# BLUE FOOD

# GREEN SOLUTIONS

AOUA 2024

### CO-ORGANIZED BY

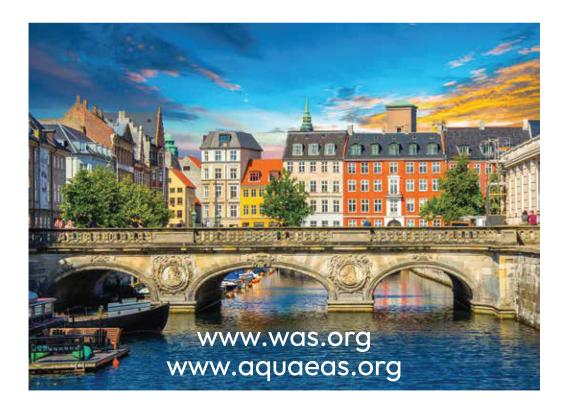




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## **BLUE FOOD, GREEN SOLUTIONS**

Aquatic food is a major component of our food future, and Blue Food from all species in marine and freshwater production, is rightly in the spotlight for its potential to provide healthy, tasty and highly nutritious food for the planet.

Food systems transfomation is a crucial requirement to mitigate climate impacts and offer enhanced food safety and security to billions. Aquaculture has demonstrated its resilience to change and is increasingly recognised for its environmental responsibility, reduced footprint and high efficiency in protein transformation and provision.

As our knowledge increases, so does our potential ability to offer Green Solutions throughout the aquaculture (and seafood) value chain. These solutions need not only to be financially feasible, they must also be based on the intelligent and sustainable utilisation of resources to maintain a measurable and limited footprint.

### Blue Food production must grow. Green Solutions will help it to do so.

AQUA 2024 will take place from August 26-30 in the Danish capital of Copenhagen. It will comprise a scientific conference, trade exhibition, industry forums, workshops, student events and receptions. The event will highlight the latest aquaculture research and innovation to underpin continued growth of this exciting food production sector.

It will be a showcase for Denmark, and its innovation leadership in several key technologies crucial for future aquaculture, but also a meeting and exchange platform for experts from around the world.

The AQUA events are co-organised by the European Aquaculture Society (EAS) and the World Aquaculture Society (WAS) and are held every six years. Past events were held in Nice (2000), Florence (2006), Prague (2012) and Montpellier (2018).



Steering Committee Conference Chair: Bjørn Myrseth (EAS), Norway EAS Rep: Bente Torstensen, Nofima, Norway WAS rep: Michael Schwarz, Virginia Tech, USA Ragnar Tveterås, University Stavanger, Norway Tarald Kleppa, Blue Planet, Norway Programme co-chairs EAS: Luisa Valente, CIIMAR, Portugal WAS: Lorenzo Juarez, Mexico Local: Kjell Maroni, FHF, Norway Local: Anne Cooper, ICES, Denmark

**Local Organising Committee** Rasmus Nielsen, UCPH Martin Winkel Lilleøre, Danish Export Association/Fish Tech Christian Philip Unmack, Eurofish Dennis Lisbjerg, DTU, Denmark

### **Technical Program Covers The Latest Research**

Sessions and workshops at AQUA2024 will cover all aspects of global aquaculture. We propose the following topics and specie groups. We invite you to submit abstracts to the session topics. If you do not find a specific topic, you may submit your abstract to one of the species sessions.

#### **Aquaculture in Society**

The blue economy Aquaculture policy and regulations Coastal and marine spatial planning Communicating with society Social sciences Consumer awareness and perception Social license to operate and permitting Food security Development, welfare, and poverty alleviation Society concerns regarding animal welfare Development of qualified talent for aquaculture

#### **Aquaculture Economics**

Government policies and aquaculture investments and growth Economics and management Markets and marketing Aquaculture value chains Financing of aquaculture

#### Aquaculture, Environment, Biodiversity and Climate Change

Impact of climate change and ocean acidification on aquaculture Environmental impact of aquaculture: assessment, monitoring and minimization

Low carbon footprint aquaculture

Circular economy; use of by-products & reuse of materials Impacts of escapees (genetic, behavioural, ecological, disease, etc.) Environmental and economic impacts of non-native and GMO species Micro and nano-plastics

Resource-use optimization, incl water and energy Transport and distribution

#### Aquaculture standards, certification, costs, and benefits

Measuring sustainability in a changing world Social certifications and labour welfare Integrating finance into sustainability models Organic aquaculture

#### **Aquaculture and Human Health**

Health attributes Bioactives and functional foods Advances in processing, value-adding, and packaging Food safety

#### **Production Systems**

Hatchery technologies Cage-culture technologies **Recirculation systems** Advances in off-flavour research and application Raceway systems/flow through systems Emerging production systems: open, semi-contained and fully contained systems Pond & reservoir-based aquaculture Offshore, exposed & multi-use aquaculture Sludge and particle removal Aquaponics Biofloc systems / Symbiotics Integrated multi-trophic aquaculture (IMTA) Multi-use and co-location with other industries Capture-based aquaculture Aquaculture under desert conditions Precision farming Predictive Farming: Use of models and sensors Sustainable intensification

#### Nutrition, Feeds, and Feeding Technologies

Nutrition and feeding strategies Feed Technologies Feed additives Fish meal and oil extension (IFO) Alternative feedstuffs and aquafeeds Live feeds Automatic and Al-controlled feeders Feedstuffs carbon footprint

#### Genetics, Genomics, Biotechnology

Selective breeding Population genetics Hybridization Sex determinism and control Gene editing Biotechnology

#### Animal Science

Morphology, Histology, and Embryology Physiology Behaviour

#### Animal health and welfare

Biosecurity, disease prevention Microbiome & health management/preventive measures Vaccines, immunology, and pathology Antimicrobials in aquafeeds, prebiotics and probiotics Diseases, bacteria & virus Fungal infections Parasites, including sea lice Cleaner fish – wrasses, lumpfish & other Drugs and therapeutants Production environmental management, i.e. water quality etc Production disorders – i.e. malformations, gill damages etc Technology for animal welfare, incl slaughtering Welfare indicators and documentation

#### **General culture**

Reproduction and broodstock management Larval culture and management Grow-out Restoration projects using aquaculture organisms Conservation aquaculture

#### **Special Topics**

Education, extension, and technology transfer Horizon Europe - EU project updates- The EU Research Programme

#### Species sessions

Bivalves: Oyster, Mussels, other Crustaceans: Crayfish, Freshwater prawns, Marine shrimp Macro- and Micro-algae (culture, bioenergy and bioproducts; potential to use as food and feed) Ornamentals Amphibians and reptiles Plankton Low trophic species: Sea cucumber, sea urchins, polychaetes Warmwater marine fish Coldwater marine fish Warmwater Freshwater fish Coldwater Freshwater fish

#### Advanced technologies for aquaculture

Digitalization Artificial Inteligence Automation Sensing technologies

### CALL FOR PAPERS - SUBMIT YOUR PAPERS NOW! DEADLINE: April 5, 2024

AQUA24 represents an excellent opportunity via its extensive technical program to showcase the latest developments in the aquaculture world. The AQUA24 Committee encourages the submission of high quality oral and poster presentations.

We strongly encourage authors to consider poster presentations as the poster session will be an integral part of the program. Papers submitted for oral presentation only may not be accepted as oral presentations due to the limited number of available time slots.

### All abstracts must be in English - the official language of the Conference.

Each oral presenter shall be entitled to no more than 15 minutes for a presentation, plus 5 minutes for questions. Oral presentations should use PowerPoint. Overhead projectors and video players will not be available or allowed.

# All presenters are required to pay their own registration, accommodation and travel expenses. AQUA24 will not subsidize registration fees, travel or hotel costs.

### No Abstract Book will be printed - an Abstract Book will be available online.

### **INSTRUCTIONS FOR PREPARATION OF ABSTRACTS**

Extended Abstract Format – Please refer to the sample.

- 1. TITLE OF PAPER : The paper title is printed in CAPITAL LETTERS, with the exception of scientific names which should be Upper/lower case and italicized. Scientific names should not be preceded or followed by commas or parentheses or other markings.
- **2. AUTHOR(S) :** The first name should be the presenting author. Use \*after the presenting author. Type in upper/lower case.
- **3. ADDRESS AND EMAIL** : Type only the presenting author's institution, address and email. Type in upper/lower case.
- 4. MAXIMUM LENGTH : One Page
- 5. PAGE SIZE : Standard 210mm x 297mm A4 paper (portrait)
- 6. MARGINS : 1-inch margin throughout(left/right/top/bottom)
- 7. SPACING : Single spaced
- **8. PARAGRAPHS :** Paragraphs should be separated by a blank line and should not be indented.
- **9. FONTS :** Character fonts should be 12 point type.
- 10. FIGURES & TABLES : Figures and tables are highly recommended. They should be reduced to the appropriate size for a one page abstract and should be clearly readable at the reduced size in black print only. The reduced figures and tables should be included in the abstract in camera-ready form.
- **11. MEASUREMENTS :** Use metric units of measurement. When needed, English equivalents may be given in parentheses.

### PLEASE SUBMIT YOUR ABSTRACT ONLINE

Submit abstracts via the internet at the meeting website : www.was.org Follow the complete instructions on the online submission.

If you are unable to submit your abstract online, contact the Conference Manager for alternative methods at : worldaqua@was.org

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**AQUA 2024** 

### August 26-30, 2024

#### Register online: USA – www.was.org

Online registration is preferred at www.was.org in USD OR www.aquaeas.eu in Euros OR fax or mail both sides. Use one form per person. PLEASE PRINT CLEARLY OR TYPE ALL REQUESTED INFORMATION BADGE INFORMATION: (As you want your name badge to read - No titles, please) SURNAME (FAMILY NAME) First Name Company or Institution (Limited to 40 Letters & Spaces) Country \_\_\_\_ \_\_\_\_\_ Alternate Email \_\_\_\_\_ Email Destal Address \_\_\_\_\_ State / Prov Postal Code Country Phone Title: (circle one) Dr. Mr. Ms. Mrs. Fax (Include country and city code) (Include country and city code) REGISTRATION FEES: To pay is US\$, go to www.was.org. To pay in Euro, go to www.aquaeas.org. TYPE OF REGISTRATION **Register by Register by Register after** \* To qualify for Member FULL CONFERENCE & TRADE SHOW July 1, 2024 August 1, 2024 August 1, 2024 Rate you must complete In order to receive the Pre-Registration discount rate, this form and payment must be received by the date above the Association US\$490 / €440 US\$590 / €540 US\$660 / €600 Memberships section on ASSOCIATION MEMBER the reverse side. STUDENT MEMBER US\$220/€200 US\$220 / €200 US\$280 / €250 RATE\* . . US\$590/€535 US\$695 / €635 Non-Member Rate US\$770 / €700 Trade Show is included in the Full Conference Registration Rate. TOTAL REGISTRATION FEE Spouse Rate US\$430 /€390 US\$540/€490 US\$600/€550 Name US\$/€\_ (Trade show pass is included with the Full Conference Registration) **TRADE SHOW PASS** US\$55/€50 Good for 3 days admission to exhibits only - August 27, 28, 29 TOTAL TRADE SHOW PASS US\$/€. **INDUSTRY TOURS** – To be announced later. MEMBERSHIP DUES - Enter amount from Membership Application on other side if applicable. TOTAL MEMBERSHIP DUES US\$/€\_\_\_\_\_ Do not mail registration after August 1, 2024 or fax after August 1, 2024. TOTAL AMOUNT US\$/€ After August 1, 2024, bring this form with you to register at the show. Registration Confirmation and Receipt will be emailed after processing. CANCELLATION POLICY: Cancellation of registration must be received - in writing - no later than July 15, 2018. Refunds for registration fees will be subject to a 20% handling fee. Refunds are processed after the conference. No refund will be made for cancellations received after July 15, 2018 or for "no shows". After July 15, 2018, no refunds will be made for professional or personal emergencies, flight cancellations, denied visa, weather related cancellation or other travel emergencies. Fees for memberships are non-refundable. For bank transfer details, contact us. Visa Mastercard Discover Diners Club American Express Check # Card # \_\_\_\_\_ Expiration Date\_\_\_\_\_ Sec Code \_\_\_\_\_ \_\_\_\_\_ Date\_\_\_\_\_ Signature\_\_\_\_ Name on Card

**ASSOCIATION MEMBERSHIPS :** Please check all boxes for associations of which you are a <u>current</u> member to receive the member rate on the registration fees. You can join an association at any time before registering to qualify for the member rate.

- Luropean Aquaculture Society
- UWorld Aquaculture Society (WAS)
- Asian-Pacific Chapter WAS

- Latin American & Caribbean Chapter WAS
- US Chapter of WAS (USAS)
- International Assn of Aquaculture Economics and Mgmt
- Aquacultural Engineering Society

#### MEMBERSHIP APPLICATION

□ NEW APPLICATION □ RENEWAL

### Join the EUROPEAN AQUACULTURE SOCIETY (EAS)!

www.aquaeas.eu

**EAS MEMBERSHIP** includes automatic receipt of the Aquaculture Europe Magazine and newsletter, online networking, annual membership list, reductions on international aquaculture press and websites, as well as big reductions on registration for EAS and WAS co-organised meetings, etc. Online access to the peer reviewed Journal Aquaculture International (bimonthly) is also offered as part of individual membership. **Details: www.aquaeas.eu.** 

An EAS membership year comprises 12 months and starts on the date of payment.

EAS offers free membership to students/retirees.

EAS Membership Categories	Standard	<b>Reduced Rate*</b>
EAS Individual Membership	€ 90	€ 60
🖵 EAS Individual Membership - 3 years	€ 255	
EAS Institutional Membership	€ 300	€ 200
EAS Life Membership**	€ 720	
EAS Corporate Membership	€1000	-

Total Amount for EAS Membership

Retired persons (certification of retired status required) Students (copy of current student card required) Please enter this amount under "Membership dues" on the previous page.

\*Reduced membership fees are available for:

- Individuals residing in European and non-European Mediterranean countries with Gross National income (GNI) lower than US\$ 15.000 per capita. These countries are: Albania, Algeria, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Egypt, Iran, Iraq, Kazakhstan, Montenegro, Morocco, Romania, Russian Federation, Serbia, Tunisia, Turkey, Turkmenistan, Ukraine
- Institutes if based in one of the above mentioned countries.

\*\*Life membership offers the general EAS benefits for full lifetime duration.

Join online at: <u>http://www.aquaeas.eu</u>

### WORLD AQUACULTURE SOCIETY (WAS) APPLICATION www.was.org

For details on the different types of memberships and options, please contact the WAS home office at Tel: +1-225-347-5408 Fax: +1-225-347-5408 Email: judya@was.org

### MEMBERSHIP CATEGORY: (Indicate only one)

□ Individual (USD 90/yr) Applies to an individual only

Fees for memberships are non-refundable.

- □ Full Student (USD 45/yr) Has all benefits and rights of regular membership including voting for all candidates on the ballot (Copy of Student ID or Signature of Professor required)
- □ **Comp Student** (No charge) Has all benefits of regular membership but voting only allowed is for the Student Director and not for the full ballot. (Copy of Student ID or Signature of Professor required)
- Sustaining (USD 155/yr) Applies to any one individual from a company
- Corporate (USD 295/yr) Allows all employees of one company to attend meeting at Member Rate
- Lifetime (USD 1400 with one chapter) Applies to an individual only
  - \*\*Discounted rates available for individuals in countries based on World Bank List of Low Income Economies. Must sign-up on website only for this category.

#### **CHAPTER OPTIONS:**

One chapter incuded in membership. Mark the chapter you choose.

- African Chapter
- Asian Pacific
- 🗆 Korea
- Latin American/Carribean
- United States (USAS)
- □ None (deduct USD 5)

You can add extra Chapters for USD 5

Total Amount for WAS Membership USD\_\_\_\_\_ Please enter this amount under "Membership Dues" section on opposite side of this form.

#### For membership in other associations, please contact them directly. If you need a phone number, contact the Conference Manager (+1-760-751-5005).

## **Show Events**

### **INDUSTRY FORUMS**

Special industry oriented sessions will be organized on the Monday and Tuesday to address industry challenges and discuss ways to overcome these. More information will be provided on the AQUA 2024 website.

### **FARM TOURS**

There will be several Farm tours arranged. More information will be provided on the AQUA 2024 website.

### YOUR FULL CONFERENCE REGISTRATION INCLUDES:

- Admission to all sessions, seminars and the trade show.
- Admission to the Receptions.
- Conference bag and Show Directory (except for spouse).
- Refreshment Breaks and Cash Bar Happy Hour.
- Students receive the full registration package plus the Student Reception. To qualify for the student rate, a copy of your student I.D. is required.
- Only pre-registered attendees are guaranteed materials.

### **SPECIAL HOTEL RATES**

For hotel information please check our websites: www.aquaeas.eu www.was.org

When available a list of hotels will be placed on the website.



Bella Sky Hotel, Copenhagen



For Trade Show information, contact: Mario Stael mario@marevent.com

### FOR MORE INFORMATION:

AQUA 2024 Conference Manager P.O. Box 2302 • Valley Center, CA 92082 USA Email: worldaqua@was.org • www.was.org • www.aquaeas.org

### **REGISTER EARLY AND \$AVE!**

# **TENTATIVE SCHEDULE**

### Monday, Aug 26

Registration Open & Exhibit Set-up	
Opening ceremony	
Welcome Drink	

### Tuesday, Aug 27

Registration Open	0730 - 1700
Plenary 1	
Spotlight Awards	
Break	
Trade Show Open	
Sessions	1030 - 1230
Lunch (at individual expense)	
Sessions	1400 - 1730
Happy Hour & Posters	1730 - 1800
Student Reception	1900 - 2100

### Wednesday, August 28

Registration Open	
Sessions	0900 - 1045
Break	1045 - 1115
Trade Show Open	1000 - 1800
Sessions	1115 - 1230
Lunch (at individual expense)	1230 - 1400
Sessions	1400 - 1730
Happy Hour & Posters	1730 - 1800
EAS General Assembly	1730 - 1830
President's Reception	1900 - 2200

### Thursday, Aug 29

Registration Open	
Sessions	0900 - 1045
Break	1045 – 1115
Trade Show Open	
Sessions	1115 - 1230
Lunch (at individual expense)	
Sessions	1400 - 1530
Break	1530 - 1600
Sessions	1600 - 1730
Exhibit Move-out	

### Friday, Aug 30

Registration Open	
Sessions	
Break	
Plenary 2	
Lunch (at individual expense)	
Sessions	1400 - 1530
Break	
Sessions	

