parrish**, Memorial University, Canada

**ROOM-B**

15:45 - 18:30 **Workshop \_ Crustacean & Shellfish Research Underpinning Aquaculture and Fisheries Enhancement**  
Chair Greg Smith, University of Tasmania, Australia

**ROOM-A**

16:05 - 16:25 **Title:** Protein Alternatives from Circular Bioeconomy for Aquafeeds  
**Luisa M.P.Valente**, CIIMAR, Portugal

16:25 -16:45 **Title:** Physicochemical properties: the unknown side of feed material quality  
**Min Xue**, National Aquafeed Safety Assessment Center, Institute of Feed Research, Chinese

16:45 - 17:05 **Title:** Discovering the Antioxidant Potential of Halophyte Plants  
**Ines Joao Ferreira**, Polytechnic University of Setubal, Portugal

**Title:** Assessment of fatty acid metabolism in European lobster (*Homarus gammarus*) larvae and postlarvae: a pathway to optimized larval nutrition  
**Renata Goncalves**, Collaborative Laboratory, Association for a Sustainable and Smart Aquaculture, Portugal

**Title:** Formulation of Sustainable Fish Feed for Aquaponics: Utilizing Poultry Droppings to Enhance Nutritional Efficiency and Environmental Sustainability

17:25 - 17:45 **Gourav Dhar Bhowmick**, Indian Institute of Technology Kharagpur, India

**Title:** Vermi-Tea Production from Fish Waste in Vermicomposting Reactor for Enhanced Nutrient Recovery in Aquaponics System

17:45 -18:05 **Ahmad Faisal**, Indian Institute of Technology Kharagpur, India

**Title:** Economic Challenges and Livelihood Resilience in the Baltic Fisheries Sector: The Impact of Feed and Aquaculture Market Shifts

18:05 -18:25 **Michael Rosciszewski-Dodgson**, University of Gdansk, Department of Economics, Poland

18:30-20:30 **Student Poster Session & Cocktails**

**Aquaculture Horizons 2025****DAY – 3, 30 April, 2025**

09:00 - 10:15 **AI Panel Session**  
Paul Robert van der Heijden, MatureDevelopment BV, Netherland  
**AI Governance**  
Hans Petter Dalen, IBM, Denmark

**10:15 - 10:40 Refreshment Break**

10:40-11:20 **Title:** AI applications for genomics and phenomics in aquaculture breeding programs  
**Baltasar Fernandes Garcia**, Sao Paulo State University (UNESP), Brazil

11:20 - 11:40 **Title:** European Lobster farm scale up powered by artificial intelligence.  
**Asbjorn Drenstvig**, Norwegian Lobster Farm, Stavanger, Norway

11:40 -12:00 **Title:** The science behind artificial intelligence powered European Lobster production.  
**Carly Daniels**, Norwegian Lobster Farm, Stavanger, Norway

12:00 -12:20 **Title:** A novel AI system to automatically measure shrimp for selective breeding in aquaculture.  
**Adrian Penate-Sanchez**, Universidad de Las Palmas de Gran Canaria, Spain

12:20 -12:40 **Title:** A computer vision method to estimate ventilation rate of Atlantic salmon in sea fish farms  
**Lukas Folkman**, Griffith University, Australia

**12:40 - 13:30 Lunch Break**

13:30 - 13:50 **Title:** Using computer vision to assess the gill health of farmed Atlantic salmon (*Salmo salar*)  
**Quynh Vo**, Griffith University, Australia

13:50 - 14:10 **Title:** Development of a low cost acquisition board with IoT support for aquaculture monitoring

**Ana Antunes**, Polytechnic University of Setubal, Portugal  
14:10 -14:30 **Title:** Advancing the Watershed Fragility Index (WFI) for Planning and Designing Sustainable Aquaculture Using AI and Machine Learning

**Michael van Zyll de Jong**, University of New Brunswick, Canada  
14:30 - 14:50 **Title:** Incorporating image analysis, machine learning, and automation into aquaculture research

**Dean Giosio**, University of Tasmania, Australia  
14:50 - 15:10 **Title:** How Do We Quantify Shell Quality in Oyster Aquaculture?

**Ernest Chuku**, Unviersity of Tasmania, Australia  
15:10-16:10 **AI Workshop**  
Paul Robert van der Heijden and Hans Petter Dalen

16:10:16:35 **Coffee & Student Presentations**  
16:35-17:00 **Closing Session**  
IPS/Andreia Rodrigues/Paul van der Heijden/Greg Smith/ Roy Palmer