



Fourth International Conference on Water Resources and Renewable Energy Development in Asia

Conference and Exhibition

Shangri-La Hotel, Chiang Mai, Thailand ~ 26 and 27 March 2012

organized and hosted by
THE INTERNATIONAL JOURNAL ON
**HYDROPOWER
& DAMS**

Programme and Preview

Following three successful events, which took place in Bangkok, Thailand (2006), Danang, Vietnam (2008), and Kuching, Malaysia (2010), our biennial regional conference is returning to Thailand, to the historic northern city of Chiang Mai. Located in the famous Golden Triangle, the culturally rich university town of Chiang Mai offers delegates the chance to visit projects in northern Thailand, and in the neighbouring Lao PDR, where major hydro projects are under way.

There will also be the opportunity to explore fascinating local night markets and ancient temples, to visit elephant sanctuaries, or to take part on night safaris.

In addition to Thailand's own hydro and pumped-storage schemes, Thailand is also an important market for the hydro production of neighbouring countries, with cross-border schemes now proposed or completed in Lao PDR, Vietnam, Cambodia and Myanmar. By importing capacity, Thailand is playing a major role in the socio-economic development of its neighbours.

The Conference is being planned in collaboration with EGAT and RID of Thailand. Speakers will represent the major water and energy utilities of the Asia and Pacific regions, as well as financiers, environmental specialists, and international experts on all aspects of dams and renewable energy. Delegations from about 50 countries attend these Asian events, to discuss all aspects of water resources development of particular relevance to the Asian region.

Supporting Organizations:





WATER RESOURCES AND HYDRO DEVELOPMENT IN ASIA

The Asian continent has an installed capacity of 362 000 MW with a further 136 500 MW under construction, making this the most active region in the world for hydro development and water resources development. Countries such as China, India, Vietnam, Pakistan, Bhutan, Lao PDR and the Russian Federation have large programmes under way, and many others such as Nepal, Myanmar and Indonesia have major potential and substantial development plans.

WHY CHIANG MAI?

Chiang Mai is a city ideally positioned to showcase the significant hydro and water resource developments of Thailand and neighbouring countries. Bordering Myanmar to the west, Cambodia to the east, and Lao PDR - the so-called battery of Southeast Asia - to the north, Thailand offers water resource professionals a gateway to the region's fast moving developments. Chiang Mai is the capital city of northern Thailand and the second largest city in the country. Located approximately 700 km north of Bangkok, Chiang Mai is on the Ping river and is surrounded by the highest mountains in the country.

As well as the two-day technical conference, an international exhibition of the world's leading companies, and optional study tours to Laos and northern Thailand, delegates will have the opportunity to enjoy the cultural, historic and gastronomic delights of the region.



ACCOMMODATION

Rooms have been reserved at favourable rates for ASIA 2012 participants at the Conference headquarters hotel, the Shangri-La (see details on opposite page).

Three other accommodation options are offered: a business hotel approximately 10 minutes walk from the Shangri-La, and two budget category hotels, also within easy walking distance of the conference centre.

Accommodation is being handled by SureFire Events, and booking on-line can be done via our website: www.hydropower-dams.com, or using the form in this brochure (see back pages).

For those travelling through Bangkok, either to or from the Conference, or after the study tours, special rates have been obtained at our partner hotel, the Montien Riverside, beside the Chao Praya river.

INTERNATIONAL STEERING COMMITTEE INCLUDES:

S. Alam, Consultant, France
 Dr E. Bellendir, Director, VNIIG, Russian Federation
 Dr Chen Shiun, Sarawak Energy Bhd, Malaysia
 Boonin Chuenchavalit, EGAT (Bhumibol HPP), Thailand
 E. Baardsen, Asian Development Bank
 Prof Luis Berga, UPC, Spain
 Dao Trong Tu, Director of Operations Division. MRC, Laos
 Do Duc Quan, MOI, Vietnam
 Dr Alan Dredge, Colenco, Switzerland
 Dr Malcolm Dunstan, Director, MD&A, UK
 M. Fauzi, Ministry of Public Utilities, Malaysia
 Brian Forbes, GHD Pty Ltd, Australia
 M. François, R&D Director, Alstom Power Hydro, France
 M. Gopalakrishnan, Secretary General, ICID, India
 J.H. Gummer, Director, Hydro Consult Pty Ltd, Australia
 R. Grether, Germany

C.R. Head, Consultant, UK
 Dr. C. Hansapinyo, Faculty of Engineering, Chiang Mai University
 Dr Jia Jinsheng, President of ICOLD, China
 D. Kenneally, SMEC, Australia
 Dr Harald Kreuzer, Consultant, Switzerland
 Prof R. Lafitte, EPFL, Switzerland
 Dr Peter Lee, Consultant, UK
 F. Lempérière, Director, Hydro Co-op, France
 B. Leyland, Consultant, New Zealand
 Lin Chuxue, China Three Gorges Project Corp, China
 Toyoto Matsuoka, TEPCO, Japan
 U Myo Myint, Vice Minister of Electric Power, Myanmar
 Kanchit Ngamsanroj, EGAT (Bhumibol HPP), Thailand
 Mohd Nazri Bin Shahrudin, Tenaga Nasional Bhd, Malaysia
 Orathai Ongartana, Dept of Water Resources, Thailand
 Ir Zulkifli Osman, Sarawak Hidro Sdn Bhd, Malaysia

A. Palmieri, Lead Dam Specialist, World Bank
 Prof Pham Hong Giang, MARD and VNCOLD, Vietnam
 J. Plummer, Senior Financial Analyst, World Bank
 Abdul Razak Bin Abdul Majid, Tenaga Nasional Bhd, Malaysia
 Chhewang Rinzin, Druk Green Power Corp Ltd, Bhutan
 Dr A. Scuero, Carpi, Italy
 Dr V. Semenkov, Consultant, Russian Federation
 N.R. Shrestha, Nepal Hydropower Association, Nepal
 Dr S. Sparkes, Multiconsult, Norway/Laos
 Dr Sompop Sucharit, Royal Irrigation Department, Thailand
 Khun Kittitancharoen, Assistant Governor, EGAT, Thailand
 Dr. T. Tanchaisawat, Faculty of Engineering, Chiang Mai University
 C.V.J. Varma, President, Council of Power Utilities, India
 Prof D.A. Williams, CEO, British Hydropower Association, UK
 Prof Dr Xia Jun, President, IWRA

CULTURAL EXCURSION AND SOCIAL PROGRAMME

Participants are encouraged to register for ASIA 2012 during Sunday 25 March, to avoid long queues on Monday morning. The registration desk will be open from 09.00 hrs, and this will provide ample time to pick up your bag, badge and registration documents, before taking part in the optional excursion in Chiang Mai.

25 MARCH: EXCURSION TO TEMPLES AND LUNCH BY THE RIVER

For those visiting Chiang Mai for the first time, this trip will provide a first insight into the history and culture of this fascinating town.

The trip will depart at 11.00 hrs from the Shangri-La hotel, allowing plenty of time to register for the conference beforehand.

The first stop will be the Wat Jedee Luang. A temple on this site originally constructed in 1401, under the orders of King Saeng Muang ma, was destroyed in the great earthquake of 1545. It lay in ruins until 1991, when it was reconstructed, regaining its former splendour.

After a walk around to view the temple, the group will continue to the Gallery restaurant, overlooking the Ping river. The front of the building houses an art gallery, built in traditional Chinese style. The restaurant, built of teak in northern Thai style, is one of the oldest structures remaining in Chiang Mai, and has won a number of awards over the years.

After lunch there will be a visit to the most renowned temple in Chiang Mai, Wat Phra Thad, which is located 15 km from the centre of town, on the Doi Suthep mountain. 1600 m above the city, the temple is one of the most famous Buddhist landmarks in the Lanna territory. The temple dates from 1383, and is accessed either by a flight of 290 naga-flanked steps, or by funicular railway. Built on the final resting place of a legendary white elephant, the 14th century structure has a copper-plated 'chedi', and offers splendid views over the city.

Return to the Shangri-La hotel will be by around 16.30 hrs.

26 AND 27 MARCH: SOCIAL PROGRAMME

The Welcome Reception, in an informal setting with cocktails and an oriental buffet, is being arranged for the first evening, in a rooftop garden overlooking the city, close to the Shangri-La hotel. This will provide an opportunity to make new contacts and renew past acquaintances.

The conference dinner will be in a spectacular setting, on the Khong Khao lawn of the Mandarin Oriental Dhara Dhevi hotel. The lawn is surrounded by flame trees, and the backdrop is an ancient prayer hall and other buildings of architectural beauty.

There will be music and entertainment at both events, reflecting the fascinating culture of the hill tribes of northern Thailand.

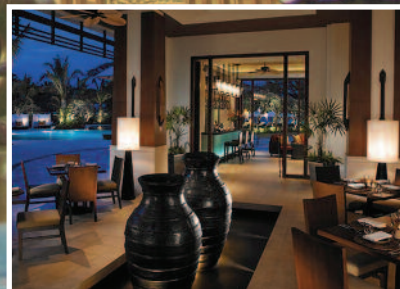
ASIA 2012 CONFERENCE HOTEL

The five-star Shangri-La luxury hotel, with 281 rooms and suites, is located in a garden setting on Chang Klan Road, which is within easy walking distance of the city's famous Night Bazaar and boutiques. (See photos, right.)

The hotel is just a 10-minute drive from Chiang Mai International Airport, which has direct flights to Bangkok, Kuala Lumpur, Singapore, Seoul, Manila, Hong Kong, Taipei and many other domestic and international destinations.

The hotel has a luxurious spa village, set in landscaped gardens amidst lotus ponds. The Chi Spa offers traditional Thai massages, as well as a selection of herbal and flower-based treatments, based on customs of the ancient Kingdom of Lanna. There is also a fitness centre, and a large outdoor swimming pool.

A number of cafés, lounges and bars serve international, Thai and Halal cuisine.



ASIA 2012 PROGRAMME PREVIEW AT A GLANCE

Opening Plenary Session

Speakers will include: Mr Hongpeng Liu, Chief of Energy Security and Water Resources, Environment and Development Division, UNESCAP; Mr Jatuporn Buruspat, Director General, Department of Water Resources, Thailand; Dr Avinash C. Tyagi, Secretary-General of ICID.

World water issues with special challenges for Asia

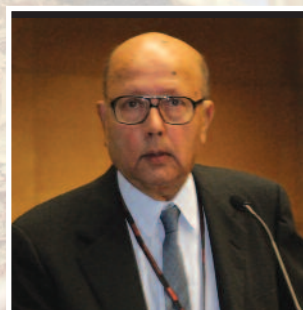
- ▶ Climate change impact on the water sector, and adaptation measures - keynote address by Prof Jun Xia, President of the International Water Resources Association.
- ▶ Flood management and hydrology - keynote address by ICOLD Hon. President, Prof Luis Berga. The session on climate change and floods will have input from Sri Lanka, China and India.
- ▶ Keynote address on 'Water as an engine for development in Asia' by Dr Asit K. Biswas, Director of the Third World Centre for Water Management and 2006 winner of the prestigious Stockholm Water Prize.
- ▶ Keynote addresses on irrigation policy and practice, and on the multipurpose use of irrigation reservoirs will be presented by the Secretary General of ICID, and an officer of RID.
- ▶ Challenges to water resources development in Vietnam will be outlined by Prof Pham Hong Giang of the Ministry of Agricultural and Rural Development, and Chairman of VNCOLD.
- ▶ Keynote on sedimentation management, by the leading world expert in this field, Sultan Alam of France (currently advising on this topic for major projects in Brazil, Nepal and D.R. Congo).
- ▶ Keynote by Dr Andy Hughes, UK: 'Engineers - Ambassadors to dam engineering or their own worst enemies?'

Hydropower development

- ▶ Update on the SCORE programme of dam/hydropower development in Malaysia.
- ▶ Update on the International Energy Agency's 'Roadmap for Hydropower', a major international initiative to accelerate hydropower development in the less developed countries.
- ▶ The importance of river basin organizations in the development of sustainable hydropower, by the Mekong River Commission and GTZ of Germany.
- ▶ A session on research and innovation in the development of hydropower equipment, led by E&M equipment world expert John Gummer of Australia. Presentations will cover turbines, generators, and equipment for pumped-storage plants, and will include the hydraulic design of high-head equipment; protecting runners from silt erosion; optimizing the efficiency of generators; tidal in-stream energy converters. Emphasis will be on efficiency, safe operation, and economy. There will be input from leading research centres such as NTNU, Norway and Kathmandu University, Nepal; from utilities including EDF, Statkraft and the Kansai Electric Power Co; and, from some of the world's leading manufacturing companies, such as Andritz, Alstom, Voith, GE Energy, etc.

Renewable energy and rural development

- ▶ A whole session will be dedicated to small hydro schemes, with: a talk on how to build schemes 'better and cheaper' by Consultant Bryan Leyland of New Zealand; another paper dealing with integrating small and micro hydro schemes into the power grid in India, using smart technology; a talk on the experience of Agence Francaise de Developpement in assisting with small hydro development in Pakistan; and, an assessment of small hydro potential in Sarawak, Malaysia. Other topics will include wind power development in India, the concept of floating solar PV plants on multipurpose reservoirs (in Korea), and the rural electrification masterplan for Laos.





Finance, economics and contractual issues

- ▶ A high-level panel discussion on carbon finance will be led by Dr Lu Xuedu of the Asian Development Bank, with input from UNIDO's International Centre for Small Hydro Development in Hangzhou. This will look at the application of carbon financing for hydropower; CDM development from small to large-scale projects; the role of international institutions, and the future role of carbon finance in contributing to energy and water security, climate change mitigation, and poverty reduction in the Asian region.
- ▶ A Workshop will be held in which specialists from both the public and private sectors will discuss contractual issues relating to construction concessions and PPA arrangements. Chaired by Chris Head, the session will have input from experts from Canada, Indonesia, Nepal and the UK.
- ▶ A session on financial and economics issues. A panel discussion will follow this session, with input from the World Bank and various financial experts in the hydro profession. Economic aspects of project delays will be discussed by Judith Plummer, World Bank/University of Cambridge, UK.



Civil engineering topics

- ▶ A Workshop on PK Weirs (one of the most significant recent developments in the field of flood discharge works), will take place during the ASIA 2012 event, led by M. François Lempérière of France, inventor of the PK Weir. PKWs are proving their advantages worldwide in terms of safety, efficiency and economy. Participants will include M. Ho Ta Kanh, France; Dr S. Erpicum, Belgium.
- ▶ Keynote on large-scale RCC dams in Asia by Dr Malcolm Dunstan. There will also be paper presentations on major RCC dams in the region, such as Upper Paung Laung in Myanmar. Another talk will describe recent applications of geomembranes at RCC dam projects, by the leading company in the field of geosynthetics, Carpi of Switzerland.
- ▶ Dam and powerplant safety: a session on the monitoring of dams, tunnels and underground works; lessons from accidents and failures; upgrading to enhance safety.



Environmental and social issues

- ▶ Financing and managing the design and implementation of environmental and social programmes association with hydro projects will be the focus of a keynote address. Lessons learned from monitoring health impacts in resettled communities will be another important topic, based on experience from the Theun Hinboun scheme in Laos. Benefit sharing, strategic communications and planning successful resettlement schemes will also be on the agenda.
- ▶ A session on environment will include talks on methane emissions from reservoirs, fish protection, and life cycle analysis for hydro plants. Another paper will look at standards for sustainable dam development in China, India, Cambodia and Turkey, and there will also be a paper on Chinese experience of protecting an ecologically sensitive area in the Changjiang river basin.



Organizations represented by speakers on the programme will include: the World Bank; The Asian Development Bank; The Mekong River Commission; the International Energy Agency; The Government of Lao PDR; Druk Green Power Corp, Bhutan; GTZ, Germany; Agence Française de Développement, France; Statkraft, Norway; EDF, France; JSC Hydroproject, Russia; PLN, Indonesia; the Ministry of Electric Power, Myanmar; Nepal Electricity Authority; CBK Power Ltd, The Philippines; China Institute of Water Resources and Hydropower Research; K-Water, Korea; Sarawak Energy Berhad, Malaysia; H.P. State Electricity Board, India; Ministry of Energy, Iran; Kansai Electric Power Co, Japan; Ceylon Electricity Board, Sri Lanka; Theun Hinboun Power Co, Laos.



These owners, developers, operators and financial institutions will be joined by speakers and delegates from the world's leading consulting engineers, research institutes, contractors, manufacturers and universities. Presentations and panel discussions will contribute to furthering the sustainable development of renewable energy and water resources in the Asian region.

PRESENTATIONS, WORKSHOPS AND PANELS

MONDAY 26 MARCH – Morning

Opening Plenary Session

Welcome to ASIA 2012 – Alison Bartle, Aqua-Media International Ltd

Welcome messages on behalf of ICOLD, ICID and IWRA

Opening Keynote Addresses:

- ▶ **Hongpeng Liu**, Chief of Energy Security and Water Resources Section Environment and Development Division, UNESCO
- ▶ **Jatuporn Buruspat**, Director General, Department of Water Resources, Thailand
- ▶ **Prof Asit K. Biswas**, Water as an engine for development in Asia – Distinguished Visiting Professor, Lee Kuan Yew School of Public Policy, National University of Singapore
- ▶ **Prof C.V.J Varma**, Development of water resources in India; prospects and challenges – President, AESIEAP, India

Session 1A: Hydro Machinery – Pumped storage

Chairman: John Gummer, Hydro-Consult Pty Ltd, Australia

- ▶ Pumped storage: technology, role in grid and benefits – N.D. Ninobla, CBK Power Co Ltd, The Philippines
- ▶ Optimized pumped-storage concepts based on converter technology – Dr R. Schürhuber, Andritz Hydro Austria
- ▶ Key aspects to design of modern variable speed motor-generators: asynchronous (DFIM) and synchronous (SMFI) electric machinery options for pumped storage power plants – H. Henning, T. Hildinger and L. Ködding, Voith Hydro, Germany

Session 2: Irrigation

- ▶ KEYNOTE: Irrigation: the way forward to food security in the ever changing context – Dr A. C. Tyagi, Secretary-General, International Commission on Irrigation and Drainage
- ▶ Integrated regional development by Ataturk dam in GAP region of Turkey, and impacts of irrigation – O. Cetin, Dicle University, Turkey
- ▶ Improvement of flow regime after hydropower project development in Nam Ngum Basin – K. Naparaxawong and P. Vibulsirikul, Team Consulting Engineering, Thailand

Session 3 : Workshop on PK Weirs

Co-Chairmen: F. Lempérière, Hydro Coop, France; M. Ho Ta Khanh, EDF, France

The session will review current research and experience of constructing PK Weirs, a relatively newly developed technology which offers safety and economy for flood discharge works. Panellists will include: J. Pralong from EDF, France.

- ▶ Numerical and physical hydraulic modelling of Piano Key Weirs – S. Erpicum, M. Piroton, B. Dewals, P. Archambeau - University of Liege, Belgium
- ▶ Study and construction of PK Weirs in Vietnam – Ho Ta Khanh - EDF, France

Session 4a: Workshop on contractual issues

Chairman: Chris Head, Consultant, UK

The session will examine contractual issues arising in the development and use of hydropower resources, through short presentations followed by open discussion. The panel will include specialists from both the public and private sectors, who will address contractual aspects relating to Construction, Concessions, and PPA arrangements.

- ▶ The clauses of FIDIC conditions of contract related to possession of site as an important causal factor of claims and disputes in hydro electric power projects – S. Hardjomuljadi, Ministry of Public Works, Rep. of Indonesia
- ▶ Importance of contract administration in the construction of hydropower projects – G.P. Kayastha, Nepal Electricity Authority, Nepal

MONDAY 26 MARCH – Afternoon

Session 1B: Hydro Machinery - Turbines

Chairman: John Gummer, Hydro-Consult Pty Ltd, Australia

- ▶ Nam Theun 2 - 1070 MW of new electromechanical equipment – N. Désy, D. Proulx, W. Martin, L. Roeden, Andritz Hydro, Canada; E. Parkinson, Andritz Hydro, Switzerland; M. Allali, Électricité de France
- ▶ A review of Pelton hydraulic development – E. Parkinson, A. Karakolcu, N. Gervais and C.-A. Perusset, Andritz Hydro Ltd, Switzerland
- ▶ Francis at part-load with water injection – E.J. Wiborg, Statkraft AS, Norway
- ▶ Alstom's tidal in stream energy converter demonstration project – M. François, P. Gilson and E. Pélerin, Alstom Hydro, France

Session 1C: Hydro Machinery - Electrical

- ▶ Efficiency optimised hydro generators – W. Ladstätter, W. Harb, G. Kastner, G. Maier, F. Ramsauer, Andritz Hydro GmbH, Austria
- ▶ Improvement of condition diagnosis with sensors for hydraulic turbine and generator – Y. Fujita, J.-I. Sugimori and K. Okude, The Kansai Electric Power Co., Inc., Japan
- ▶ Air gap monitoring: key element to avoid unnecessary and costly repairs – A. Tétréault and M. Cloutier, Vibrosystm Inc., Canada

Session 5: Hydro potential and planning

Co-Chairs: Chhewang Rinzin, Druk Green Power Corp, Bhutan; and N. Nielsen, International Energy Agency

- ▶ KEYNOTE: The IEA Hydropower Technology Roadmap – N. Nielsen, IEA, Australia
- ▶ SCORE project in Sarawak – Sarawak Energy Berhad – (to be confirmed)
- ▶ Fast-track Approach for the Assessment of Hydropower Resources – H. Hildebrand, T.P. Kumar and S. Briggemann, Fichtner GmbH & Co. KG, Germany
- ▶ Experience in designing of hydropower projects in South-East Asia – A. Volynchikov, JSC Institute Hydroproject, Russia
- ▶ Collaborative development of a hydroelectric project: more than just an Owner's Engineer – P. Kumar and A. Sharma, Entura Hydro Tasmania, India; R. Herweynen, ANCOLD, Australia
- ▶ Planning and development of hydropower projects in Jawa Bali power system – N. Mulyanto and C. Wiwoho, PT. PLN (Persero), Indonesia

Session 4B: Financial and economic aspects of hydro development

Chair: Judith Plummer, The World Bank / University of Cambridge, UK

- ▶ KEYNOTE: Economic issues of project delays – J. Plummer, The World Bank/ University of Cambridge, UK
- ▶ A Panel discussion will follow in which panellists from the lending agencies and experts from the industry will interact with delegates to debate current issues in the field of project finance. Panelists will include D. Doran, DFID Mekong Lawyers, Thailand, and P. Rae, Independent Consultant, Canada

Session 6: Managing Sedimentation

Chairman: S. Alam, Consultant, France

- ▶ KEYNOTE: Aspects of sediment management in various parts of the world – Sultan Alam, Consultant, France
- ▶ Introduction of reservoir sediment simulation of the Houay Lamphan Gnai hydroelectric power project in Lao PDR – T. Saruhashi, Newjtec Inc., Japan
- ▶ The formation of new deltas in large water reservoirs – V.M. Starodubtsev and V.A. Bogdanets, National University of Life and Environmental Sciences, Ukraine
- ▶ Optimization and numerical analysis of Francis runner designs exposed to sediment erosion – B.S. Thapa, Kathmandu University, Nepal; M. Elvik, K. Gjostater and O.G. Dahlhaug, Norwegian Institute of Science and Technology, Norway
- ▶ Understanding hydro-abrasive erosion – K. Winkler, Andritz Hydro AG, Switzerland
- ▶ Accelerated testing for resistance to sand erosion in hydraulic turbines – B. Thapa, Kathmandu University, Nepal
- ▶ Tarbela 4th extension project; designing for potentially increased sediment flows – F. Griffin, Mott MacDonald House, UK
- ▶ Prediction of long term deposited sediment profile in reservoirs; a case study – Z. Ahmad, Institute of Technology Roorkee, India

ASIA 2012 Welcome Reception on the Roof Terrace of the Empress Hotel

TUESDAY 27 MARCH - Morning

Session 7: Small hydropower

Chair: Dr Hu Xiaobo, International Centre for SHP, China

- ▶ KEYNOTE: Small hydropower: How to do it better and cheaper – B. Leyland, Consultant, New Zealand
- ▶ Assessment of small hydro potential in Sarawak, Malaysia - A GIS approach – V. Srivastava, Entura Hydro Tasmania, Australia; G. Maher and L. Chai Pau, Sarawak Energy Berhad, Malaysia
- ▶ Small and medium-sized hydropower: Best option for renewable energy? The experience of AFD in Pakistan – N. Fornage, French Development Agency (AFD), Pakistan
- ▶ Management of small hydro projects; developers/investors perspective – R. Kalra, Andritz Hydro, India
- ▶ A feasibility study of archimedes screw application for electricity generation from micro hydropower in Thailand – N. Assanee, J. Hirunlabh ad J. Jansuwan, King Mongkut's University of Technology, Thailand; J. Khedari, Rattanakosin University of Technology, Thailand
- ▶ Planning and design of diversion and intake arrangement for Asiganga-II SHP – D. Das, Indian Institute of Technology Roorkee, India; G.P.S. Bhati, Consultant, India
- ▶ Lao PDR; small hydropower promotion and project sites offered to developers/investors – E. Baardsen, ADB, Vietnam, C. Boungnong, Ministry of Energy and Mines, Lao PDR, A. W. Andersen, GHD, Lao PDR, and C. French, GHD, Australia

Session 8: Climate and Flood

Chairman: Prof L. Berga, Honorary President, of ICOLD, Spain

- ▶ KEYNOTE: Adaptive management for climate change impacts in the Chinese water sector – Prof Jun Xia, President IWRA
- ▶ KEYNOTE: Flood management and climate change – Prof L. Berga, Hon President, ICOLD and UPC, Barcelona, Spain

► Climate change, forests and water security in Sri Lanka – Implications for national hydropower requirements – K. Aithukoral, *NetWater, Sri Lanka*; C. Navaratne, *University of Ruhuna, Sri Lanka*

► Reducing the impacts of flooding in downstream area of the Ubon Ratana dam in 2010 – A. Meethom, *EGAT, Thailand*

► Floods in Bangladesh: possible causes, solutions and hydropower development – Dr Md Abdullah Al Mamun, *Ministry of Local Government, rural development and cooperatives, Government of Bangladesh*

► Sustainable flood management: a framework for Bangladesh – R. Debnath, *Bestway Group, Bangladesh*

► Environmental concerns in integrated flood management – H. Ozguler, *General Directorate of State Hydraulic Works (DS), Turkey*

► Optimization of multi-reservoir system operation under climate change – M. Gocht and G. Meon, *Techni University of Braunschweig, Germany*

► Interim results of the first flood early warning system in Suriname – S. Naipal, S. Wongsoredjo and E. Naipal, *The Anton de Kom University, Suriname*

► Climatic changes and trends in runoff data over a major river basin in India - a case study – K.C. Patra, G. Sau and K.K. Khatua, *National Institute of Technology, India*

► 2010 International training programme on the management of flood control and disaster mitigation – Zhu Yao, Guo Jun, Chai Jindong, Guo Chongshan, *China Institute of Water Resources and Hydropower Research, IWHR, China*

Session 9: Civil Engineering – Materials and construction

Chairman: Dr Malcolm Dunstan, MD&A, UK

► KEYNOTE: The construction of large RCC dams in Asia – Dr M. Dunstan, *MD&A, UK*

► Design and construction aspects of the upper Paunglaung RCC dam – U Myint Zaw, *Ministry of Electric Power No 1, Myanmar*; U Zaw Min San, *Myanmar*; C. Rohrer, *AF-Consult Switzerland Ltd*

► Selecting appropriate construction equipment – M. Conrad and D. Morris, *AF-Consult, Switzerland*

► Concrete cooling at large dams in Asia – P. Kulczycki, *KTI-Plersch-Kältetechnik, Germany*

► Making concrete of 8° C under extreme ambient temperatures - R. van Popering, *NR Koeling, The Netherlands*

► Recent geomembrane projects on new RCC dams – A. Scuero and G. Vaschetti, *Carpi Tech S.A., Switzerland*

► Koldam hydro-electric project – selection of materials for earth and rockfill dam – R. C. Senan, M. Aggarwal and A. Nayak, *NTPC Ltd, India*

► The rubber sheet development for maintenance improvement of rubber dam – Phil Shik Kim, Hyung Joong Kwon, Jae Hyouk Lee, Bum Jun Choi and Hyun Jun Park, *Yooil Engineering, South Korea*

► A new patented system for effective concrete placement at large dams - F. Furlani, *Sinmem SpA, Italy*; and A. Cantin, *Agudio SpA, Italy*

Session 10: Environmental Aspects

Chair: Dr Cecilia Tortajada, Vice President, Third World Centre for Water Management, Mexico

► Ensuring benefits from hydropower development without compromising environmental sustainability – the role of river basin organizations in Asia – S. Schmeier, *German Technical Cooperation (GIZ)'s Mekong River Commission (MRC)-GIZ Cooperation Programme, Lao PDR and S. Krohn, MRC Initiative on Sustainable Hydropower, Germany*

► Assessment of flow changes for operation of 41 dams in the Sre Kong, Se San and Sre Pok rivers of the Mekong basin – T. Pima and T.A. Cochrane, *University of Canterbury, New Zealand*

► Discussion on identification of important ecologically sensitive areas in Changjiang river basin – Hongqing Li, *Changjiang Water Resources Protection Institute, P.R. China*

► Enhancing fish passage through turbine design – J. M. Foust and S. Coulson, *Voith Hydro, Inc., USA*

► Life cycle assessment (LCA) models: a tool to analyse and optimize the low carbon footprint of hydro – J. Schaal, K. Krüger, B. Fischer-Aupperle *Voith Hydro Holding GmbH & Co. KG., Germany*

► International standards for sustainable dam development in China, India, Cambodia and Turkey – W. Scheumann, N. Choudhury and O. Hensengerth, *German Development Institute, Germany*

TUESDAY 27 MARCH - Afternoon

Session 11: Panel Discussion on Carbon Finance

Chair: Dr Lu Xuedu, Advisor to the Asian Development Bank

Experts on carbon finance representing buyers, project owners, consultants and others will present an overview of the status of carbon financing in Asia. Discussions topics:

► The application of carbon financing for hydropower, using income from carbon credits (CER) as well as voluntary offsets (VER).

► CDM development (from small to large scale projects) including CDM, bundled CDM and programmatic CDM approaches; understanding of additionality.

► The role of international institutions (World Bank, ADB, etc), national governments, project developers and buyers; lessons learnt in Asia (hydropower case studies).

► The future role of carbon finance in reaching climate mitigation, energy and water security and poverty reduction in Asia. What are NAMAs? Sectoral approaches.

Session 12: Social Issues

► KEYNOTE: Stakeholder involvement in decision making – Dr C. Tortajada, *Vice President, Third World Centre for Water Management, Mexico*

► Lessons learned from monitoring of health impacts in resettled communities – J. Pereira, *Theun Hinboun Power Company, Lao PDR*

► Prudent planning and benefit sharing - An experience of a mega project in Nepal – D.B. Singh, *Consultant, Nepal*; A. Singh, *Women Environment Group, Nepal*

► Lessons learnt from the Theun-Hinboun expansion resettlement – S. Sparkes, *Statkraft, Norway*

► Strategic communications for a hydropower project – R. Stearnes, *Tacoma Public Utilities, USA*

► Urbanization and the social impact on water resources in India – J. Mohr, K. Baier, R. Azzam and R. Jha, *RWTH Aachen University, Germany*

Session 13: Civil engineering - Safety

Chairman: Dr Andy Hughes, Atkins Water, UK

► Improved pre-stressing and monitoring concept for hydro tunnels in rock – H. Krenn, *Züblin Spezialtiefbau Ges.m.b.H, Austria*; H. Wannenmacher, *Amberg Engineering AG, Switzerland*; N. Komma, *Strabag AG, Austria*

► State of the art in structural geodetic monitoring solutions for hydro power dams – J.V. Cranenbroeck, *Geomos AG, Switzerland*

► An engineering-geological survey for the Bawanur dam in Kurdistan – V. Cerný, J. Fousek, O. Horský and P. Bláha, *Geotest a.s., Czech Rep*

► Earthquake design of a gated spillway using the 3D finite element method - case study at Theun Hinboun expansion project (THXP) – J.-C. Girard, M. Demirdache, P. Porcelli and C. Babini, *Tractebel Engineering, France*

► Learning from accidents and failures: the Case of Situ Gintung dam (Indonesia) – A. Firman and I. Kasiro, *Ministry of Public Works, Government of Indonesia*

► Dam operation and maintenance in Iran – S. Mahmoudi, *Ministry of Energy, Iran*

► Dam safety in Vietnam – Dao The Hung, Le Quang Huy, *PECC1, Vietnam*; M. Conrad and D. Morris, *AF-Consult, Switzerland*

Session 14: Refurbishment

Chairman: B. Leyland, Consultant, New Zealand

► Refurbishment of Ambuklao and Binga hydro power dams and appurtenant works – J.O. Grimston, *Tonkin & Taylor (Phils) Inc, New Zealand*

► Refurbishment and maintenance of Djuanda HEPP on adaption for environmental impact – H. Idrus and H. Zulkarnain *Jasa Tirta II Public Corporation, Indonesia*

► Powerhouse upgrade to enhance safety – A. Canning, *Entura, Australia*

► Case study on K-Water Hapcheon hydro power station – Koh San Yong, *GE Energy, Singapore*

► Improving Sultan Mahmud hydropower plant (SMPP), Kenya via real time optimization – A.B. Othman, *TNB Research Sdn. Bhd, Malaysia*; Md. Yuzeiry and Md. Yasin, *Sultan Mahmud hydro power plant (SMHPP), Malaysia*

► Problems of the Angat hydro-engineering structure – P. Bláha, *Geotest a.s. Czech Rep*; B. Skácel, *CREA, Czech Rep*

Session 15: Renewable Energy and Rural Development

Chairman: I. Araki, Nippon Koei Co Ltd, Japan

► Study on rural electrification master plan in Lao PDR – I. Araki, *Nippon Koei Co., Ltd., Japan*; A. Phongsavath, *Ministry of Energy and Mines, Lao PDR*

► A study on commercializing photovoltaic floating plants to be used on the surfaces of multi-purpose dam reservoirs – Han Hoyeon, Lee Sehyeon, Lee Hyoungmook, Choi Hyeoncheol and Im Donghyun, *K-Water, Korea*

► Wind power development and prospective growth in India – K.C.Dhimole, *Formerly C-WET, India*

► Transmission network reinforcement for wind power absorption in Ambewela, Sri Lanka – M. T. A. P. Wickramaratna, *Ceylon Electricity Board, Sri Lanka*

Closing Plenary Session

► KEYNOTE: Engineers - Ambassadors to dam engineering or their own worst enemies? – Dr A. Hughes, *Atkins Water, UK*

► Conference Conclusions and recommendations

ASIA 2012 Conference Dinner in the garden of the Oriental Hotel

ACCOMPANYING PERSONS' PROGRAMME

MONDAY 26 MARCH

Departure from the Shangri-La hotel will be at 09.00 hrs. The first visit will be to the Wat Pra Singh, in the centre of the city. This large 'jedee' was built in 1345 by King Pha Yu, to house the remains of his father King Kam Fu. A typical scripture repository can be seen in the temple; these repositories were designed to house and protect the delicate 'sa' or mulberry paper sheets used by monks and scribes to keep records and to document folklore customs.

The walls of the chapel are decorated with murals depicting Lanna customs, costumes and scenes from daily life. The Lai Kam chapel houses an image of the revered Phra Singh Budda.

A traditional 'merit making session' will take place during the group's visit, whereby offerings are given to the monks, who then pray for the visitors' good luck, and sprinkle holy water.

The next stop will be the Warorot Flower Market, where there will be an opportunity to view local lifestyle as well as the exotic plants and flowers of the region.

Lunch will be at the Whole Earth Restaurant, which has a pleasant balcony overlooking the garden. This restaurant specialises in Thai, Indian and vegetarian food.

After lunch there will be a chance to visit the fascinating Chiang Mai museum, which is the main regional museum for the north of the country. The Fine Arts Department of the Government has nominated this museum as the Centre for Education and Preservation of Art and Culture of Chiang Mai, and the old Lanna Kingdom. There will be a guided tour through the Thai style building, with a Lanna rooftop, and a picturesque central courtyard.

The return to the Shangri-La hotel will be by around 15.00 hours, allowing time for shopping, relaxation by the pool, or a traditional massage at one of the luxurious hotel spas.

TUESDAY 27 MARCH

Departure from the Shangri-La hotel will be at 09.00 hrs. The group will travel by luxury coach to the Mae Sa Elephant Camp (about 45 mins from the city).

On arrival at the camp, there will be a chance to see the elephants being trained, and to witness their logging skills. There will also be an opportunity to feed bananas to the elephants, providing a chance to view them closely. For those who wish to have the experience of an elephant safari, there will be a trek riding on these gentle animals through an area of jungle.

The group will then travel on by coach to the Baan Toang Luang Tribal Village, for a barbecue lunch. The Village is a government-protected area for families from a variety of hill tribes. They make a living by producing various handicrafts.

After leaving the village, the group will make a stop at an orchid farm, and the last stop will be at the San Kamphang Handicraft Village, where there are various establishments providing fine examples of cotton items, silverware, and silk umbrellas.

Return to the Shangri-La hotel will be at around 17.50 hours, in good time for the conference dinner.

Accompanying persons may book the above trips as an inclusive package, and are also welcome to both evening social events (a welcome reception in a roof garden overlooking the city, and a conference dinner, in elegant surroundings, with music and a cultural show).

The booking form is at the back of this brochure.



STUDY TOURS

TOUR A - LAOS (optional farewell dinner and overnight stay in Bangkok)

Four-day tour: Theun Hinboun Expansion and Nam Theun 2, Laos; Optional extra night in Bangkok

The itinerary below sets out the intended programme but could be subject to minor changes. On Wednesday 28 March delegates will fly to Vientiane, Laos, via Bangkok. There will be a short time for sightseeing or to relax in the afternoon, before dinner at the Kualao restaurant with traditional music and dancing.

After breakfast on Thursday 29 March, the group will proceed to the Theun Hinboun Expansion project, stopping first at a view point, and then proceeding for a briefing followed by lunch. The Expansion involves upgrading a 210 MW run-of-river scheme, completed in 1998, to 500 MW, with the construction of a 70 m-high dam and reservoir on the Gnouang river. A 230 MW upgrade is in progress at the existing plant as well as a new 60 MW powerhouse. There will be a chance to visit the site, and also the Sankham resettlement village, where the school, clinic, and other facilities can be visited. Dinner and the overnight stay will be in Lakxao.

The group will depart after breakfast on 30 March from Lakxao towards the Nam Theun 2 dam on the Nakai plateau, with a visit to the Thalang resettlement village en route. Around midday lunch will be in the wooden guesthouse at Nakai. After lunch there will be a briefing on the environmental and social aspects of the scheme and a chance to walk around the Boua Ma resettlement village. In the afternoon, delegates will have opportunities to visit the 1070 MW NT2 powerhouse, and the visitor centre, before travelling on to Thakek for dinner and an overnight stay. The hotel offers a view across the Mekong river into Thailand.

On 31 March the group will cross the Mekong via the Friendship bridge, and take the morning flight from Nakom Phanom to Bangkok.

The group will have the option to transfer to the Montien Riverside Hotel for dinner, and an overnight stay; there would be a supplementary charge of US\$150 for this.

NB: The trip includes substantial overland travel in Laos, and accommodation in Lakxao will be of a simple, basic standard!

TOUR B - NORTHERN THAILAND + BANGKOK

Two days: Mini hydro at a multipurpose scheme; resort and sightseeing

On the morning of Wednesday 28 March, participants will travel to the Mae Ngat mini hydro plant, about one hour from Chiang Mai, which has been built on the river outlet of a medium-sized irrigation storage dam.

Releases are made for dry season irrigation demands only. Therefore, the flow variation (1 to 26 m³/s) and gross head variations (16 to 50 m) are substantial. The station is equipped with two 4500 kW vertical Kaplan units. Two 100 kW micro hydro plants were installed last year at the release channel as a micro hydro demonstration scheme.

Lunch will be taken at a restaurant overlooking the Mae Ngat reservoir, not far from the dam. Dinner and the overnight stay will be at the 5* Rawee Waree Resort and Spa, a luxurious boutique resort, set in a tropical garden.

On 29 March, before the return drive to Chiang Mai, there will be a chance to visit an elephant training camp, and a hill tribe handicraft village (an area conserved for families from various ethnic groups) where there will be a barbecue lunch. The group will pass through scenic areas in Mae Rim and Samoeng Districts, on the return to Chiang Mai.

The group will take an afternoon flight to Bangkok, for the final part of the trip, which will be dinner by the Chao Praya river, and an overnight stay at the 5* Montien Riverside hotel; (the venue for ASIA 2006). The following day a sightseeing trip will be arranged in the city, and there will be plenty of opportunities for shopping or relaxation.

Delegates wishing to stay longer in Bangkok may take advantage of preferential rates.



OFFICIAL CARRIER



Thai Airways International will be the official carrier for ASIA 2012. Discounts will be available on a wide range of fares between 19 March and 16 April, for passengers travelling to Chiang Mai in Economy or Business class. Thai Airways is offering the best net fares on TG operating flights for participants attending ASIA 2012.

To locate the nearest Thai Airways sales point, please go to our website: <http://www.hydropower-dams.com/pdfs/reservation.pdf>

The following reference code should be quoted when making a booking: **TG1203016**

POST-CONFERENCE OPTION: PK WEIR IN VIETNAM

For those interested in PK Weirs, the Vietnamese National Committee on Large Dams offers the possibility to make a trip to Vietnam, after ASIA 2012, to learn about Vietnamese research and development in this field, and to visit the Van Phong dam, which is under construction with a PKW.

This field trip will be especially interesting for those taking part in the Workshop session on PK Weirs during the ASIA 2012 Conference.

Delegates would travel to Hanoi on 28 March, continue on the following day by air to Quy Nhon province, for a briefing and the dam visit, and then return to Hanoi by the morning of 30 March. The trip is provisionally offered, subject to minimum numbers.

Those wishing to take part should indicate their interest on the registration form, and details will be passed on to VNCOLD.



AMI HYDROPOWER FOUNDATION

The AMI Hydropower Foundation was created in 2007 as a means to promote the scientific, technical and socio-economic aspects of hydropower, and the responsible use of water resources. It is governed by an international board of Trustees. The principal function is to facilitate delegates (water and energy professionals) from the less developed countries to attend the annual international hydro conferences organized by Aqua-Media, which are acknowledged as valuable international gatherings of hydropower experts. The Foundation recognizes that major hydro potential exists in the less developed countries and it is essential that representatives of these countries are able to interact with the international hydropower community, to keep up to date with the state of the art in technology, safety, planning tools, financing models, and environmental/social aspects. Delegates who, in the opinion of the Trustees, are likely to gain valuable knowledge and experience to take back to their home countries, and who have some influence in their countries' hydro/water resources development, are considered for sponsorship.

If you would be interested in donating to the Foundation, to enable colleagues in the less developed countries to join the conferences, you can do so on the registration form in this brochure (below registration fees), or contact: amihf@hydropower-dams.com

ASIA 2012 SPONSORS AND SUPPORTERS

We gratefully acknowledge the support of the following organizations who have sponsored an item or activity for ASIA 2012. As this brochure went to press, some opportunities were still available for sponsorship. Please contact our sales team for more details (sales@hydropower-dams.com).



TECHNICAL EXHIBITION

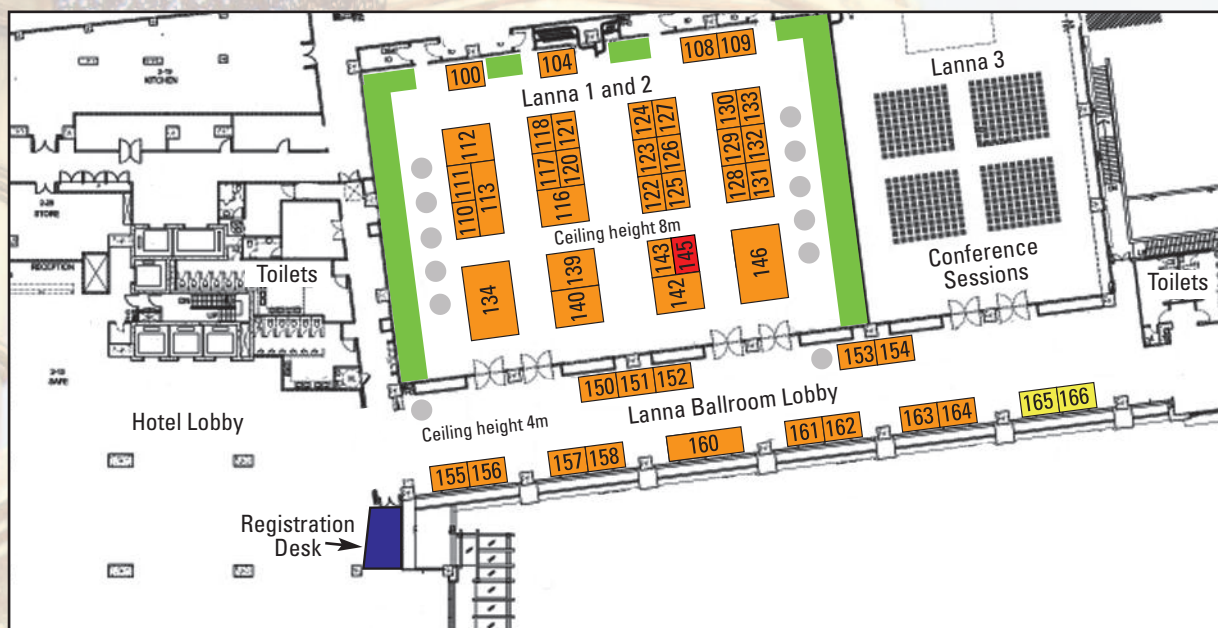
A major Technical Exhibition will take place alongside the ASIA 2012 Conference, at which international consultants, developers, contractors and suppliers will showcase their expertise in the fields of water infrastructure, hydropower equipment, renewable energy systems, monitoring devices, planning software, powerplant components and many other things. The leading professional associations in the field of water and energy will also display information about their initiatives and current activities.

Exhibition space is generally sold in units of 6 m² (with some larger and smaller units available this year) and includes white panelling, a table, two chairs, spotlights, flooring and a company name sign. The price for one stand (6 m²) is US\$3200.

Lunch and refreshments will be served each day in the Exhibition Halls, to ensure that international participants have plenty of time to visit the exhibitors. Various opportunities will also be available to sponsor or co-sponsor social activities, such as apéritifs, lunches, receptions and coffee breaks. This can be a pleasant and memorable way of bringing your organization to the attention of the international participants.

Exhibition stands are selling fast, but some good positions still remain, close to three of the four conference meeting rooms, and to the business centre. Don't miss the opportunity to be seen at the most important regional water and energy event for the Asia region.

Ground Floor



Lower Level





TECHNICAL EXHIBITION

STANDS BOOKED BY FEBRUARY 2012

THE INTERNATIONAL JOURNAL ON HYDROPOWER & DAMS

AF Consult, Switzerland	www.afconsult.com	118
Agudio SpA, Italy	www.agudio.com	112
Alstom Hydro, Malaysia	www.power.alstom.com/hydro	140
Andritz Hydro, Austria	www.andritz.com	146
ATB Riva Calzoni SpA, Italy	www.atbrivacalzoni.com	163
Aurecon, Australia	www.aurecongroup.com	224
BK Vibro, Austria	www.bkvibro.com	128
Carpì, Switzerland	www.carpitech.com	131
CNC-Tvar, Czech Republic	www.cncivar.cz	123
Department of Water Resources, Thailand	www.dwr.go.th	228
Durham Geo Slope Indicator, USA	www.slopeindicator.com	129
Entura Hydro Tasmania	www.entura.com.au	230
General Mechanical Works Pvt. Ltd, India	www.gmw.in	154
Geokon, USA	www.geokon.com	110
Gilbert Gilkes & Gordon Ltd, UK	www.gilkes.com	109
Hobas Engineering GmbH, Austria	www.hobas.com	113
Hubei Hongcheng General Machinery Co, Ltd	www.hbhc.com.cn	155
Hydro Engineering, Romania	www.hydrom.com	117
ITM Soil, UK	www.itmsoil.com	152
Jacon, Australia	www.jacon.com.au	139
J.P. Sauer & Sohn Maschinenbau GmbH	www.sauercompressors.com	111
Kinematics, Inc., USA	www.kinematics.com	125
KTI-Plersch Kältetechnik GmbH, Germany	www.kti-plersch.com	161
Liebherr, Thailand	www.liebherr.com	160
Manitowoc, USA	www.manitowoc.com	143
Minova International	www.minovainternational.com	150
Mott MacDonald, UK	www.power.mottmac.com	126
National Electric Coil, USA	www.national-electric-coil.com	121
N.R. Koeling BV, Netherlands	www.nrkoeling.nl	153
PAHM, Germany/Thailand	www.pahm.com	139
Pöyry Energy, Thailand	www.poyry.com	116
Prolinx Asia, Singapore	www.singnet.com.sg	139
Putzmeister, USA	www.putzmeister.com	151
Rainpower, Norway	www.rainpower.com	156
RCC Conveyors, USA	www.rccc-usa.com	139
Rittmeyer, Switzerland	www.rittmeyer.com	122
Roctest Ltd, Canada	www.roctest.com	120
RST Instruments Ltd, Canada	www.rstinstruments.com	132
Salini Costruttori S.p.A, Italy	www.salini.it	142
SBS, Singapore	www.sbs-bearings.com.sg	158
Sika Ltd, Thailand	www.sika.co.th	164
Simem, Italy	www.simem.com	112
Sisgeo, Italy	www.sisgeointernational.com	100
SMEC, Australia	www.smec.com	104
SNC-Lavalin Power (Malaysia) Sdn Bhd	www.snclavalin.com	108
Stahlhandel Gröditz GmbH	www.stahlportal.com	124
TES Vsetín, Czech Republic	www.tes.cz	133
Tractebel, Thailand	www.gdfsuez.com	127
Worthington Products Inc, USA	www.tuffboom.com	162
VAPHydro, Bulgaria	www.vaphydro.bg	130
Voith, China	www.voith.com	134
Yooil Rubberdam Engineering Co Ltd Korea	www.rubberdam.co.kr	157

To receive further details of the exhibition and/or sponsorship opportunities, please contact:

Mr Lukas Port or Mrs Maria Loreda
Tel: + 44 20 8773 7251/7252
Email: sales@hydropower-dams.com



Fourth International Conference on Water Resources + Renewable Energy Development in Asia

BOOKING CONDITIONS

The Conference **Water Resources and Renewable Energy Development in Asia (ASIA 2012)** is being organized by *The International Journal on Hydropower & Dams* (Aqua-Media International Ltd) with event management by SureFire Events, UK.

On-line Registration

You can register on-line via the *Hydropower & Dams* website at:

www.hydropower-dams.com.

Registrations will be handled by SureFire Events. This is a secure server website. You may receive an acknowledgement of registration on completion of this process; however, this is not a confirmation.

Registration by post or fax

Complete the registration form and return it, with payment, to the Conference Secretariat. Please complete one registration form per delegate, including any accompanying persons.

Please photocopy the form if you need further copies, or download a form from:

www.hydropower-dams.com

The total fees for Conference registration, accompanying persons' programme, accommodation deposit, cultural excursion and/or study tour (if applicable) should be calculated and totalled in the 'Total US\$' column on the second page of the registration form.

Collection of badge and documents

This will begin at 09.00 hrs on Sunday 25 March 2012, on the ground floor (lobby) level of the Shangri-La hotel.

Payment

Payment for all services (fees, hotel deposit, tours) must be made in US dollars (\$) and received in advance of the Conference. Payment is possible by the following methods:

- On line by Visa or MasterCard
- By bank transfer to SureFire Events (see details on the registration form).

All fees paid by credit card will be charged in US\$.

Accommodation

The Conference organizers have secured rooms at a wide range of hotels in various price categories in Chiang Mai. Rooms will be offered on a first-come-first-served basis. You are advised to reserve your room well in advance, as availability cannot be guaranteed.

Please complete the accommodation section of the registration form, and return it to the Conference Secretariat (SureFire Events). Full payment will be required to secure your accommodation booking. All hotel room extra charges must be settled in full directly with the hotel prior to departure. SureFire Events will endeavour to meet all accommodation requests. However, should your preferred hotel be full, SureFire Events reserves the right to make your reservation at the nearest available alternative.

Disclaimer

All best endeavours will be made to present the programme as printed. The ASIA 2012 organizers and their agents reserve the right to alter or cancel, without prior notice, any arrangements, timetable, plans or other items relating directly or indirectly to ASIA 2012 for any cause beyond its reasonable control. The organizers and agents are not liable for any loss or inconvenience resulting from such alteration. The Conference and Tours are subject to minimum numbers. Tour places are subject to availability on a first-come-first-served basis. Full payment for tours must be received at the time of registration.

Cancellations

Cancellations must be made in writing to SureFire Events. Cancellation charges will be payable as shown in the Table below. Substitution of delegates after a reservation has been made is acceptable before the Conference, and no extra fee is payable. Any necessary refunds (see Table below) will be made after the Conference.

Liability/Insurance

The registration fees do not include the insurance of participants against personal accidents, sickness, cancellations by any party, theft, loss or damage to personal possessions. The organizers accept no responsibility for death, injury, loss or accident, delay arising from any act or default of any person, or any other matter arising in connection with Conference services or transport. The organizers make no warranty in this connection. All services provided are subject to local laws. Arrangements for the Conference have been made in accordance with UK Law.

Delegates, exhibitors and tour participants are strongly advised to take out adequate personal insurance to cover risks associated with travel, accommodation, cancellation and theft or damage to personal belongings.

The organizers reserve the right to amend any part of the Conference programme or arrangements if necessary. In the very unlikely event that it is necessary to cancel any of the Conference arrangements, an appropriate refund will be made and thereafter the liability of the organizers will cease.

Passport and Visa Requirements for Thailand

It is the responsibility of all participants to check their own passport and visa requirements. Please contact the Thai Embassy or consulate in your country if in doubt about requirements.

Letters of invitation

If you require a letter of invitation from the organizers to facilitate your visa application, please let us know at the time of registering. A letter can be issued to assist with obtaining a visa, but this does not imply an invitation to the Conference without payment of registration fees, unless such arrangements have been made with the organizers. If you need a letter from the host country, as well as the organizers, please notify us as soon as possible. Please allow plenty of time for visa applications.

Date cancellation received	On or before 26 February 2012	From 27 February 2012	On or after 10 March 2012
Registration (Conference/Exhibition)	10% of fee is forfeited	50% of fee is forfeited	No refund
Technical excursions	10% of fee is forfeited	No refund unless place can be resold	No refund
Accommodation	10% of fee is forfeited	50% of fee is forfeited	No refund

A reduced registration fee is available for current subscribers to *Hydropower & Dams*

CONTACT DETAILS

For enquiries concerning registration and accommodation, contact:

SureFire Events, Unit 8, Hinton Business Park, Tarrant Hinton, Blandford DT11 8JF, UK

Tel: +44 (0)1258 447 040 • Fax: + 44 (0)700 349 7034 • Email: asia2012@surefire-events.com

NB: Registration forms and payment should be sent to SureFire Events, UK.

On-line registration via: www.hydropower-dams.com

For further details of the programme, please contact:

Mrs Margaret Bourke at:

Hydropower & Dams, PO Box 285, Wallington, Sutton, Surrey SM6 6AN, UK.

Tel: + 44 (0)20 8773 7244 Fax: + 44 (0)20 8773 7255 Email: asia2012@hydropower-dams.com

Website: www.hydropower-dams.com

Water Resources and Renewable Energy Development in Asia - IV

Shangri-La Hotel, Chiang Mai, Thailand; 26-27 March 2012

REGISTRATION FORM

(Deadline for early booking discount: 26 February 2012)

This registration form is a self-billing order form, which should be sent to SureFire Events, UK, with payment for all items booked on the form. By completing this form you are agreeing to the Booking Conditions within this brochure. Fees are payable in US Dollars (US\$). Each Conference/Exhibition participant should complete a separate form.

PLEASE COMPLETE THE FORM IN CAPITAL LETTERS, AND **EMAIL A PORTRAIT PHOTO (JPEG FORMAT)** TO BE USED ON A PHOTOBOARD AT THE CONFERENCE

Title (Mr/Ms/Mrs/Dr/Prof/etc):	Given name:	Family name: (surname)	
Name as it should appear on your badge/in correspondence: ie, Mr John BROWN or Mr Li Jishang			
Job title within organization:			
Organization:			
Organization's postal address (inc. post code and country):			
Tel (inc. country code):		Fax (inc. country code):	
Mob/Cell (for use by organizers only):			
Email address:		Web site:	
Data Protection: I do not wish my email address to be passed to any third party <input type="checkbox"/> I do not wish any contact details to be passed to a third party <input type="checkbox"/>			
FEES	Up to 26 Feb 2012	From 27 Feb 2012	Total US\$
FULL DELEGATE FEE: Includes attendance of the Conference and Exhibition; documentation and CD of papers; morning and afternoon refreshments; lunches during the Conference; social programme.	US\$ 995	US\$ 1100	
H&D SUBSCRIBER DELEGATE FEE: For subscribers to <i>Hydropower & Dams</i> H&D Subscription No:	US\$ 900	US\$ 1100	
DELEGATE FEE WITH NEW SUBSCRIPTION TO H&D (reduced registration fee + 6 issues of H&D + World Atlas & Industry Guide + Maps)	US\$ 1140	US\$ 1340	
SPEAKER FEE: Includes all facilities described above for Full Delegates, plus an additional reception on Sunday 25 March. NB: This fee applies to <u>one</u> person per paper (main author or presenter)	US\$ 550	US\$ 575	
FIRST EXHIBITOR FEE: (One full participant fee is included with exhibition booking) Stand No:	Free of charge		
SECOND (+ THIRD) EXHIBITOR FEE: (Covers attendance of Conference sessions, CD of Conference papers, evening social programme and lunches) Stand No:	US\$ 750		
ACCOMPANYING PERSON FEE: (For family members or friends not attending the Conference) The fee includes activities/excursions during both days, with lunch (see programme), and the evening social events. NB: Accompanying persons who do not register by completing this section are <u>not</u> eligible to attend lunches or social events. Name to appear on badge (inc. title Mrs/Miss/Mr/Dr/etc):	US\$ 350		
EXCURSION TO TEMPLES WITH RIVERSIDE LUNCH: (Sunday 25 March) Visit to Wat Jedee Luang and Doi Suthep; lunch at the Gallery Restaurant. I wish to book seats at US\$ 90 per person			US\$
DIETARY REQUIREMENTS Participant : Vegetarian meals required <input type="checkbox"/> Other dietary requirements / special needs Accompanying Person: Vegetarian meals required <input type="checkbox"/> Other dietary requirements / special needs			
OPTIONAL DONATION TO THE AMI HYDROPOWER FOUNDATION This is a charitable foundation, set up by Aqua-Media and governed by international trustees, which exists to facilitate the participation of delegates from the less developed countries to attend the hydro conferences. (More details can be found at: www.hydropower-dams.com). Suggested minimum donation: US\$ 25			US\$
PLEASE TOTAL THE COSTS ON THIS PAGE AND CARRY THEM OVER TO THE SECOND PAGE			

SUB-TOTAL OF FEES CARRIED OVER FROM PREVIOUS PAGE

US\$

ACCOMMODATION (Please refer to Booking Conditions)

The Conference sessions, Exhibition, Speakers' reception and side events will be held at the Shangri-La hotel. The Shangri-La is a luxury 5* hotel, set in pleasant gardens, with a pool, spa and international restaurant.

Hotel rooms have also been reserved at three selected hotels nearby. The Meridien is a business hotel, about 10 minutes walk from Shangri-La.

The Empress is adjacent to Shangri-La about 5 minutes walk away. The Imperial Mae Ping is about 10-15 minutes' walk away.

SOLE USE BEDROOM WITH PRIVATE BATHROOM

(includes taxes and breakfast)

- ☐ 5* Shangri-La (Premier) **US\$ 205 per night**
- ☐ 5* Shangri-La (De Luxe) **US\$ 145 per night**
- ☐ 5* Meridien (De Luxe) **US\$ 132 per night**
- ☐ 4* Imperial Mae Ping (De Luxe) **US\$ 60 per night**
- ☐ 3-4* Empress (Superior) **US\$ 60 per night**

TWIN OR DOUBLE ROOM WITH PRIVATE BATHROOM

(includes taxes and breakfasts for two people)

- ☐ 5* Shangri-La (Premier) **US\$ 220 per night**
- ☐ 5* Shangri-La (De Luxe) **US\$ 160 per night**
- ☐ 5* Meridien (De Luxe) **US\$ 145 per night**
- ☐ 4* Imperial Mae Ping (De Luxe) **US\$ 70 per night**
- ☐ 3-4* Empress (Superior) **US\$ 70 per night**

Preference: ☐ Twin ☐ Double (cannot be guaranteed)

Check-in date: March 2012

Check-out date: March 2012

Total number of nights:

Special requests (eg, non-smoking room):

Twin occupancy: Name of partner

(If you wish to share a room with another delegate, then you must both request the arrangement, and both send registration forms to SureFire Events at the same time. Only one person should make the payment for the hotel.)

TECHNICAL TOURS See details of itineraries in this brochure. Prices include all transportation (inc. air fares), meals, guides, entrance fees during sightseeing trips, and accommodation (Tour A: simple accommodation in Lakxao 3* Tour B: 5* spa hotel). Both tours start in Chiang Mai and end in Bangkok.

US\$

Homeward flight details: Date: Flight No: Depart time: From to:

Tour A - Laos (4 days) A visit to the Theun Hinboun Expansion scheme, and Nam Theun 2 hydro plant and resettlement villages.

Emphasis will be on social and environmental aspects at both projects. Theun Hinboun is a major upgrade, with interesting technical features, currently under construction.

..... Single room US\$ 1250 per person (total tour cost) Sharing twin room US\$ 1180 per person (total tour cost)

Tour B - Northern Thailand (3 days) A short journey to the Mae Ngat mini hydro scheme, which has been constructed at the outlet of an irrigation reservoir.

Day 2: The group fly to Bangkok and transfer to the Montien Riverside Hotel for an overnight stay (includes evening river dinner cruise and sightseeing tour the following morning).

..... Single room US\$ 575 per person (total tour cost inc. flights) Sharing twin room US\$ 525 per person

An additional post-Conference trip may be offered by the Vietnamese National Committee on Large dams, to visit a PK Weir in Vietnam, including a briefing on Vietnamese research in this field. The trip is subject to minimum numbers. Please tick the box here if you would be interested in participating, and we will pass details to VNCOLD. ☐

PASSPORT DETAILS (necessary if you wish to have a letter to support a visa application or if you are taking Tour A to Laos)

(Delegate) Full name as in your passport: Passport No:

Date of issue: Place of issue: Expiry Date: Nationality:

(Acc person) Full name as in the passport: Passport No:

Date of issue: Place of issue: Expiry Date: Nationality:

TOTAL PAYMENT FOR REGISTRATION, HOTEL AND EXCURSIONS (include total from first page)

US\$

(Please ensure that this box is completed, so that your registration can be confirmed)

Please quote your company VAT / Mwst / TVA / ALV / IVA / BTW / MOMS number:

SOCIAL EVENTS (Included in the registration fee and only available for registered participants)

I/we will attend (please tick boxes as applicable):

Participant Accompanying Person

Monday 26 March - Welcome Reception on the Roof Terrace of the Empress Hotel

Yes ☐ No ☐ Yes ☐ No ☐

Tuesday 27 March - Conference Dinner in the garden of the Oriental Hotel, Chiang Mai

Yes ☐ No ☐ Yes ☐ No ☐**PAYMENT**

Payment is possible by the following methods:

- Bank transfer (the preferred method) to: Surefire Events Ltd., Barclays Bank, Blandford, Dorset, UK
 - Sort Code: 20-96-96 • Account: 76359966 • IBAN number: GB86BARC20969676359966 • SWIFT: BARCGB22
 - For on-line bookings, payment will be taken by Barclaycard from your debit or credit card. All on-line fees will be taken in US dollars (\$).
- All credit card transactions will be with SureFire Events (this is the name which will appear on your statement)

SureFire Events, Unit 8, Hinton Business Park, Tarrant Hinton, Blandford DT11 8JF, UK

Tel: + 44 (0)1258 447040 Fax: +44 (0)700 349 7034 E-mail: asia2012@surefire-events.com

Online registration via: www.hydropower-dams.com