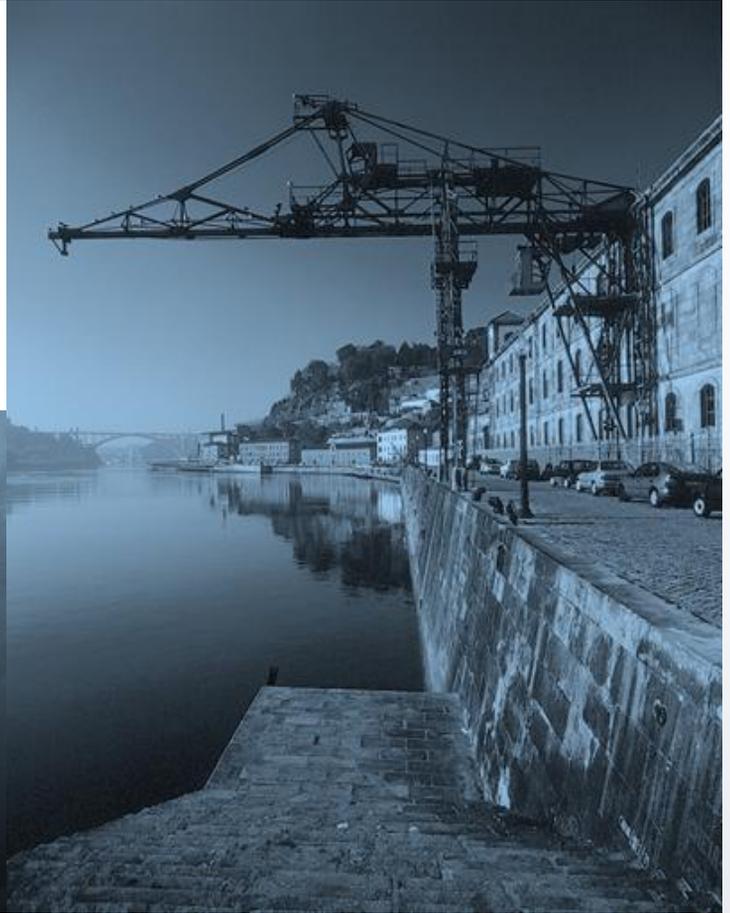


Seafarming tomorrow



Porto, Portugal
October 5-8, 2010

Organised by the European Aquaculture Society
Hosted by AQUA.PT and CIMAR (CIIMAR and CCMAR)



Supported by



área metropolitana do porto

Following on from the highly successful Aquaculture Europe 2002 conference “Seafarming Today and Tomorrow” held in Trieste, **Aquaculture Europe 2010 will bring back the focus on the future of marine aquaculture in Europe.** As in 2002, the conference comes at a time when the European Commission has published its Communication on the strategy for the development of European aquaculture.

Although global aquaculture production shows annual increases of 5-10%, production growth in Europe is considerably lower. **The challenge is to demonstrate sustainable development, while producing products that are competitive with those originating from other regions in the global market.** Novel technology, but also new areas for production will need to be realized - making use of the great potentials of Europe as an advanced aquaculture production environment and as a leading consumer market.

As its theme suggests, the **AE2010 conference will address many topics related to island, coastal and ocean aquaculture, but it will also cover the production of freshwater species.** Parallel conference sessions include land-based systems, estuarine, coastal lagoon, coastal and offshore aquaculture and encompass many species from shellfish to fish to marine plants. AE2010 will also consider the specific issues related to production on Mediterranean islands and in Europe’s Outermost Regions. A trade exhibition, farmers’ day, the EAS General Assembly and other events will complete the AE2010 event.

AE2010 Thematic Sessions

The thematic sessions take place each morning of AE2010 and are plenary sessions. International speakers will present these thematic sessions, that ‘open the debate’ and pave the way for the parallel, technical sessions of contributed presentations in both oral and poster format.

- **Future aquaculture in a changing environment.** A vision for the future status of marine aquaculture in Europe, providing a general overview of the main themes and focussing on the effects of a changing environment on coastal biodiversity and the physiological functions of farmed aquatic species.
- **A license to produce?** In the light of the new Commission strategy for the development of European aquaculture, what type of governance and regulatory framework is needed? What should be the roles of public authorities and NGO’s in the development of the sector?
- **Competing claims - joint solutions.** How to integrate aquaculture with other coastal activities; how can aquaculture contribute to the maritime strategy, to coastal zone management and to Natura 2000 objectives.
- **Consumer demands and consumption trends.** What are the demand and consumption trends and what do European consumers prefer? How important to consumers is the origin and certification of aquatic products produced ‘locally’ in Europe or imported from third countries.
- **Sustainable sea farming.** How do we develop sustainable sea farming using the ecosystem approach? How is aquaculture linked with natural ecosystem processes and with patrimonial cultivation?

Information on the thematic speakers will be posted at www.easonline.org

Portugal and Porto

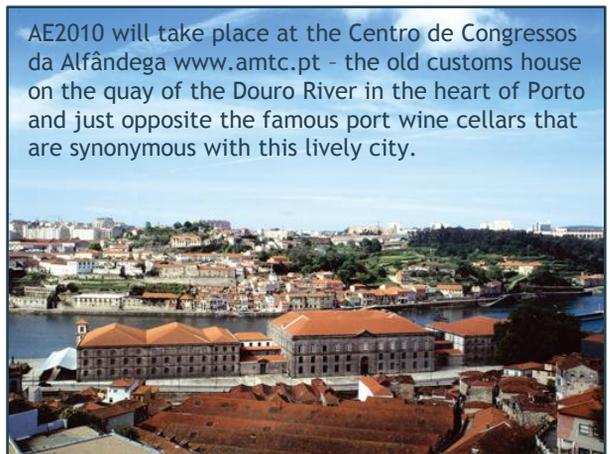
Aquaculture production in Portugal is modest with some 10.000 tonnes of production, of which more than half is shellfish. Marine aquaculture in Portugal is mainly centred on the Algarve coast, but more recently, land-based production of turbot and other marine species has developed on the Atlantic coast. Currently, there is renewed interest in developing aquaculture in Portugal’s outermost regions, notably in the Azores.

The Portuguese remain Europe’s highest consumers of fish and shellfish, with annual per capita consumption of close to 60Kg.

Porto is Portugal’s second biggest city and the ‘capital of the north’. Its historic centre was declared a World Heritage Site by UNESCO in 1996 and it shared the designation European Culture Capital in 2001.

The city has excellent connections with Galicia and especially with Vigo, just 90 minutes away.

AE2010 will take place at the Centro de Congressos da Alfândega www.amtc.pt - the old customs house on the quay of the Douro River in the heart of Porto and just opposite the famous port wine cellars that are synonymous with this lively city.



AE2010 Parallel Sessions (for submission of abstracts)

In addition to the thematic sessions, AE2010 also includes parallel and poster sessions. The following is a list of the sessions open for submission of abstracts. Examples of research areas that may be included in each session are shown as an indication.

When considering submission of your abstract, please select the session most suited to your contribution.

PS 01: Hatchery production, processes and management, including new shellfish seed collection techniques.

PS 02: Land-based production - new technologies for fish and shellfish production, including large-scale RAS, production in arid regions and other land based activities.

PS 03: Semi intensive/extensive coastal/lagoon aquaculture: especially in the context of nature management, spatial planning and patrimonial conservation.

PS 04: Aquaculture on islands - specificities of production in outlying areas in tropical and temperate regions, including European Outermost Regions.

PS 05: Offshore aquaculture of fish and shellfish.

PS 06: Aquaculture governance, policy, socioeconomic and economic research.

PS 07: Consumer science and studies.

PS 08: Where fisheries and aquaculture meet: interactions, commonalities, interdependence and competition.

PS 09: Ecosystem processes - nutrient management, IMTA, carrying capacity and modelling.

PS 10: Spatial planning - tools and case studies.

PS 11: Welfare & ethics.

PS 12: Health management.

PS 13: HABs and biotoxins: new threats, new solutions.

PS 14: Quality measurement, assessment, detection, certification.

PS 15: Invasive and alien species, including transplantations, movements of livestock, control, predation and biofouling.

PS 16: Seaweed & algae (including microalgae) culture.

PS 17: Flatfish culture.

PS 18: Tuna culture.

PS 19: Sturgeon culture.

PS 20: Other contributions that submitting author(s) feel do not belong in the sessions already listed, are welcomed. The Program co-chairs will consider additional sessions to accommodate them.

The **EAS General Assembly** will take place during AE2010, where members can participate in the oversight of the organisation, and where the new President and Board of Directors will be presented for approval.

The **EAS Student Group** will organise a special forum and reception for students attending AE2010 to enable networking and exchange of ideas. The forum will have a dedicated programme and include a special student reception. 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.

A special question and answer **EU Forum** addressing research funded by the European Community and chaired by staff of the European Commission.



European **Associations, networks & research projects** will also have a forum to hold meetings during AE2010.

Aquaculture Europe 2010 encourages the submission of high quality oral and poster presentations. We strongly encourage authors to consider poster presentations because poster sessions will be an integral part of the programme. Papers submitted for “oral presentations 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.** No Abstract Book will be printed - a compilation CD will be provided to registered delegates.

Each oral presenter should be entitled to no more than 15 minutes for a presentation, plus 5 minutes for questions. Authors of studies involving proprietary products or formulations should present this information in workshops or the trade show. Oral presentations should use Power Point. Overhead and slide projectors and video players will not be available.

All presenters are required to pay their own registration, accommodation and travel expenses. **Aquaculture Europe can not subsidize registration fees, travel or hotel costs.**

Posters have a prominent place in Aquaculture Europe meetings:

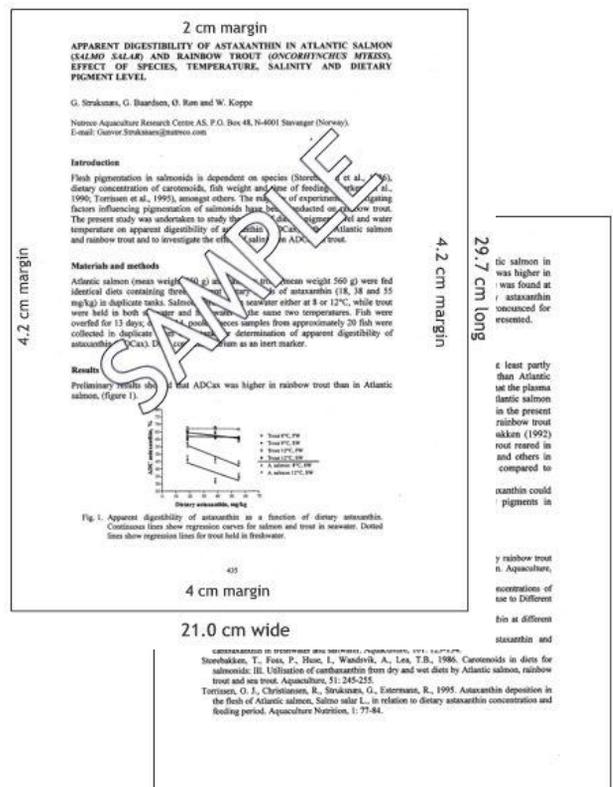
- Presenters that send a PDF or power point version of their poster four weeks before the conference will have their poster reviewed within the appropriate oral session.
- Special poster viewing with authors present is provided during the happy hours.
- Besides this, posters will be easily accessible during the lunch breaks.
- In the programme book, special mention will be made in the oral session lists of where the relevant posters can be found.
- Prizes will be awarded during the wrap-up session for Best Poster and Best Student Poster.

Instructions for preparation of 2-page abstracts

Abstract Format - Please refer to the sample.

1. Title of paper: type in bold in upper-case letters (= full capitals) and the scientific names in the title in italics; leave two lines between title and author(s).
2. Author(s): the first letters of both first and last names must be capitalised; leave one line between author(s) and affiliation. Use * after the presenting author.
3. Address and Email: (in point 9) leave two lines between affiliation and text. Only the e-mail address of the contact person should be provided.
4. Headings of sections: type bold (not in full caps); space above should be two single lines for the first section header and one and a half lines above all the other section headers; space below section header should be half a line (or 6pt) only.
5. Text: typing must be single spaced; space between paragraphs can be half a line (or 6pt); paragraphs should begin flush with the left margin of the text, not indented.
6. Maximum length: two pages
7. Page size: standard A4 paper (210mmX297mm) (portrait)
8. Margins: left margin=4.2cm; right margin=4.2cm; margin top=2cm; margin bottom=4cm.
9. Font: Times New Roman 10 point
10. Photos, Figures and Tables: should be included if relevant. They should be reduced to the appropriate size to fit on the page and should be clearly readable.

Full guidelines can be found at www.easonline.org



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APPARENT DIGESTIBILITY OF ASTAXANTHIN IN ATLANTIC SALMON (SALMO SALAR) AND RAINBOW TROUT (ONCORHYNCHUS MYKISS). EFFECT OF SPECIES, TEMPERATURE, SALINITY AND DIETARY PIGMENT LEVEL.

G. Struksnes, G. Bardon, O. Ram and W. Koppe
 Nærve Aquaculture Research Centre AS, P.O. Box 48, N-4001 Stavanger (Norway).
 E-mail: Gustav.Struksnes@narveco.com

Introduction
 Flesh pigmentation in salmonids is dependent on species (Storseth et al., 2006), dietary concentration of carotenoids, fish weight and time of feeding (Torrison et al., 1990; Torrison et al., 1995), amongst others. The majority of experimental ageing factors influencing pigmentation of salmonids have been studied on rainbow trout. The present study was undertaken to study the effect of species, temperature and salinity on apparent digestibility of astaxanthin in Atlantic salmon and rainbow trout and to investigate the effect of salinity on ADCx of rainbow trout.

Materials and methods
 Atlantic salmon (mean weight 400 g) and rainbow trout (mean weight 560 g) were fed identical diets containing three different concentrations of astaxanthin (18, 38 and 55 mg/kg) in duplicate tanks. Salmon were held in seawater either at 8 or 12°C, while trout were held in both freshwater and seawater at the same two temperatures. Fish were overfed for 13 days, and 4 pooled feces samples from approximately 20 fish were collected in duplicate for each treatment. The apparent digestibility of astaxanthin (ADCx) was determined as an inert marker.

Results
 Preliminary results show that ADCx was higher in rainbow trout than in Atlantic salmon, (figure 1).

Fig. 1. Apparent digestibility of astaxanthin as a function of dietary astaxanthin. Continuous lines show regression curves for salmon and trout in seawater. Dotted lines show regression lines for trout held in freshwater.

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at least partly that Atlantic salmon in the present rainbow trout okken (1992) trout reared in and others in astaxanthin could pigments in rainbow trout n. Aquaculture, concentrations of use to Different astaxanthin and

Please submit your abstract online: www.easonline.org

If you are unable to submit online, please contact the Aquaculture Europe conference manager at worldaqua@aol.com or fax +1 760 751 5003

A major international trade exhibition especially for AE2010

Aquaculture Europe 2010 will feature a special international **trade exhibition**, organised by the European Aquaculture Society. Portuguese, Spanish and International companies will present the latest products and services for aquaculture.

Both **Standard and Corner booths** will be available and each booth is 9m² (3x3m) and features walls, carpet, two chairs and one table, spotlights, one power outlet, fascia identification sign and **two free passes for the AE2010 conference**.

A special **farmers' day** programme will have a special emphasis on aquaculture in Portugal and in Spain. This forum, hosted by AQUA PT, is designed to allow discussion of the issues raised. Simultaneous interpretation will be provided in Portuguese, Spanish and English.

A series of short **workshops** organised by EU-funded projects and other relevant initiatives will take place in the exhibition area and specifically targeted towards exhibitors and trade show visitors.

October 5 Tuesday	October 6 Wednesday	October 7 Thursday	October 8 Friday
Move in 08.00-18.00	Move in 08.00-10.00		
	Trade show open 10.30-19.00	Trade show open 10.30-19.00	Trade show open 10.30-16.30
Welcome 19.00-20.30	Happy hour 17.30-19.00	Happy hour 17.30-19.00 Presidents' reception 19.30-22.00	Move out 16.30-19.00

For booth information, reservation and advertising opportunities, please contact Mario Stael, AE2010 European Exhibit Sales Manager.

Tel/fax.: 32-9-2334912

E-mail: mario.stael@scarlet.be www.marevent.com

AE2010 also provides SPONSORSHIP OPPORTUNITIES to suit all budgets.

<please contact Alistair or Mario for more>

Your Aquaculture Europe conference registration includes:

- Admission to all conference sessions and to the trade exhibition
- Delegates kit
- Abstract CD - no abstract book will be published
- Lunches on conference days
- Refreshment breaks
- Admission to Welcome & Presidents' receptions
- 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 delegates are guaranteed delegates kit and abstract CD.
Spouse registration does not include these two items*

SAVE TIME – REGISTER ONLINE: www.easonline.org

- Register online
- If this is not possible, return both sides of this form with payment to the address on the next page
- Registration can be faxed (fax: +1-760-751-5003) if paying by credit card (fax both sides)
- Use one form per person. Please copy this form for additional people
- Cancelled registrations will receive a refund minus 20% handling. Cancellations must be in writing and be received by September 15, 2010. Refunds will be issued after the conference.

PLEASE PRINT CLEARLY OR TYPE ALL REQUESTED INFORMATION

BADGE INFORMATION: (As you want your name badge to read - no title please)

First Name _____ Surname (Family Name) _____

Company or Institution _____
(Limited to 40 letters & spaces)

City _____ State/Prov _____ Country _____

MAILING INFORMATION: Email _____

Address _____

City _____ State/Prov _____ Postal Code _____ Country _____

Phone _____ Fax _____ Title: (circle one) Dr. Mr. Ms. Mrs.
Include country code and city code

Type of registration	Register by June 30 2010	Register by September 1 2010	After September 1 2010	* To qualify for Member Rate you must be an EAS or WAS member in good standing (please tick overleaf). Trade show access is included in the full conference registration rate TOTAL REGISTRATION FEE € _____
EAS Member rate*	€ 395	€ 445	€ 495	
EAS Student Member rate* (Include copy of Student ID)	€ 125	€ 170	€ 225	
Special Rate for Portuguese Nationals	€ 200	EAS Member or Non-member rates apply		
Non-Member rate Student non-member rate (Include copy of Student ID)	€ 495 € 175	€ 545 € 225	€ 595 € 275	
Spouse rate Name _____	€ 225	€ 275	€ 325	

AE2010 trade exhibition: free for registered delegates of the Aquaculture Europe 2010 conference.

Trade Show Pass Only - valid whole period: €50
- per day: €20 Available on-site

Membership dues - enter amount from membership application on other side if applicable € _____

Do not post registration after September 15th 2010 or fax after October 1st 2010. After October 1st bring this form with you to register onsite. **TOTAL AMOUNT € _____**

Registration confirmation and receipt will be emailed after processing.

PAYMENT METHOD: all fees must be paid to the order of Aquaculture Europe 2010 without charges for the beneficiary.

Visa Mastercard Access Diners American Express

Card # _____ Expiry Date _____ Name on Card _____

Card Billing Address _____ City _____ Zip _____ Country _____

Date _____ Signature _____

For bank transfer details, contact: worldaqua@aol.com

If you wish to pay by cheque, please contact Conference Director John Cooksey beforehand. A surcharge of €25 will be applied and this should be added to the final amount.

Name _____

Membership: please check the box(es) for which you are a current member. Membership in any of these associations qualifies you for the Member Rate on the registration fees. **You can join EAS before registering to qualify for the Member Rate.**

European Aquaculture Society World Aquaculture Society

EAS MEMBERSHIP APPLICATION New Application Renewal

Join the EUROPEAN AQUACULTURE SOCIETY (EAS)!



EAS MEMBERSHIP includes automatic receipt of the Aquaculture Europe Magazine (quarterly), annual membership list, reductions on international aquaculture press and websites (Fish Farming International, Fish Farmer, Eurofish, Havbruk, ContactDirect.com, Seafoodintelligence.com), as well as **BIG REDUCTIONS ON REGISTRATION** for EAS and WAS co-organised meetings, etc. The peer reviewed Journal Aquaculture International (bimonthly) can be obtained as a part of the specific individual membership.

EAS Membership Categories

(membership is from January to December each year. New members joining at any time of the year receive all material for the calendar year)

	Standard	Reduced Rate**
<input type="checkbox"/> EAS Individual* Membership	€ 80	€ 55
<input type="checkbox"/> EAS Individual Membership, incl. AI	€ 135	€ 110
<input type="checkbox"/> EAS Institutional* Membership	€ 300	€ 200
<input type="checkbox"/> EAS Life Membership ***	€ 720	-
<input type="checkbox"/> EAS E-member	€ 10	

(E-membership does NOT allow for member rate for AE2010 conference registration)

Total Amount for EAS Membership: € _____

Please enter this amount under 'Membership Dues' section on opposite side of form.

* Peer-reviewed scientific Journal "Aquaculture International" (AI) not included

**- Individuals if aged 30 or under (proof of age required). Also for individuals residing in European and non-European Mediterranean countries with Gross National income (GNI) lower than US\$ 10.000 per capita. These countries are: Albania, Algeria, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Egypt, Iran, Latvia, Lebanon, Lithuania, Libya, Macedonia, Moldova, Montenegro, Morocco, Poland, Romania, Russia, Serbia, Slovak Republic, Syria, Tunisia, Turkey, Ukraine.

- Institutes if based in one of the above mentioned countries.

*** Life membership offers the general EAS benefits (AI not included) for full lifetime duration.

more at www.easonline.org

European Aquaculture Society (EAS)



The EAS is an international non-profit association dedicated to the promotion of contacts and the exchange of information amongst all involved or interested in aquaculture in Europe.

Established in 1976, the society's primary activities include publication of a quarterly magazine, publication of a series of special publications, publication of an international scientific journal and participation in the development of sustainable aquaculture in Europe through various EU projects and initiatives.

www.easonline.org

AQUA.PT



AQUA.PT
ASSOCIAÇÃO DE
AQUACULTURAS
DE PORTUGAL

AQUA.PT is the Aquaculture Association of Portugal whose main objective is the development of the Portuguese aquaculture sector.

Its activities are presently focused on offshore development and the implementation of business models that will attract investors.

AQUA.PT acts as meeting point between the many entities intervening in the sector, supplying contacts, mediating conflicts and promoting partnerships.

www.aqua.pt

CIMAR (CIIMAR and CCMAR)



CIMAR is the foremost Portuguese Marine Sciences Associate Laboratory with 154 PhD researchers working primarily at CIIMAR (Porto) and CCMAR (Faro), but also at

other installations of the University of Porto, University of Algarve and INETI/LNEG (Lisbon).

Its main objective is to carry out basic and applied research on the processes occurring in aquatic ecosystems, including the study of impacts of human activities on these ecosystems. CIMAR provides also post-graduate training to students in several fields related to the Marine & Environmental area. These R&D and training activities have been applied to the development of aquaculture, biotechnology and environmental technologies for the study and management of marine resources and ecosystems.

www.cimar.org



AE2010 Steering Committee

Chair: Yves Harache, EAS President Elect
Members: Peter Bossier, EAS Treasurer, Joao Coimbra (CIIMAR) and Pedro Sarmiento-Coelho (AQUA.PT).

AE2010 Programme Co-Chairs

Maria Teresa Dinis (CCMAR) and Aad Smaal (WUR).

AE 2010 Local Organising Committee

Joao Coimbra (CIIMAR), Pedro Sarmiento-Coelho (AQUA.PT), Emidio Gomes (AMP), Luisa Valente (University of Oporto) and Aires Oliva Teles (University of Oporto).

Tentative schedule

Tuesday October 5th - Registration and set up day

Registration open	noon - 19.00
Exhibitor move in	08.00 - 18.00
Poster set-up	14.00 - 18.00
Welcome drink	19.00 - 20.30

Wednesday October 6th

Registration open	08.00 - 18.00
Exhibitor move in	08.00 - 10.00
Plenary session/Opening ceremony	09.00 - 09.45
Plenary session 1	09.45 - 10.30
Coffee Break	10.30 - 10.50
Parallel Sessions	10.50 - 12.30
Lunch (provided)/ Posters	12.30 - 14.30
Parallel Sessions	14.30 - 17.30
Poster Session Happy Hour	17.30 - 19.00
Student Reception	19.00 - 21.00

Thursday October 7th

Registration open	08.00 - 18.00
Plenary session 2	09.00 - 09.45
Plenary session 3	09.45 - 10.30
Coffee Break	10.30 - 10.50
Parallel Sessions	10.50 - 12.30
Lunch (provided)/Posters	12.30 - 14.30
Parallel Sessions	14.30 - 17.30
Poster Session Happy Hour	17.30 - 19.00
Presidents' Reception (buffet reception)	19.30 - 22.00

Friday October 8th

Registration open	08.00 - 17.30
Plenary session 4	09.00 - 09.45
Plenary session 5	09.45 - 10.30
Coffee Break	10.30 - 10.50
Parallel Sessions	10.50 - 12.30
Lunch (provided)/Posters	12.30 - 14.30
Parallel Sessions	14.30 - 16.30
Plenary Wrap-up Session	16.30 - 17.30
Exhibitor move out	16.30 - 19.00

We are organising a great selection of hotels in Porto with very good rates.

Hotel information and booking is available at www.easonline.org

Remember to book your hotel early!

AE2010 further information:

Conference: ae2010@aquaculture.cc

Registration: worldaqua@aol.com

Trade exhibition: mario.stael@scarlet.be