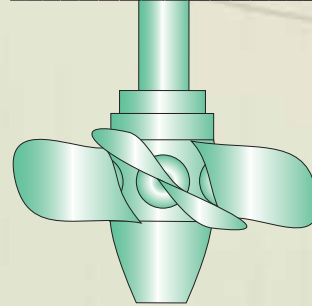




HYDRO 2010



Meeting Demands for a Changing World

International Conference and Exhibition
Lisbon, Portugal ~ 27-29 September 2010

Organized by:

THE INTERNATIONAL JOURNAL ON
**HYDROPOWER
& DAMS**

with



edp

In the wake of a global financial crisis, with the additional concerns of environmental protection and anticipated effects of climate change, and power shortages hampering socio-economic development in some parts of the world, hydropower development has many solutions to offer. The hydro profession is responding to the needs of a changing world, with innovations in planning methods, environmental assessments, technological innovation, approaches to financing strategies, and optimized use of existing assets.

HYDRO 2010 will review progress and achievements, as well as needs and future challenges.

As usual, the Conference will focus strongly on the needs, priorities and plans of the developing countries of Africa, Asia and Latin America, and discussions will cover technical, economic, commercial and environmental/social aspects.

A major Technical Exhibition will run alongside the Conference and a full social programme will offer extra networking opportunities.

SUPPORTING ORGANIZATIONS INCLUDE:



Call for Papers

PORTUGAL AND HYDROPOWER

The development of new hydro schemes and project upgrades are major priorities for the Portuguese power sector. Portugal's most important electricity producer EDP, our co-host for HYDRO 2010, has an existing portfolio of 74 hydro plants, totalling more than 4700 MW. The company plans to commission at least 22 new hydro generating units by 2018. This will increase capacity by about 3000 MW.

Portugal will therefore have much to show, and to discuss, during HYDRO 2010. Study tours will showcase some of the multipurpose hydro and pumped-storage schemes in various parts of the country.

LISBON AS HYDRO 2010 HOST CITY

The capital of Portugal since its conquest from the Moors in 1147, Lisbon is a legendary city with more than 20 centuries of history. In its golden age, the city gained a reputation as the eighth wonder of the world. As one of the greatest maritime centres in history, the Portuguese capital imported exotic wares from the distant parts of its empire, marking a new era in world trade. Lisbon offers a mix of traditional and modern architecture: Many medieval façades and old palaces have been restored, 19th-century Art Nouveau buildings can still be found and there are also modern museums and galleries. The majestic Vasco de Gama Bridge across the Tagus is an outstanding landmark. The Congress Centre is on the bank of the Tagus, close to the charming old quarter, Belem.

Lisbon Portela airport is just 7 km north of the city, and connects with 84 international cities.



AQUA-MEDIA AND THE HYDRO CONFERENCES

Aqua-Media has been recognized during 2009 for the contribution the company makes to sustainable hydropower development. The company received the Turkish Prime Minister's Water Prize (during the World Water Forum in Istanbul) and two India Power awards (during the Green Power VI conference in New Delhi). The annual Hydro Conferences represent an important part of Aqua-Media's role in promoting the benefits of well conceived hydro schemes.

HYDRO 2010 will be the 17th event in this annual series. The events, supported by international professional associations such as ICOLD, IEA, IWRA and ESHA, have steadily increased in size, scope and format. HYDRO 2009 in Lyon attracted 1750 delegates from a record 94 countries, making it the most international large-scale conference specifically devoted to hydropower. A similar gathering is expected in Lisbon.

HYDRO 2010 MISSION

As hydropower development begins a new wave of development, with greater universal recognition of its multiple benefits and its vital role in sustainable development, there are still many parts of the world with vast hydropower potential, where large proportions of the population still lack a reliable electricity supply.

We aim to bring together a unique concentration of hydro expertise:

- those with long-term experience of hydropower development, powerplant operation, and upgrading and refurbishment
- those with current major programmes underway
- those with the greatest need for international collaboration, to accelerate much-needed future projects

The format of 2010 will comprise not only valuable technical presentations on a wide range of current topics, but also high-level panel debates and inter-active workshops. All practical aspects of hydro will be on the agenda (technical, economic, financial and environmental). The Technical Exhibition will show-case state-of-art technology.

The programme aims to address practical issues, and to help turn positive policies into concrete actions.



Main Themes

Abstracts are now invited on the following or related themes:

Reviewing and maximizing hydro potential

- Development priorities and plans for new hydro and upgrades by region (Asia + Pacific region, Africa, Latin America, North America, Europe)
- Capacity building in the less developed countries
- International and regional co-operation
- Rural electrification

Environment and social responsibility

- Climate change; COP 15 opportunities and challenges for the hydro sector (carbon accounting and finance, reservoir emissions and mitigation)
- Implementing international guidelines efficiently; shared experiences
- Flora and fauna protection and conservation
- Project monitoring and reporting
- Scaling-up for regional development planning
- Social impacts of project delays

Maximising potential - multipurpose projects

- Multi-criteria decision-making
- Marketing benefits and realising returns
- Stakeholder experiences (recreation, hydro, navigation, floods)
- Minimizing delays to maximize economic and social benefits

Commercial and financial aspects

- Financing strategies – securing investment
- Panel discussion with IFIs, project developers and investment banks
- Assessing, apportioning and managing/mitigating risk
- Contemporary finance models
- Legal and contractual issues
- Need and proposals for the future
- Carbon trading experience

Marine and non-hydro renewable development

- Meeting national and international targets
- Connecting to the grid
- Hybrid systems
- Energy storage

Upgrading and refurbishment

- Economic benefits of refurbishment
- Condition monitoring and scheduling upgrades
- Case studies demonstrating innovation

Pumped storage

- Contribution to the grid
- Economic assessment and market competitiveness
- Technological advances to meet new challenges

Optimization

- Modelling operations and electricity markets
- Optimization challenges in uncertain markets
- Recent experiences and lessons learnt

Machinery

- R&D for improved operation and efficiency
- Turbine design innovations
- Electrical equipment (generators, control, transmission and distribution)

Civil engineering

- Water infrastructure: advances in design and construction techniques
- Tunnelling challenges and solutions
- Complex sites
- Construction in extreme climates
- Engineering for areas of seismic activity
- Powerplant safety (including gates and generating equipment)

Sediment

- Design of structural measures
- Monitoring sediment build-up and erosion
- Protecting machinery
- Sediment removal systems

Technology and system management

- New eco-technology developments
- Project management technologies and communication systems
- Operation and maintenance
- IT and smart grid systems

Small hydro

- Maximizing SHP potential
- Policy issues and planning
- Contribution to rural electrification
- Economic feasibility for private landowners
- Advances in engineering

INTERNATIONAL STEERING COMMITTEE INCLUDES:

S. Alam, France
J. Antunes Sobrinho, Brazil
I. Araki, Japan
E.M. Baardsen, ADB
G. Babalis, Greece
E. Bellendir, Russian Federation
L. Berga, Spain
A. Bergeret, France
P. Boeriu, UNESCO-IHE
H. Brekke, Norway
J.M. Buil Sanz, Spain
A. Carrère, France
D. Develay, France
J.-M. Devernay, France
M. De Vivo, France
K.B. Dubey, India

I. Ekpo, Nigeria
M. François, France
J. Freitas, Portugal
M.A. Gómez Balandra, Mexico
J. Gummer, Australia
C.R. Head, UK
F. Isambert, France
R.E. Israelsen, USA
Jia Jinsheng, China
C. Kayitenkore, Burundi
H. Keck, Switzerland
V. Kerčan, Slovenia
H. Kreuzer, Switzerland
T. Kunz, Switzerland
U Myo Myint, Myanmar
R. Lafitte, Switzerland

F. Lempérière, France
B. Leyland, New Zealand
Lin Chuxue, China
F. Louis, France
E. Monosowski, Brazil/France
N. and L. Nielsen, Australia
A. Nombre, Burkina Faso
C.S. Ospina, Colombia
A. Palmieri, World Bank
B. Pelikan, ESHA, Austria
B. Petry, The Netherlands
I. Phiri, Zambia
J. Plummer, UK
V. Radchenko, Russian Federation
P.J. Rae, USA
J.R. Rojas Morales, Costa Rica

F. C. da Rocha e Silva, Mozambique
J. Rupčić, Croatia
A. Schleiss, Switzerland
K. Seelos, Norway
J.-J. Simond, Switzerland
B. Tardieu, France
J. Thanopoulos, Greece
S. Tickodri-Togboa, Uganda
B. Trouille, USA
M.S.D. Tsoy, Russian Federation
W. Um, Asian Development Bank
C.V.J. Varma, India
J.G. Warnock, UK
G.M. Wedam, Austria
D.A. Williams, UK
J. Yagüe, Spain

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Technical Exhibition



As usual at the annual Hydro Conferences, a major Technical Exhibition will take place alongside HYDRO 2010. All lunch and refreshment breaks will take place in the Exhibition Hall. The Hydro Conferences are renowned for their high-level international participants from all parts of the world (at HYDRO 2009 in Lyon, 94 countries were represented).

The Exhibition provides a unique opportunity for all those playing a role in world hydropower development. Exhibition space is sold in units of 6 m² (multiple units are available for large displays or groups of companies wishing to form a national pavilion).

The cost of each unit, € 2700, covers: the fabricated stand, including the framework, panels suitable for mounting posters, a name sign, a table, two chairs, and two spotlights. Additional furniture may be ordered directly from our recommended supplier. One exhibitor is entitled to free registration, and up to two others may register at reduced fees for the conference. This includes the full technical and social programme, including meals during the event.

SPONSORSHIP OPPORTUNITIES

Various opportunities are available to sponsor meals, apéritifs, receptions and coffee breaks; this is a pleasant and memorable way of bringing your company to the attention of the international delegates. For further details of the Exhibition and/or sponsorship opportunities, contact our Sales & Marketing team: Mr Gaël Bozec, Mrs Maria Loredo or Mr Lukas Port

Email: sales@hydropower-dams.com Tel: + 44 20 8773 7250

HYDRO 2010 EXHIBITORS (registered in December 2009)

ABB AG Power Generation, Austria • Agudio SpA, Italy • Alstom Hydro, France • Amiantit (SAAC), Germany • Andritz Hydro, Austria • ASL AqFlow, Canada • ATB Riva Calzoni, Italy • Bühler Schweisstechnik, Austria • British Hydropower Association, UK • Camuna Installazioni SpA, Italy • Carpi Tech SA, Switzerland • Cesari Giovanni Srl, Italy • Chesterton Europe, Europe • CKD Blansko Holding as, Czech Republic • Converteam, France • D2FC, France • Damen Dredging, The Netherlands • Dolnoslaska Fabryka Maszyn Elektrycznych, Poland • DSD Noell GmbH, Germany • Dyrhoff as, Norway • Eaton Hydraulics, Europe • Eaton Electrical, Europe • EFACEC, Portugal • Encardio-Rite Electronic Pvt, India • Engevix Engenharia SA, Brazil • EPFL-LMH, Switzerland • Farab, Iran • Federal Mogul Deva GmbH, Germany • FGTH-DG, France • Fugesco, Canada • Gaima, Spain • GE Energy, USA • Geokon Inc, USA • Geosense, UK • Hubei Hongcheng (Hydropower Vale), China • Humidor-Acotec, Belgium • Hydroea Engineering, France • Hydro Engineering SA, Romania • HydroVision GmbH, Germany • IGINSA, Spain • Indar Electric SL, Spain • Ingenionics, Portugal • Internacional de Maquinas Herramientas Portatiles, Spain • James Walker, UK • Jeumont Electric, France • Kinematics Inc, USA • Kolo Veidekke, Norway • Korto Cavitation Services, Luxembourg • Künz GmbH, Austria • Litostraj Power Ltd, Slovenia • Lloyd Dynamowerke GmbH, Germany • Louis Feugier, France • Marelli Motori SpA, Italy • Mavel sa, Czech Republic • Mecamidi, France • Meggitt Sensing Systems, Switzerland • MHyLab, Switzerland • Numeca International, Belgium • Obermeyer Hydro Inc, USA • Oiles Deutschland GmbH, Germany • Pan Italia, Italy • Panolin AG, Switzerland • P&S Tensioning Systems Ltd, Switzerland • Powel ASA, Norway • Rainpower ASA, Norway • Rascor International Ltd, Switzerland • Rittmeyer AG, Switzerland • Rubberart Ltda, Brazil • Schmiederwerke Gröditz GmbH, Germany • Sedicon AS, Norway • SKF Economos GmbH, Austria • Stahlhandel Gröditz GmbH, Germany • Stucky Ltd, Switzerland • Studio Ing. G. Pietrangeli, Italy • Tes Vsetin sro, Czech Republic • UCM Resita SA, Romania • VAG-Armaturen GmbH, Germany • Veski d.o.o., Croatia • Voith Hydro Holding GmbH, Germany • Walo Bertschinger AG, Switzerland • Worthington Products, USA • Zeco Srl, Italy



Centro de Congressos de Lisboa - www.lisboacc.pt



STUDY TOURS

Several technical tours are being arranged to enable delegates to learn about Portugal's current activities in hydropower development, and powerplant upgrading. One trip will visit the multipurpose Alqueva development, where it will be possible to visit the dam and powerplant currently in operation, and the site of the new Alqueva II powerhouse, under construction. As well as the technical visits, the trip will include a visit to a large farm, where wine and olives are produced. Another trip is planned to the northeast, to projects underway close to the Spanish border. En route to visit projects such as Picote II and Bemposta II, the group will travel through the scenic Douro valley, with a chance to visit touristic centres such as Penalva do Castelo. Details of itineraries will be announced in early 2010.

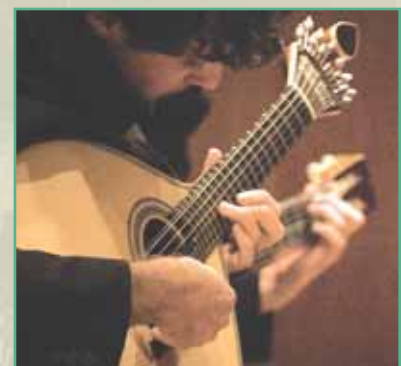
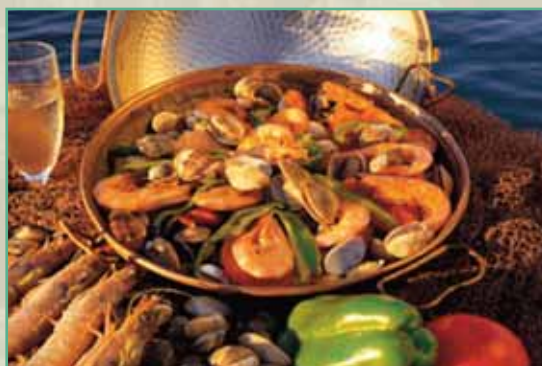


SOCIAL PROGRAMME

A local excursion and city tour with lunch will be arranged on the afternoon of Sunday 26 September for all participants, providing the opportunity to visit some of the main sights of Lisbon, including the charming old quarter of Belem.

A Welcome Reception with music will take place on the evening of Monday 27 September, and the Conference Dinner, to be hosted by EDP, will take place on the evening of Wednesday 29 September. One function will be held at the Convento do Beato, a stunning 16th century building constructed of white marble.

Lunches and morning and afternoon refreshments will be served in the exhibition area each day during the conference.



ACCOMPANYING PERSONS' PROGRAMME

A number of touristic excursions are being planned for accompanying persons, providing opportunities to get to know the history and culture of the host country. There will be a chance to see the surrounding countryside, and the coast, as well as museums, galleries and shops in Lisbon.

A trip is planned to Sintra, one of the most delightful towns of Portugal (and described by Byron as 'the most pleasing of Europe'). Surrounded by green woodland and wine-growing areas, the Serra da Sinta, the town's artistic heritage includes three spectacular palaces, as well as valuable archaeological remains from the roman period, manor houses and picturesque churches.



Submission of Abstracts

Abstracts of up to 800 words, in English, are now invited on the themes listed or related topics. Please mail, fax or email abstracts to the address below. A short CV of each author should be included.

Your abstract should summarize precisely the scope and content of the paper proposed. No artwork or bibliography is required at this stage. In the case of any project to be described, please mention its current status or date of completion. If the abstract is sent by email, please incorporate the author's name in the file name.

Please note: **abstracts should only be submitted if the author would be able to attend the conference (or send a representative)**. Please obtain any necessary clearance, and check your availability to attend before submitting the abstract.

If the paper is accepted, you will be asked to sign a form confirming willingness to attend; it is **essential** that we receive this undertaking before allocating time for an oral presentation.

The final deadline for receipt of abstracts is **26 February 2010**. Authors will be notified in early April 2010 whether or not their paper has been accepted for presentation, or for publication in the Proceedings.

Abstracts will be reviewed by two or more experts on our International Steering Committee, and you may be asked to modify some aspects of your proposed

paper. As this review process takes some time, we urge you to submit abstracts promptly (if possible well before the final deadline).

Full papers will be required by **5 July 2010**, and format guidelines will be sent to all authors whose papers are accepted. A hard copy and an electronic file of each final paper will be required.

Full details of the technical and social programmes, and more information about the excursions, accommodation and registration fees, will be published in the Final Bulletin, which will be distributed in June 2010.

Meanwhile, information about HYDRO 2010 will be updated regularly in the journal Hydropower & Dams, by email, and on our web site (www.hydropower-dams.com).

If you do not receive regular copies of the Journal and would like to subscribe now, please contact our Subscriptions Manager, Maria Flintan at: subs@hydropower-dams.com or tick the appropriate box on the form below.

Subscribers to Hydropower & Dams will be eligible for reduced registration fees.

NB: Speakers are eligible to book at a reduced registration fee (which includes meals during the conference, and the full social and technical programmes).

If you would need financial assistance to attend, you must indicate this at the time of submitting your abstract.

HYDRO 2010: Meeting Demands for a Changing World

Lisbon Portugal, 27-29 September 2010

- I am interested in attending the Conference and Exhibition as a delegate. Please send further details.
- I attach an abstract for consideration. If it is accepted, I or my representative will attend the conference to present the paper.
- My organization may wish to participate in the Exhibition. Please send further details.
- I am interested in sponsorship opportunities (coffee breaks, etc). Please send details.
- I would like to subscribe to The International Journal on Hydropower & Dams.
(When registering later as a delegate I wish to take advantage of the reduced registration fees for subscribers)

Name: Position/Dept:

Organization:

Address:

Country: Email:

Fax: (+ int. code) Tel: (+int. code)

Proposed paper topic:.....