

# IWA News Update









# Member Newsletter

# Water. Climate and Energy

In the run-up to the COP-15

– the global community's attempt to come to terms with climate change and how to manage it – I'd like to share some personal thoughts on how we as water professionals could and perhaps should respond to global climate and energy challenges upon us.

Daniel Yergin's seminal book "The Prize", chronicled the rise and fall energy derived from fossil fuels in both political and economic terms over the previous century. One implication of Yergin's message is the old adage "expect the unexpected", which has resulted in a go-stop-go approach to investment in energy efficiency. The second message from Yergin is a reminder that in the long run, the supply of fossil-based fuels are finite, leading to a declining supply resulting in long run shortfalls and rising prices as the world's population and economies grow relative to a shrinking supply.

The latest chapter of this century long saga was played out in the 2007-2008 time period, when unprecedented energy prices took a toll on many sectors, including water. I think that the prices we saw provide a preview of what is to come, but appreciate that there are other points of view. Also unprecedented about this period was the parallel preview of the steps that will be required for mitigation of green house gas emissions by utilities. If we combine these two previews, first scarcity-induced shortage and price spikes, and second, extremely challenging mitigation obligations, a sobering if not frightening picture is emerging on the energy challenges that lie ahead for us.

If you are skeptical about the likelihood of this future, consider the case of Australia. The proposed Carbon Pollution Reduction Scheme

Legislation included fugitive emissions from the country's large wastewater treatment facilities as direct greenhouse gas producers. Along side power plants, these facilities were required to implement strict mitigation commitments. While the proposed legislation was rejected by the Senate (for other reasons) this will not be the end of the proposed scheme.

Still wondering? Consider the case of the UK, whose utilities, as Dr Mike Farrimond of UKWIR explains, were in 2009 consuming energy at an index value of 200 compared with a 1990 baseline value of 100. These increases in energy intensity follow directly from environmental legislation requiring increasingly higher levels of water and wastewater treatment. And while the EU Framework directives have yet to be factored in, pushing the index even higher. UK legislation under development will require an 80% reduction in carbon against the 1990 baseline by 2050. By any measure, this target is stunningly bold and raises the question of whether such reductions are possible without compromising health or environmental standards

Considering the factors presented above and many conversations with experts inside and outside of the IWA membership, I have come to the belief that the impact of climate change will be felt deeply by utilities. Energy will be a significant issue in terms of costs and exposure to risks in meeting aggressive standards. Against these emerging imperatives, utilities need to rise to the occasion. A more complete and perhaps revolutionary look at our water and wastewater systems, along the lines envisioned in IWA's Cities of the Future Programme, will be necessary. Energy will become a key



design imperative for networks and treatment plants alongside public health, water quality and water quantity.

I have also come to believe that the potential for positive outcomes in a time of scarce energy and high price are huge, particularly for wastewater utilities. Through adaptation of research and development outcomes, wastewater utilities can move from being net energy consumers to net energy producers. This will become possible through a combination of energy produced from wastewater, heat recovered through the wastewater collection system, and the possibility of adding additional waste stream into the digestion process. Dr Willy Verstraete of Gent University talks about the future in terms of water and waste treatment plants being transformed into "energy and nutrient producing machines".

Another positive side of the energy challenge is, that transformation of both the networks and the treatment modalities needed by utilities will create many new additional opportunities for researchers, technology producers and consultants. This transformation, properly guided by regulation, could be a significant factor in creating green technology opportunities at the national and super national levels. For example,

# **IWA News Update**

# New regional manager for East Asia & Pacific



In September 2009, the IWA East Asia & Pacific Regional Office welcomed another staff, Galant Tanson, as Regional Manager and WaterLinks Programme Coordinator.

Galant will be responsible for the coordination of WaterLinks programmes in Asia such as facilitation of water operator twinning partnerships and regional capacity building.

"The WaterLinks programme interests me in particular because it's a regional network that supports partnerships between water and wastewater operators in Asia to promote improved access to safe water and basic sanitation. It is indeed a challenging mission considering the current lack of access to clean water and basic sanitation in many areas in the region that results in public health risk and low economy productivity."

Galant graduated from the University of Surabaya - Indonesia with a Bachelor's degree in Chemical Engineering before coming to Singapore on a scholarship for a Master degree in Environmental Science and Engineering at the Nanyang Technological University (NTU) of Singapore. After graduation from NTU in 2006, he was an engineer with the Public Utilities Board of Singapore before joining IWA.

# **New IWA President-elect**

Dr Glen Daigger is the new presidentelect of IWA. Glen ran unopposed and the IWA Governing Assembly meeting ratified unanimously his election as President in September in The Hague, Netherlands.

Glen, who is recognised worldwide as an expert in wastewater treatment technologies, is the Senior Vice President and Chief Technology Officer at CH2M HILL. He has been a member of IWA for 36 years and has served most recently as Senior Vice President and as a member of the Finance and Investment Committee. Glen will serve as President-Elect for a year and will take office for a two-year term as President at the IWA World Water Congress in Montreal in September of 2010.

"I am deeply honoured to be President-Elect of the International Water Association," says Glen. "IWA is a unique international organisation that takes into account the entire water cycle, beginning with rain coming down from the sky to the point where water is returned to the environment, and everything in between."

"As an organisation of leaders, our mission is to advance the science and practice of water management in a manner that creates more liveable urban areas, accelerates the rate at which we are providing drinking water and sanitation to those who do not have them, and enhances the environment."

"Accomplishing this mission requires a partnership of researchers, leading practitioners, utility managers, technology providers, regulators, and politicians. My role as President is to help the organisation and its people to be as successful as possible in pursing this mission."



Citing IWA members as, "A wonderful group of people to work with," Glen looks forward to his term as President. At his pre-election speech, Glen said he will focus on four initiatives:

- Continuing to build strength, both in participation and financially, to allow the organisation to expand its programs.
- Expanding the "family" by including a broader range of professionals than ever before and growing the new generation of professionals.
- Reinforcing the culture of a "bottom-up" organisation in which the outstanding results and improvement of society is produced through the interests and initiative of its members.
- Daring to be great and addressing an increasingly "water constrained" global situation by helping to transform water management policies and practices to see that the needs of all citizens of the planet are met well into the future.

# Lisbon to host 2014 IWA World Water Congress – major IWA events to take place in applicant cities of Brussels, Dublin and Istanbul

Members of IWA's Governing Assembly ranked Lisbon, Portugal as first to host the biennial IWA World Water Congress and Exhibition in 2014. The IWA Board of Directors had previously nominated two venues, Lisbon and Brussels, for ranking by the Assembly.

"We were very impressed by all the applications, not only by the winning proposal. The technical excellence, appropriateness of venue facilities and the enthusiasm of all bid consortia was beyond our expectations, and indicates to us the strength of our national committees in all candidate countries," says Paul Reiter, IWA Executive Director.

"The proposal preparation process has given focus to the national IWA branches in each of the candidate countries. Also, working with the candidates has provided IWA staff a real insight into the interests of those countries and cities."

"Maintaining this momentum and recognising the enormous effort of the bidding partners, IWA is planning to stage major events in the applicant cities in the near future," Mr Reiter concludes.

# **Professor Ken Ives**

Professor Ken Ives passed away in September 2009. Ken was Executive Editor of Water Research for several years from 1984 and well known at IWA. He made a significant life time contribution to particle separation research, in particular filtration for water treatment. IWA extends condolences to Ken's family and friends.

# IWA Global Operations

International Water Association Koningin Julianaplein 2 (7th floor) 2595 AA The Hague The Netherlands

If you need to contact our office directly, please dial +31 703 150 792.

# **IWA Governing Assembly September 2009**

The Governing Assembly met in the Senate Chamber of the Dutch Parliament in Den Haag on Saturday 5th September 2009. It was welcomed by the Senator Jan Hendrik of the Dutch Senate.

In addition to the Presidential and Congress Venue election reported on elsewhere in this newsletter, the Governing Assembly was advised that:

- All conferences have been well attended and membership has been growing steadily. It was noted in particular that the increasing role of Young Water Professionals in the Association's activities is a healthy sign.
- Regionalisation is progressing well and a new office in Bucharest, Romania will be opened soon.
- IWA Operations hub was relocated within
   The Hague to a building close to the Central

Station in July 2009. This has allowed for a significant increase in floor space at a modest increase in costs.

- A company IWA Development Solutions has been established to receive donations with Theo Schmitz as Chairman to advance the Water Operator Partnerships (WOPs) and Water Safety Plans (WSPs) in developing countries.
- Treasurer Dr Mike Farrimond reported the financial status to the meeting, commenting that the IWA finances were sound. He outlined the new investment and growth strategy adopted by the Board and the safeguards associated with the plan.

The members received a presentation from three members on the development and implementation of their action plans.

Subsequently members discussed these in small breakout groups covering methods and problems



with implementing these. The members valued the exercise and the interactions that resulted.

The Annual General Meeting was held at the conclusion of the Governing Assembly meeting. The next meeting will be held in Montreal Canada in September 2010 in conjunction with the World Water Congress.

Members and guests were invited to the President's dinner held in the Parliamentary Buildings complex in a room used for the declaration of independence from Spanish rule in the 17th century. On Sunday Governing Members representatives visited Delft porcelain works and the Vermeer Museum.

# IWA to open a new hub serving Danube and Black Sea

The International Water Association (IWA) together with the Romanian Water Association has announced the opening of a new regional office to be based in Bucharest, Romania aimed at serving IWA's members and stakeholders in the region of the Danube and Black Sea. The office will be operational in November, 2009.

The office will serve as the hub for coordinating IWA's knowledge exchange and programmatic activities in the region including regional participation in IWA's Specialist Groups, scientific and specialist conferences, capacity development and training (including water operator partnerships), and furthering key IWA programs such as Water Safety Plans and Young Water Professionals.

"Our main goal is to support the maturing water sector in the Danube and Black Sea region.

IWA compliments the important and ongoing work of national associations in the region, providing water professionals with the ability to draw on leading experts from the international community and international best practices in a variety of areas. Our office in Bucharest will allow us to better provide these very important functions", said Mr Paul Reiter, IWA Executive Director.

The decision to move forward with the IWA regional office in Bucharest follows from a multi-year consultation process with regional water professionals culminating in meeting at the IWA World Water Congress in Vienna in 2008, where it was clear that the time was right.

"The sector faces some great challenges, for example, there is a need to improve utility efficiency and implement water safety plans and EU regulations. IWA provides a critically important vehicle for tapping into the international discussion and learning from peers across the globe, said Mr Vasile Ciomos, President of the Romanian Water Association.

For more information, please contact Keith Robertson at keith.robertson@iwahq.org

# 'Must see' programme at 1st IWA Development Congress, 15-19 November, Mexico



IWA has compiled a dynamic programme at the forthcoming 1st Development Congress to be held in Mexico City this November.

The focus of this event addresses solutions – not just challenges - for service delivery in low and middle income countries – in short, placing emphasis on 'what works at large scale'.

The Congress programme – now available in full at www.iwa2009mexico.org – is structured over three days on what is working in large scale service delivery, water and sanitation management, and alternative & smart solutions. The programme is built around a series of parallel technical sessions with platform presentations and practice based workshops, woven together with keynote speeches at the beginning and end of each day by leading practitioners and experts in the field.

Further information at www. iwa2009mexico.org or by contacting Darren Saywell, IWA Development Director: darren. saywell@iwahq.org

# **◄** continued from page1

the EU Water Supply and Sanitation Technology Platform is currently exploring this issue.

This brings us to a key question. As a multi-facited global industry supplying one of life's principal enabling goods, do we want to sit on the sidelines of this transformation, or alternatively, be a key player? If I look to COP-15 and the process envisioned for Copenhagen, an honest assessment is that the water interests are sitting on the sidelines in spite of water being the number one sector impacted by climate change.

Could it be different? In the view of many members and experts outside of IWA alike, the answer is yes. A start is IWA's Water, Climate and Energy program, graciously sponsored in part by MWH, who have also done some of the pioneering work on UK's energy assessment referred to above. As another part of the Water,

Climate and Energy program, a conference on Water, Climate and Energy, critical to the issues underlying COP-15 has been organized by Bo Jacobsen and Gustaf Olsson. The conference will be held in Copenhagen, 29-31 October 2009 and from the collective knowledge of the attending international experts, an input to COP-15 meeting is being developed.

This is a start for the water professionals in the long march to a new equilibrium between water, climate and energy. Will it have an impact? What else should we be doing? What can IWA do to help the urban water sector? Good questions for which answers will emerge in part through your thoughts. So in the first instance, please share them at water@iwahq.org.

Thanks.

Paul Reiter

# IWA MEMBERSHIP 2009 – some good news to report!

IWA's membership is a reflection of the professional and geographic diversity of the Association and collectively reinforces IWA's position as the network of world-leading experts spanning all corners of the globe. We are delighted to report that current membership figures overall demonstrate that IWA is retaining and growing a foundation of loyal members dedicated to realising our goal of being "the voice" of water professionals globally and we would like to take this opportunity to thank you for your continued support of the IWA in 2009.

Of particular note is that there has been significant growth in Individual membership with

this member segment now achieving the highest growth in 2009. Individual membership has grown by 4.5% since September 2008.

The continued growth of membership across all categories of membership despite the global economic downturn experienced in 2009 reflects well on the efforts of the IWA International Secretariat to ensure that our strategic direction, programmatic content and member benefits are in line with the needs of our members in a rapidly changing world and we thank you- our members for providing comments and ideas on how we can continue to develop and provide value to our members.

	2008 Year End	September 1 2008	September 1 2009	2009 Targets (% growth)
IND	4,777	4488	4672	4900 (2.5%)
CORP	444	434	433	444 (0%)
NOM REPS	2262	2242	2384	3260 (44%)

# **IWA Membership Surveys 2009**

Recognising the integral importance of our members to the continued development of IWA, the Membership Department is continually focused on developing a more detailed understanding of member needs as part of IWA's efforts to provide increasing value and benefit.

As part of these efforts, we have prepared a membership survey tailored to your specific category of membership which has been sent to your by email and we would like to thank you in advance for taking the time to complete this survey.

Your feedback plays an essential role in helping us to monitor and improve our services.

By sharing your opinions you can give us the information we need to stay up-to-date on our members' needs and expectations and ensure that we plan our work for 2010 with your comments in mind.

If you have not received this email or would like to make any comments about the survey then please contact the IWA Membership Department at members@iwahq.org

Help us help you make the most of your membership with the world's leading water network!

# LAST REMINDER!!!

EARLY BIRD DISCOUNT EXHIBITION SPACE WORLD WATER CONGRESS MONTREAL – DEADLINE 15 OCTOBER 2009!

The IWA World Water Congress is the leading international event in the water sector. This event offers a platform to 4,500 international delegates and visitors to network and exchange knowledge of all aspects of the water cycle. More than 200 exhibitors will participate through presenting the latest technological innovations and new concepts & developments in the global water industry.

The IWA World Water Exhibition, to be held from 20-23 September 2010, offers a unique possibility to showcase leading-edge products and services to a top-level international audience comprising CEO's, Technical Managers and Senior Consultants from Utilities, Contractors, Consultants, Governments, Manufacturers and Universities/Institutes. The structure of the event allows also participating in sessions and networking in high level social functions.

Almost 75% of the exhibition space has been blocked, including major sponsors, ITT, Veolia, and Suez.

Members of IWA who apply for exhibition space before the \*\*15 October 2009\*\* will receive an early bird discount. Contact us NOW to benefit from this special discounted rate for exhibition space at Montreal in 2010!

If you have any questions, please contact the Exhibition Secretariat by sending an e-mail to info@ iwa-exhibitions.com or phone Roy Agterbos, Exhibition Manager: +31 70 382 00 28.

# IWA announces the launch of the Fellows Program

With the wealth of professional excellence present amongst our vast member network, IWA has established a new program which aims to recognise these accomplishments through awarding nominated individuals with the honorary title of IWA Fellow.

Election to IWA Fellow grade is one of the highest honors that can be bestowed upon an individual by IWA. The accomplishments that are being honored shall have contributed significantly to the advancement or application of water science and technology, bringing significant value to society. The grade of Fellow recognises unusual and outstanding distinction in the profession and shall be conferred by the IWA Board of Directors upon a person with an extraordinary record of accomplishments in any of the IWA fields of interest. An IWA Fellow can have made significant contributions as an application engineer or practitioner, an educator, a utility manager, a regulatory, a research engineer, a scientist or as a technical leader.

Nominations for the IWA Fellows Program will open soon and further information will be available on the IWA website shortly.

For further information please contact chloe.menhinick@iwahq.org



# **IWA'S Governing Members**

IWA would like to thank all our Governing Members for their support to the Association and our activities in 2009. We are particularly delighted to welcome on board some new Governing Members this year from Ireland, the Pacific Islands, Palestine and Cyprus – and we look forward to developing strong and fruitful relationships with each of you in the coming months.

We would also like to give a special thanks to France, Italy, Japan and Switzerland who have contributed to the IWA Connections Programme this year. As part of our mission to engage with low and middle income countries we are looking to raise additional finds for this programme in 2010. If you are interested in finding out how you can contribute to this programme for 2010 then please contact IWA Development Director-Darren Saywell at Darren.saywell@iwahq.org for further information.

#### **CORPORATE MEMBERS**

#### 2010 Corporate Membership Renewal

IWA would like to thank all our corporate members for your collaboration with IWA in 2009. You can renew your membership for 2010 online. Please contact IWA Corporate account manager at roselyn.chang@iwahq.org for further assistance.

#### **Nominated Representatives and Young Water Professionals Program**

If you have a Medium or Large Corporate Membership with IWA we encourage you to ascribe a portion of your Nominated Representatives

to the IWA's Programme for Young Water Professionals. This is a platform which facilitates global interaction and mentoring between those in the water industry under the age of 35; an outstanding opportunity to foster leadership and career development in an international environment among younger employees in your organization.

Please send details of nominated representatives in your company to join the Young Water Professionals network to Roselyn Chang at roselyn.chang@iwahq.org. We look forward to hearing from you soon.

# **New Corporate Members Update**

We are pleased to welcome the following organisations as new members of IWA.

# Aguas de Antofagasta (Chile)

www.aguasantofagasta.cl

Provide and distributes drinking water and sewerage services for the cities of Antofagasta and Calama in Chile.

# • Hans Huber AG (Germany) www.huber.de

The Huber Group is operating in the environmental engineering sector. With more than 50 subsidiaries, representative offices and agents, the Huber Group is among the worldwide leading suppliers in the field of wastewater/sludge treatment and process engineering. Huber is an innovator in the field of drinking water and wastewater treatment with a continuous focus on the development of new solutions for water.

# Eau de Vie Limited (United Kingdom)

www.eaudevie.com/

Eau de Vie offers a complete built-in system that produces filtered, chilled and optionally carbonated water sourced from the local mains supply. Eau de Vie Limited is a new company formed by catering professionals with long practical experience in the provision of filtered water systems and the varying needs of customers who use them.

# • ECO Consult (Jordan) www.ecoconult.jo

Established in 1995, ECO Consult is recognized as one of Jordan's leading consulting firms providing integrated consulting services through out the Middle East and other parts of the world on a wide range of disciplines. ECO Consult have built up a strong portfolio of experience in

providing services to public utilities, ministries, municipalities, decision makers, donor agencies.

# Manila Water Company Ltd (Manila)

www.manilawater.com

Manila Water has been acclaimed as a shining example of a successful public-private partnership not only in the Philippines but even in the international community. As the concessionaire of the Metropolitan Waterworks and Sewerage Systems, Manila Water provides water and wastewater services to 5.6 million people from 23 cities and municipalities of eastern Metro Manila and Rizal Province which include Pasig, Mandaluyong, Marikina, Taguig, Pateros and parts of Manila and Quezon City.

# Penang Water Supply Corporation (Malaysia)

www.pba.com.my/

PBAPP is a holistic water supplier which sources, treats, distributes and bills for water supply, operating with a licence issued by the Penang State Government. In 2001, PBAPP became a wholly owned subsidiary of PBA Holdings Bhd (PBAHB). In 2002, PBAHB was listed on the Main Board of Bursa Malaysia (Malaysian Bourse) to facilitate equity participation by the public, water consumers and employees.

# Regulation & Supervision Bureau of the Emirates of Abu Dhabi (United Arab Emirates)

www.rsb.gov.ae/

The Regulation and Supervision Bureau (the Bureau) is the independent regulatory body for the water, wastewater and electricity sector of the Emirate of Abu Dhabi. It has exclusive authority to regulate all companies undertaking activities associated with

electricity and water production, transmission, distribution and supply. In addition, the Bureau also regulates the wastewater sector which is responsible for ensuring the safe collection, treatment and disposal of wastewater products.

# • Hach Company (China) www.hach.com.cn

Since 1947, Hach Company has manufactured and distributed analytical instruments, test kits, and reagents for testing the quality of water and aqueous solutions, with products for lab, process, and field. Their products are designed specifically for quality, accuracy, and simplicity, and today are in use around the world.

# • Histas AS (Turkey) www.ekotank.net

Histas AS offers creative solutions for liquid storage. The company is a manufacturer of a wide range of water tanks whether it is drinking water or rainwater. Ekotank products are ready to be used at every type of storing, to increase efficiency and decrease costs. The applications of their products include agriculture, industry, construction and military.

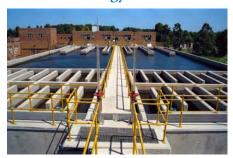
# • WLN (the Netherlands) www.wln.nl

WLN offers a package of services in the area of water quality and water technology. The laboratory from WLN is accredited in a broad range of chemical and microbiological analyses, in which WLN can further test for the fulfillment of regulations. WLN also provides advisory about the results en emergency actions required in certain cases. Their services cover water management, drinking water, industrial water and wastewater.

# **Programmes**

### **Utilities**

#### Water and Energy



Water and energy are interlinked. Energy is needed to supply water and wastewater services and water is used in generating energy or power. The design of our urban environment, from cities to household scale, has significant implications on both water and energy consumption. In a world where population growth, urbanisation, increased environmental standards and climate change are placing increasing demand on both water and fossil fuels there is a need for a new approach which integrates these issues.

#### Climate Change

Water and energy are also linked through climate change. The effects of climate change will be seen predominantly through the water cycle. Water and wastewater utilities will be one of the first sectors to have to adapt to very real climate change impacts. As such utilities have a vested interest in seeing strong commitments to reduce greenhouse gas emissions and mitigate climate change.

However the urban water cycle (water and wastewater utilities and the energy associated with water usage such as heating) is a substantial user of energy. As such increasing demands to reduce greenhouse gas emissions and energy consumption are going to impact water and wastewater utilities.

# **Energy Efficiency and Production**

Water and wastewater utilities have long recognised the importance of energy consumption within their operations as a cost to be minimised. Recent increases in energy costs, changes in legislation or policies, improved technologies and a growing awareness of the importance of climate change have led to utilities focusing on energy efficiency and production in a more rigorous and proactive manner. Water and wastewater utilities are increasingly altering operations to becoming green energy producers and taking a systematic approach to efficiency targets. To achieve these goals requires changes in both technology and organisational approaches.

# Targets, Reporting and Communication Tools

Governments, cities and utilities are

increasingly setting environmental goals related to greenhouse gas emissions, energy reductions and carbon reductions. However there is a need for consistency in the definition, measuring and reporting of these targets. There is also a call for improved tools which allows integration of both carbon and water.

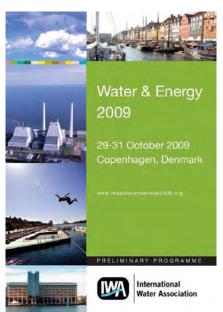
# Opportunity to learn more and get involved

The upcoming IWA Water and Energy conference in Copenhagen will explore this topic in detail. The two day conference will include a management and technical stream and cover reduction of green house gas emissions, energy efficiencies, energy production and the synergies between the two sectors. Learn from the leaders about the developments in this area.

It will also discuss the applicability of reporting tools including life cycle assessments and integrated assessments. The conference includes professionals from both the water and the energy sector and will present an opportunity to further understand and improve the dialogue between the two sectors.

The conference will include the development of a set of statements on water and energy that will represent the views of both sectors. The declaration will be available for the United Nations Climate Change Conference COP15 event.

#### Conference Details



The IWA Water and Energy 2009 conference will be held in Copenhagen, Denmark 29-31 October. Registration is now open and more details can be found at:

http://www.iwawaterandenergy2009.org/

For more information on Utilities, please contact Emma Rose on emma.rose@iwahq.org

# New report on Utility Performance Assessment in Africa

A recent report provides a synthesis of the self-assessment and benchmarking exercise carried out amongst 134 African utilities engaged in water supply and sanitation services. These assessments and the ensuing regional workshops are critical steps in the operationalisation of the Water Operators Partnerships program for Africa (WOP-Africa). WOP-Africa is built on the premise that well-performing utilities will step forward and emerge as leaders and that the needs of the less well-performing utilities will be met in a professional and sustainable manner. For more information please contact Darren Saywell at darren. saywell@iwahq.org

# Associations taking concerted action in support of the water and sanitation Millennium Development Goals

Following on from work led by the International Water Association during the 5th World Water Forum in March 2009, a group of 14 professional associations (national, regional and international) have formed an alliance to take action in support of the water and sanitation Millennium Development Goals (MDGs). The group, comprising those Associations which participated in the Water Forum, met during the Stockholm Water Week to pledge commitment to the alliance and to agree the basis of a strategic plan. The intention is to demonstrate the value and impact that professional associations can play in addressing the MDGs, through:

- Networking and promoting the technical expertise of our members in response to technical assistance requests.
- Building confidence in and understanding of potential between Associations and other institutions such as development agencies and funders and policy makers.
- Delivering clear and consistent messaging on key issues through linked communication activities.

Association leaders, or other interested parties wanting to learn more about this alliance should contact Darren Saywell at IWA (darren. saywell@iwahq.org).



# **Human Resource Capacity Gap**

In 2006, the WHO World Health Report estimated that 4.3 million additional health workers are needed worldwide – 1.5 million health workers for Africa alone – to alleviate the current crisis. UNESCO (2008) estimates that 18 million new teachers are needed to meet the MDG of achieving universal primary education (sub-Saharan Africa needs to increase the number of its teachers by 1.6 million or 68 per cent). Yet the human resource gap and shortage in the water and sanitation sector in developing countries is relatively unknown.

There is an urgent need to carry out a realistic assessment of the water and sanitation related capacity in the government, private and NGO sectors. Country case studies are needed to start mapping the existing capacity in the sector by skills (e.g. engineers, hydrologists, hydrogeologists, artisans, plumbers, fitters,

technicians, electricians, welders, water works operators, superintendents, social scientists and hygiene promoters), at national and local levels and across government, private and NGO organizations. A methodology and other tools must be developed to collect the data on HR gaps and shortages at a national level and help to inform an understanding of human resources shortages and gaps at a regional and global level.

The Water and Sanitation Team, from the Policy and Research Division of the Department for International Development (DFID) has a long-standing interest in this area of research. An international Reference Group, led by Darren Saywell at IWA has been established to support the work, comprising leading practitioners, academics, and representatives from NGOs, the World Bank, regional development banks and international organisations, with experience



in human resource development and capacity building in the sector. The research is aimed at a wide range of stakeholders including NGOs, practitioners, national and local government, the wider donor community and broad research community and is currently conducting case studies in several countries in both Africa and Asia.

The main outputs from this project will include: A 'State of the Art' review of human capacity gap shortages; global headline figures (based on country case studies & regional estimates); and a proposed 'Atlas of Professional Capacity' for the water and sanitation MDGs, in collaboration with the International Water Association.

Further details from Darren Saywell, darren. saywell@iwahq.org

# Disaster Response discussions in Mozambique

With increasing vulnerability of developed systems, future hazards and climate change IWA is stepping up its efforts in risk and disaster management. IWA held a 2-day workshop in Maputo, Mozambique on the 27-28th August for key decision makers to promote the need to implement water safety planning. At the same time a new initiative for disaster risk reduction was presented.

Events and announcements are being planned at the Mexico 1st Development Congress and African Water Association Congress in Kampala in March 2010. Many African countries see the need to boost their preparedness for climate change impacts causing disasters related to droughts and flooding, however many times the response is more reactive than proactive.

Based on case studies, starting with

Mozambique, IWA is now investigating how to best support the water sector in the long term by preparing for extreme events, looking in particular at an integrated approach involving a broad spectrum of recommendations at the river basin level. Mozambique has since the big flood in 2000 built an impressive capacity to respond in times of extreme events through its different institutional structures, mainly by INGC, The National Institute for Disaster Management. Its functions was tested in 2007 when there were multiple disasters in Mozambique also involving flooding which the institute managed very well. However, the challenges to prepare invest and plan long term for climate change and reduce impacts of large floods such as in 2000 in an integrated manner, needs investments that the country may not afford without international advocacy and support.



Improved drainage in Maputo peri-urban areas. This is an area of Maputo where Medicines sans Frontiers (MSF) came as a disaster response in the big flood in 2000 to set up an association that manages improved water supply, sanitation, drainage and solid waste collection. Now Water Aid is managing this area until the association can stand on its own feet. The combined intervention has drastically reduced the number of cholera cases; also in non-disaster times as the floods return more or less every year.

# **Access to Water Update**

Nine members of the IWA Access to Water Task Force and its Chair Michael Rouse, former Head of the Drinking Water Inspectorate, met during Stockholm Water Week to discuss a scoping study completed by Andy Robinson, an independent specialist in water and sanitation.

The group agreed that factors motivating a change should be the focus of the program, and IWA should seek to produce a systematic overview of these key factors. Collaboration with other studies is regarded as important. The World Bank, WSUP (Water & Sanitation for the Urban Poor) and a consortium led by UNESCO-IHE have expressed interest in cooperating with the task force, to share case studies, results and expertise.

The recognition that the urban poor and especially the informal sector is underestimated and needs to be addressed beyond conventional approaches and measures and monitoring, is a driving factor behind these initiatives. Andy will now produce a summary scheme as a simple device for communicating that will be consulted with a core of the IWA membership and the task force. The task force is planning to host a workshop in Montreal 2010 and produce advocacy products throughout 2010.

# **Monitor Water Quality with Communities Worldwide**

World Water Monitoring Day (WWMD) is an international education and outreach program that builds public awareness and involvement in protecting water resources around the world by engaging citizens to conduct basic monitoring of their local water bodies.

#### Register for WWMD 2009

Signing up for World Water Monitoring Day is easy. Simply visit www.WorldWaterMonitoringDay. org and click 'Participate' to learn how. Host your WWMD anytime from March 22 until December 31

#### Order your Testing Equipment

Once you've signed up, you may order an inexpensive water quality test kit designed specifically for the programme. You are welcome to use your own equipment if you prefer. If you are from a developing country then you are eligible to receive free testing kits, please contact Frances Lucraft at frances.lucraft@iwahq.org

# Need Materials for Your Monitoring Event?

If you're planning a WWMD event this year, we want to make sure that you have the resources you need. Don't forget to check out the 'Resources' section of the website for items such as the Event Planner's Guide, the WWMD instructional DVD, A Waterproof Case, puzzles, templates for news releases, giveaways, and more. Many items are free upon request, and we can provide artwork for printing items such as t-shirts and banners. If you have questions about available resources, please send us an e-mail (wwmd@wef.org).

# Materials in Languages other than English

Thanks to the work of many kind volunteers, the WWMD promotional brochure is currently available electronically in English (also available in hard copy), Spanish, French, Portuguese,

Chinese, Arabic, Russian, Romanian and Polish. Instructions for using the WWMD test kit are also available in these languages from 'Event Resources' on the WWMD website. Files for professional printing of any of these

# Participating in WWMD? Apply for an Award!

The WWMD Awards Program makes its debut this year with two categories of awards. The Water Champion: Making a Difference award recognizes superior levels of relevance, educational effort, support, and innovation in the promotion of water quality (via involvement in World Water Monitoring Day). Awardees will be chosen by a subcommittee of the World Water Monitoring Day regional panel of judges. Applications are now being accepted. The WWMD Superlatives will be awarded based upon data submitted to the WWMD database.

For further information please contact Frances Lucraft at frances.lucraft@iwahq.org

# **IWA** in the Regions

# **Africa Region News**

## High level Water Safety Plan Awareness Workshops in Ouagadougou and Maputo

The first of the high-level WSP awareness workshop took place in Ougadougou in July during the AfWA STC meeting. The one day event was specifically for CEOs of AfWA member utilities, especially from the Francophone countries in the region.

The second similar event took place in Maputo 26th-28th August. Like the first event, the well attended workshop targeted CEOs of large to medium sized urban utilities, Regulators, policy makers, and water associations from Anglophone countries in the region. The event attracted participants from 14 countries, representing 11 different utilities and 4 regulatory bodies. During the two day workshop, participants were introduced to the WSP approach to ensuring water safety and steps in the development of WSPs that CEOs ought to be conversant with. There was also time allocated to different groups of participants to discuss how WSPs would apply in their various specific circumstances mainly as utility managers, regulators and associations. Participants were all in agreement that Water Safety implementation was long overdue in African utilities. The CEOs committed themselves to nominate staff

members to take part in the upcoming WSP training due to tale place in Johannesburg in September 2009.

#### **ESAR Council Meeting**

The Council meeting took place on the 28th of August 2009 in Maputo. During the meeting, a new executive was elected to run the affairs of the association for the next three years. The majority of the old Executive Committee, led by Professor Hamanth Kasan as President, were re-elected.

### **Latin America**

# 5th National Meeting of Clean Beaches

Given the importance of tourism and biodiversity conservation for the Mexican government, this year the 5th National Meeting of Clean Beaches was held in the state of Nayarit, a new axis of tourism and residential investment in the Mexican Pacific coast. IWA participated in this meeting as a guest speaker on the risk management approach to ensure safe recreational waters.

Some of the most important conclusions of the event were:

- 1. The commitment to work with a holistic view of a basin, taking into consideration the appropriate uses of the water, soil and forests, and promote a payment for environmental services to encourage the certification of beaches for recreation or ecological conservation.
- 2. The success of Beach Certification Program. Amongst others, the clean beach certification contributes to the protection and conservation of the species that inhabit the coastal and marine systems, many of which are endangered due to climate change.

Together with several Mexican Government authorities, such as the Ministry for Health who monitor water quality at beaches, the Federal Commission for Protection Against Sanitation Risks and the Ministry of Environment and Natural Resources, the clean beaches Council includes beach committees from 15 coastal states of Mexico, The National Water Commission, as well as the Office of Environmental Protection, the National Association of Water and Sanitation utilities (ANEAS) and, other public and private, national and local associations.

At the close of the event, the Director of the National Water Commission asked the audience not to slow down investments and addressed the need to strengthen the water utilities despite the economic crisis and to promote joint working with the municipal governments.

# **Young Water Professionals**

# YWPs at Stockholm Water Week

Following the success of the Young Water Professionals workshop organised in 2008 during the World Water Week (Stockholm, Sweden), the IWA YWP Team partnered again with SIWI to organise a half-day activity for students and young professionals under 35 years.

The workshop brought together more than 70 participants from around the world. They had the opportunity to hear four senior professionals talk about some of the challenges that the waster sector currently faces.

- Priya Shah, Water Integrity Network, addressed issues around water and corruption:
- Kala Vairavamoorthy, UNESCO-IHE, presented his ideas on how to build cities of the future:
- Ryan Yuen, from IWA, gave an overview about the Water Operators Partnerships and
- Karin Lexén, SWH, talked about THE big challenge ahead: Water & Climate.

After the four presentations, the group broke up into smaller discussion groups where the YWPs had an opportunity to talk about the topics with the senior professional who made the presentations. At the end these discussions were presented to the workshop audience.

Here two of the group leaders share their views with us:

**Amanda Daniela Nkomo**, Johannesburg Water Pty (South Africa), reports back on the discussion on Water Operator Partnerships

Participating at the YWP Workshop during the Stockholm Water Week gave me the opportunity to meet and network with people from around the world and also learn more about WOPs.

The discussion of our group was lead by Ryan Yuen and we learnt more about its objectives and benefits; mainly the sustained exchanges between water operators to overcome development challenges and also to build capacity.

There are seven important points that we, as young professionals, discussed under the WOPs topic:

- WOPs definition It is structured partnership between 2 or more water operators.
- Why are WOPs important? They allow operators from both public and private sectors to support each other.
- How is WOPS partnership formed? By twinning arrangements which includes site visits between two interested water utilities whether mentoring or receiving assistance.



- WOP's coverage— Asia, Africa, Europe, North America, Middle East, Latin America and Caribbean.
- Funding Funds are being sourced out from the UN, IWA and otherwise water operators which are being assisted are to fund the project.
- Benefits of WOPS:
- Staff development
- Sharing of new ideas
- Results oriented and adherence of good governance principles.
- Challenges
- Water utilities feel that it is not important since they don't have a social responsibility obligation.
- Utilities need to partner with utilities which are better off.
- After partnership and assistance has been given maintenance is often neglected which makes the whole process unsustainable.

**Sarah Graaf**, Swedish University of Agricultural Sciences (Sweden), reports back on the discussion regarding Corruption in the Water Sector

The Stockholm World Water Week - Young Water Professionals seminar provided a great opportunity for young water professionals from various disciplines to meet, exchange viewpoints and take part of current issues related to water.

One of the workshops held during the seminar, lead by Ms. Priya Shah representing the Water Integrity Network, focused on corruption in the water sector. A number of issues were discussed treating both the contexts under which present cases of corruption have developed and which components that can aggravate or improve their current status.

These are some of the topics discussed:

 the importance of non-fraudulent governmental agencies and a government suppressing corruption by a cooperative

- juridical authority fully recognised by all sectors of society. If non-existing, the lack of legitimate legislative forces will undermine following attempts to end corruption:
- the proneness to corruption within private or public companies/organisations with weak structures and/or low ethics. Aims must be set on top-down consistency and could in terms of practical methods be achieved with back-reporting, transparent contracting and procurement processes to mention a few routines discussed.
- The need of clarifying and enforcing local consumer and ownership rights, especially in regions lacking transparent organizational structures and with informal providers. A number of cases were brought forward where local grassroots involvement had proven successful examples.

During the latter part of the workshop the following were discussed off-topic:

"The Right to water": can it be defined, and if so, what can be a realistic expectation?

To meet current and future needs an efficient system has to be created where water supply variances, distribution chains and consumer volumes are a few of the issues that should be taken into account. De facto, the global distribution of fresh water resources is uneven and some examples using quotas and tiered prices as means of improving local conditions were discussed as possible large scale solutions. With proper enforcement, it could result in greater water supplies where and when needed and thus decreasing the incentives for corruption.

# IWA YWP Dr Rashmi Chand wins the Willy Masschelein prize



The prize is delivered at every International Ozone Association's World Congress by the regional group IOA-EA3G for the best PhD thesis that has been issued within the past 4 years.

# **IWA Specialist Groups**

Specialist Groups form the basis of IWA and are important vehicles for all "water people" interested in interactions on scientific, technical and management topics throughout the world. The Groups, formed as coalitions of individuals around subjects of common interest, provide a sound structure of networks for international specialists to share knowledge, information, skills, and make good professional and business contacts. Some of the Specialist groups also have task groups or working groups, which have been formed in order to perform a defined task.

For a full list of IWA's specialist groups and their activities view the IWA website http://www.iwahq.org/templates/ld\_templates/layout\_633184.aspx?ObjectId=633829. To take advantage of this networking opportunity, and become a member of any specialist group (or change your group

membership) simply contact the IWA membership department (members@iwahq.org) and tell us which groups you would like to join.

This issue of the newsletter features the activities of several groups active in the research and practice of:

- Chemical Industries
- Lake and Reservoir Management
- Nano and Water Application of Nanoparticles, Nanoengineered Materials and Nanotechnology
- Resources-Oriented Sanitation (EcoSan)
- Sustainability in the Water Sector
- The IWA Task Group on Benchmarking of control strategies for wastewater treatment plants
- Waste Stabilization Ponds
- Water Security and Safety Management

**Chemical Industries** 

The Chemical Industries Specialist Group aims to address all aspects of the water and wastewater issues arising from industries, especial chemical, petrochemical and life science industries. These industrial sectors, which play increasingly important roles in world economic growth are facing problems in treating and reusing their industrial wastewater, contaminated water. The Group offers a multidisciplinary platform to discuss specific issues related to industrial water and wastewater management and evaluate relevant technological advances. Industries are major consumers of water and energy and major producers of wastewater. Efficient industrial water management is therefore of paramount importance to achieve environmental sustainability and improve business profitability. This requires innovative, cost effective and advanced management technologies.

The Specialist Group has recently intensified its activities, as shown by the recent organisation

of the "Chemical Industries 2008" conference in China, which attracted an unprecedented number of attendees, soon to be followed by the "Water and Industry 2009" (Nov 30 – De 02 2009) in New Zealand. The latest Specialist Group conference event also demonstrates the Group's willingness to extend its scope to global industrial environmental management issues as it recognises the growing interdependencies between water and energy issues. We invite researchers, managers, regulators, consultants, students and technology providers from around the world to attend Water & Industry 2009 and contribute to our Specialist Group.

Dr Benoit Guieysse (Conference Chair) & Dr Darren Sun (IWA Chemical Industry Chair)

# New Specialist Group on Lake and Reservoir Management Holds First Symposium

Earlier this year, a new specialist group on















New Specialist Group on Lake and Reservoir Management

Lake and Reservoir Management (L&RM) was duly constituted and approved. The objectives of the group are to:

- Promote sustainable management of drinking water supply reservoirs with the best science and technology;
- Develop innovative reservoir management practices that will complement and optimise water treatment effectiveness and cost for the range of challenges faced by water utilities;
- Nurture an interdisciplinary approach to lake and reservoir management (including fluid dynamics, biogeochemistry, microbiology, and aquatic biology and ecology) and consider the potential longer-term effects of climate change;
- Provide a forum and network with an international scope and emphasis on the rapidly developing regions of the world.

The L&RM SG held its first symposium from June 28-July 02, 2009 at National Cheng Kung University, Tainan, Taiwan. Presentations on a comprehensive range of topics related to lake and reservoir management were made by a number of leading experts in the field. Field trips and group dinners allowed for an intimate atmosphere where many new professional relationships were forged and information exchanged. The general consensus of the international group of attendees was that it was amongst the best-hosted and most interesting symposiums they had participated in.

Plans are afoot to continue the momentum with a specialist group meeting at the IWA World Water Congress in Montréal, followed by further symposiums. We invite IWA members to join the group.

You can view the group's constitution and officeholders or join the group at the IWA website. Information about the first symposium (program, photographs, etc.) can also be found at http://www.serc.org.tw/2009IWA/. For more information about the L&RM SG, you can also contact either John Little (Chair) at jcl@vt.edu or Tsair-Fuh Lin (Secretary) at tflin@mail.ncku.edu. tw. We welcome your participation!

# Nano and Water - Application of Nanoparticles, Nanoengineered Materials and Nanotechnology

Nanotechnology and Nanoengineered Materials are being developed rapidly for a large number of applications in all kind of sectors and products, e.g. cosmetics, car tyres, construction materials, pharmaceuticals, etc. Their specific properties related to the small sizes will provide opportunities to develop new technologies with performance and characteristics that cannot be established with conventional materials and technologies.

Nanotechnology has promising perspectives for drinking water and wastewater treatment. New and advanced treatment technologies can be developed with very specific targets that are very difficult to achieve with conventional technology. But although the technology is very promising, no actual breakthrough in the water sector has occurred yet. Furthermore, application of nanotechnology in water treatment may be a source for nanoparticles itself. Manufacturing and application of nanotechnology and nanomaterials may result in the emission and accumulation of nanoparticles in the environment, causing unknown threats for public health and aquatic life. Fate, concentrations and stability of nanoparticles in the environment are in general unknown. Also the removal efficacy of current treatment technology is not known and a topic of great interest.

Because of the promising properties of nanotechnology, but also the potential disadvantages connected to it, a large research effort is needed. The number of research groups working in the field of nanotechnology is growing. The water sector is however not always aware of the research and development results, because research takes place in different sectors of industry.

The objectives of the Specialist Group are to:

- Stimulate research and provide objective information towards water utilities, policy makers and the general public on fate and stability in the environment, and possible health risks and environmental effects of nanoparticles.
- Provide a platform and create a network for exchange knowledge and expertise on the development and possible application of nanotechnology and nanomaterials for drinking water and wastewater.
- Stimulate the development of nanotechnology from lab scale to technological scale for drinking water and wastewater applications and simultaneously reducing the risks associated to the specific technologies.
- Form "eyes and ears" for the water sector on the development of nanotechnology in other fields (technology scouting).

For more information, please view the group webpage at:

http://www.iwahq.org/templates/ld\_templates/layout\_633184.aspx?ObjectId=679294

and the constitution at:

http://www.iwahq.org/kn3w/system/component\_view.asp?LogDocId=679293&PhyDocId=117680.

Chair: Dr. Jan Hofman, Vice Chair: Dr. Ralf Kaegi, Secretary: Dr. Blanca Antizar-Ladislao, and Newsletter editor: Dr. Jo E. Burgess.

# Resources-Oriented Sanitation (EcoSan)

The SG on Resources-Oriented Sanitation (EcoSan) focuses on sanitation systems enabling nutrient reuse, mainly by source separation. The full range from high- over medium- to low-tech and from decentralised to centralised solutions is covered. "Resources-oriented sanitation" is understood in the same way as "sustainable sanitation" and "ecological sanitation". Currently the SG has about 350 members.

We would like to inform you about the IWA conference on Sustainable Solutions for Small Water and Wastewater Treatment Systems (S2Small-2010) that will be held in Girona, Spain, from 19-22 April 2010. S2Small-2010 is jointly organised by the IWA Specialist Groups Small Water and Wastewater Systems (Small) and Resources-Oriented Sanitation (EcoSan) and comprises the Specialist Conferences of these two Specialist Groups. The deadline for submission of papers is 31 October 2009. For more information please visit the conference website http://www.udg.edu/s2small2010.

In addition the chair and some members of the group will present at the 3rd Decentralised Conference on Water and Wastewater International Network, 10-13 November 2009 Radisson Hotel Kathmandu, Nepal www.iwa. nepaliko.com/. There is the opportunity for an informal meeting, those interested should mail to Ralf Otterpohl: ro@tuhh-de

At S2Small-2010 we will organise a Specialist Group meeting during which elections of new chair persons and management committee members will take place. We would like to encourage all interested SG members that want to take actively part in the work of the SG to apply for a chair or management committee position. If you want to apply for the SG leading team please send a short CV including your motivation why you want to join the SG leading team (together not more than 1 page) per email to guenter.langergraber@boku.ac.at latest by 31 March 2010. Please note that also current members will have to apply to be able to be reelected.

We are looking forward to meeting you at the S2Small-2010 conference and the SG meeting in Girona,

Chair Ralf Otterpohl (Germany), Co-Chair Håkan Jönsson (Sweden), Co-Chair Günter Langergraber (Austria)

# Sustainability in the Water Sector

The IWA Specialist Group on Sustainability in the Water Sector formed around 2001 with the mandate to support IWA's vision of providing leadership in the "development of effective and sustainable approaches to water management". The group addresses and encourages dialogue around sustainability and related concepts. This covers diverse issues such as Integrated Water Management, climate change adaptation, water and energy, cities of the future, nutrients





and nutrition and leading edge science and technology. The group has some 650 members with 15 members on the Management Board chaired by Bruce Beck. (Refer to http://www.iwahq.org/templates/ld\_templates/layout\_633184.aspx?ObjectId=642511) for contact details.

The group is particularly active in the lead up to and during the biennial World Water Congress. Among other aspects, the group has encouraged debate the relative merits of sustainability concepts and models. It has developed and presented awards for projects and research demonstrating high levels of "sustainability" innovation and convened workshops on Triple Bottom Line reporting and managment. It is developing a toolbox to compile and distribute key reference material relating to sustainability in water (See http://www.iwahg. org/templates/ld\_templates/layout\_633184. aspx?ObjectId=644318). This contains a useful listing of reference materials and websites, and is planned for wider expansion.

# The IWA Task Group on Benchmarking of control strategies for wastewater treatment plants

The goal of the task group (TG) is under the Systems Analysis and Integrated Assessment SG, which is to develop and promote the use of a benchmark simulation protocol for objective evaluation of control strategies for WWTPs and produce a Scientific and Technical Report (STR, part of IWA Publishing's series). The TG is now making a final effort to report, present and



Some active benchmarkers at the ICA2005 conference, Busan, Korea.

publish the research that has been ongoing for the last 13 years (the last four years as an IWA TG). A first draft of the STR will be delivered to IWA Publishing by the end of this year (editorin-chief: Dr Krist V. Gernaey, DTU, Denmark). Moreover, about 15 detailed technical reports have been written, which will all be published together with the STR on an enclosed CD. The complete source code for the BSMs for several software platforms will also be included. The task group maintains a web site as a means to publicise on-going activities (http://www. benchmarkwwtp.org). Interest in the benchmark protocols has been extensive and the web site is regarded as the best platform for communication with interested parties including getting feedback and getting input from benchmark users whether they are experienced users or just getting started. Dissemination of results as well as inviting the research community to comment and influence the direction of the work is also done via suitable conferences and workshops. Information: Dr Ulf Jeppsson (chair), IEA, Faculty of Engineering, Lund University, PO Box 118, SE-221 00 Lund, Sweden. Phone: +46 46 2229287; fax: +46 46 142114; e-mail: ulf.jeppsson@iea.lth.se.

### Waste Stabilisation Ponds

In 2009, the major activity of the specialist group on Waste Stabilisation Ponds was the organization of the 8th IWA Specialist Group Conference, in Belo Horizonte, Brazil, from 26 to 30 April.

The conference followed the pathway of the very successful previous conferences (Portugal, USA, Brazil, Morocco, New Zealand, France and Thailand). There were 120 delegates from 22 different countries covering all continents, what guaranteed the international view and flavour of the conference.

In the opening ceremony a tribute to Prof. Salomão Silva, who died last year, was made. In the sequence, Prof. Duncan Mara received a homage, including a plaque in the name of the Specialist Group "in recognition for his outstanding contribution to ponds research and application".

The morning sessions were devoted to five round tables with the presence of internationally leading scientists, covering the following subjects: (a) Pond biology; (b) Pond hydraulics and modelling; (c) Nutrient removal; (d) Pathogen removal and effluent reuse; (e) Integration of ponds with other systems. The round tables had an excellent level and presented historical perspectives, consolidated views, new findings and new research focuses.

In the afternoon there were 70 oral presentations for papers and 16 short-platform presentations for posters. Probably close to a record in terms of a conference, all papers originally scheduled were effectively presented.

The technical visit was done to the Onça (UASB reactors) and Arrudas (activated sludge) treatment plants, with a special tour on the experimental site UFMG-COPASA, which includes several wastewater treatment units (ponds, wetlands, UASB reactors, trickling filters and others). The picture below shows the group that took part in the visit.

In the Specialist Group meeting at the conference, new SG chair (Marcos von Sperling, Brazil) and secretary (Kara Nelson, USA) were elected for a mandate of four years, and Adelaide (Australia) was selected as the host city for the next conference, in 2011. Some weeks later, Miller Alonso Camargo Vallero (Colombia) was appointed as newsletter and blog editor of the group.







# Understanding the Risks and Readiness to Respond

With the backdrop of swine flu pandemic, climate change induced extreme natural disasters, and the threat of global terrorism; water security and safety management has emerged as a critical issue for water utilities. This month the Specialist Group on Water Security and Safety Management will mark its second anniversary.

Over this period, the group has been intrinsically involved in the development of IWA's Disaster Response Program that aims to build national capacity in disaster preparedness. The Program includes participants from Europe, Asia, South East Asia, Africa and Latin America. Just last month at the World Water Week at Stockholm, a capacity building workshop was jointly convened by the IWA, WHO and UNICEF. Forthcoming 1st IWA Development Congress at Mexico will provide further opportunity to engage with the wider IWA community on the issue of disaster preparedness capacity.

The Specialist Group is working on developing and disseminating body of knowledge on four key areas - risk assessment, preparedness, crisis management and recovery. To that effect, a special session is currently being planned to be held in conjunction with the Montreal World Water Conference 2010.

Bruno Nguyen, Chair



# IWA UPCOMING EVENTS SCHEDULE

# Water and Wastewater Treatment Plants in Towns and Communities of the XXI Century: Technologies, Design & Operation

2-4 June 2010, Moscow, Russia

The topics to be discussed are:

#### **LDWTP**

- Design of drinking water treatment plants
- Operation of drinking water plants
- Cost and economics
- Conventional treatment processes
- Advanced technologies in DW Production

#### **LWWTP**

- Design of LWWTPs
- Operation of the wastewater treatment process
- Sludge treatment and management
- Costs and economics
- Innovative wastewater treatment technologies

Email: iwaconference@sibico.com Webiste: www.iwaconference.ru

# 12th IWA International Conference on Wetland Systems for Water pollution Control 4-7 October 2010, Venice, Italy

Constructed wetlands (CWs) have been adopted by many Italian communities as a cost-effective mean of secondary and tertiary wastewater treatment, in order to meet more stringent standards and to lower operating costs. Some small systems have now been in existence for nearly 15 years, while wetland treatment systems for larger towns and small cities have become a more recent trend. Since 1999 CWs have been "officially" recognized as a treatment technology.

More than 1000 CW systems are operative at the moment in the country. Following several positive experiences with municipal and domestic wastewater treatment, there is now an increasing number of projects and realisations of CWs for diffuse pollution, like as agricultural runoff, highway and urban runoff (SUDs, CSOs,...), for industrial applications (wineries, landfill leachates, animal breeding,...) and finally for "Ecosan" related facilities (wastewater segregation, reuse,...). The topics to be discussed are:

- Process Dynamics
- Landscaping
- Case studies
- Design criteria and Operation policies

- Treatment Performances of Wetlands in Water Pollution Control
- Economics
- Application of CWs for Water Reuse, Ecosanitation, Sustainable Water Management
- Environmental Issues
- CWs components

Email: info@wetland2010.org
Website: www.wetland2010.org

# IWA Regional Conference on Membrane Technology & Water Reuse

#### 18-22 October 2010, Istambul, Turkey

IWA Specialist Group of Membrane
Technology and Water Reuse organize
specialized conferences every two years
separetely. This regional conference organized
in Istanbul is the first conference organized
jointly by Membrane Technology and Water
Reuse groups of IWA. It presents the advances
in membrane technology and water reuse
and provides a perfect atmosphere to make
contacts between researchers, professionals and
engineers working on membrane technology
and water reuse. The topics of the conference
will cover almost all the areas of membrane
technology and water reuse.

Istanbul is the cultural capital city of Europe in 2010 and this conference in going to be an event under cultural capital city celebrations in 2010.

The topics to be discussed are:

- How membrane technology can help in transforming waste water in a potential source of useful water. (MBR, Hybrid Membrane processes etc.)
- Membranes for on site recycling of industrial effluents or reuse.
- Energetic aspects of wastewater treatment using membranes: new processes and new paradigms Integrated membrane processes for desalination including comparison between both potential sources of water: sea water, sewage and effluents.
- Economy of water reuse by membrane.
- Treatment of emerging pollutants
- Novel technology developments
- New membranes for water reuse
- Case studies

Email: info@iwa-mtwr2010.org
Website: www.iwa-mtwr2010.org



# Marine Waste Water Discharges and Coastal Environment 25-29 October 2010, Langkawi, Malaysia

After 10 years along the coasts of the Mediterranean Sea, it has been decided to move towards the South Eastern Countries, with the aim of enhancing the cooperation and the participation of our Asian colleagues.

Malaysia has been the Country chosen for the 2010 event; the conference will be held in Langkawi, the major of the 99 islands in the homonymous archipelago on the northern tip of continental Malaysia.

The island is since 2007 an UNESCO Geopark and is well known for its well preserved natural environment.

The topics to be discussed are:

- Scientific themes
- Sealines & coastal plants engineering, construction and operation
- Coastal works and coastal environmental protection

# **DEADLINES**

10 October 2009 for submission of full papers to the 7th International Conference on Sustainable Techniques and Strategies for Urban Water Management (28 June - 1 July 2010, Lyon, France)

Contact: novatech@graie.org

15 October 2009 for submission of outline papers to the 7th Leading-Edge Conference on Waste & Wastewater Technologies (2-4 June 2010, Phoenix, Arizona)

Contact: let2010@iwahq.org

15 November 2009 for application of participation to 2nd IWA/WEF Wastewater Treatment Modelling Seminar (28-30 March 2010, Mont-Sainte-Anne, Canada)

Contact: WWTmod2010@modelEAU.org



# IWA World Water Congress & Exhibition

# Invitation



# Montréal



19-24 September 2010

www.iwa2010montreal.org











# Join us in Montréal

This is your invitation to join 3,000 likeminded people at the IWA World Water Congress & Exhibition in Montréal from 19–24 September 2010.

#### What is IWA?

The International Water Association (IWA) is a global network of 10,000 individual and 400 corporate water professionals in 130 countries. Association members span the continuum between research and practice and cover all facets of the water cycle, from the science and management of drinking water, wastewater and stormwater to the conservation of water resources throughout the world.

## What is this event?

The IWA World Water Congress & Exhibition is a high-profile biennial event that in previous years has been held in Vienna, Beijing, Marrakech, Melbourne, Berlin and Paris.

# What is its purpose?

The IWA World Water Congress & Exhibition is where the entire global water community congregates every second year to meet, exchange ideas, explore the state of the art and debate the key issues underlying the science and practice of water. It is also where IWA specialist groups showcase their work and do their planning.

#### Who will attend?

IWA is expecting 3,000 delegates to attend from both inside and outside the IWA membership. IWA is partnering with two Canadian associations to produce this event—the Canadian Water and Wastewater Association and the Canadian Association on Water Quality. Thanks to their active participation, IWA is expecting strong attendance from Canada, the United States and Latin America, as well as the 130 different countries IWA members represent.

# Why attend?

As well as the excellent content, the event will provide unparalleled professional and business networking opportunities. The scientific and technical programme will cover forward-looking themes, with opportunities to share experiences and innovations in research, science and technology. Through presentations and discussion, the sessions will make a contribution to the way that water is managed around the globe.

#### **Themes**

The programme will cover:

- science and application of water management
- · water, climate and energy
- · cities of the future
- · managing utilities and their assets
- securing new and traditional water resources for the future
- · water, ecosystems and catchments
- · water and health
- water and wastewater in developing countries.

# Your involvement options

## **Delegates**

When you attend as a conference delegate you and your organisation will benefit from the knowledge you gain on the latest global water industry science, technology and strategic issues.

#### **Presenters**

Presenting a paper will enhance your involvement and give you a higher profile at the event. Your paper will also be published on a CD-Rom of proceedings and possibly in one of three IWA publications.

#### **Exhibitors**

You are welcome to join other utilities, technology and product manufacturers, consultants, knowledge and research institutes, non-government organisations and the media in the exhibition. It will be an excellent four-day marketing opportunity with exposure to 3,000 decision-makers.

#### Sponsors

As a sponsor your organisation will present as a major international water industry player, receiving exposure before, during and after the event and VIP treatment at technical, social and business networking sessions.

# **Enquiries**

#### Technical and scientific programme

Tom Williams Tel. +31 703 150 780 Fax +31 70 347 7005

2010montreal@iwahq.org

#### Sponsorship

Roselyn Chang Tel. +31 703 150 783 Fax +31 70 347 7005 2010montreal@iwahq.org

#### **Exhibition**

Roy Agterbos Tel. +31 70 382 00 28 Fax +31 70 382 68 14 info@iwa-exhibitions.com



www.iwa2010montreal.org

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# **News from IWA Publishing – www.iwapublishing.com**



# New Journal of Water and Climate

IWA Publishing launches in 2009 a new *Journal of Water and Climate* devoted to publishing papers on all aspects of water science, technology, management and innovation in response to climate change. Full details of the journal can be found at www.iwaponline.com/jwc.

We invite the submission of new papers through our online submission system – please go to the website above or contact the journal's manager Emma Gulseven (jwc@iwap.co.uk) for guidelines. The first issue will be free, either as print or online. For subscription information please contact Ian Morgan, Marketing Manager (imorgan@iwap.co.uk).

We are delighted to bring you news of THREE NEW BOOKS from IWA Publishing:

#### Waterborne Pathogens: Comprehensive Review for the Drinking Water Industry

**Global Water Research Coalition (GWRC) Report Series** 



Authors: Emmanuelle Guillot and Jean-Francois Loret

Infectious diseases caused by pathogenic bacteria, viruses and protozoa, are the most common and widespread health risk associated with drinking water. Controlling the risks related to these pathogens is a permanent challenge for the water

industry.

This book provides a comprehensive review of current knowledge on a selection of pathogens of interest for the drinking water industry, identifying the remaining gaps of knowledge and thus the necessary research to be conducted. Each micro-organism in this study is described in a summary fact sheet. The study features a general section on virus research needs. A special section summarizes the risk management research conducted on waterborne pathogens. Finally, the conclusion gives an overview of the main gaps in current knowledge on waterborne pathogens.

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Editors: G Rees, K Pond, D Kay, J Bartram and J Santo Domingo

The trade and consumption of bivalve shellfish is a global industry and is increasing. Human illness caused by infectious agents transmitted through animal or human sources

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Alternative Water Management and Self-Sufficient Water Supplies provides inspiration for water planners in cities with

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