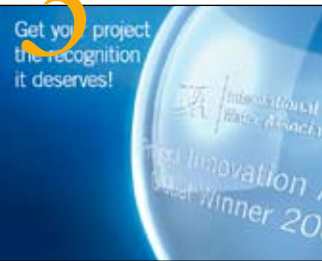


# Member Newsletter

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## Vienna – Gateway to the Danube and Beyond

Editorial by IWA Executive Director, Mr Paul Reiter

Normally this column is devoted to ideas, concepts and the future. And that is why this piece is all about the upcoming 2008 World Water Congress and Exhibition in Vienna – an event devoted to ideas, concepts and the future of the most compelling issues that we, as water professionals, face today.

The Congress Programme committee met last weekend and drafted a superb programme involving science, practice and industry elements. I am proud to report to you that the programme that emerged from the committee speaks to the critical challenges of both today and tomorrow. Let me share some of my highlights with you.

**Danube** – The location of this years Congress is in the heart of Europe and the Danube basin provides one of the focal points for the Technical Programme. Water professionals from Austria - and the wider Danube region – are well represented throughout the programme, ready to share their knowledge and experiences in managing the longest river in the European Union. There are also key contributions from the International Commission for the Protection of the Danube River (ICPDR) and the The International Association of Waterworks in the Danube Catchment Area (IAWD) in the form of keynote presentations and workshops. As the global pressures of managing water resources and river basins increase, the Congress provides a unique opportunity to share best practice and innovative research based on a breadth of local and international experiences.

**Urbanisation, Megacities and**

**Cities of the Future** – Last year saw a major demographic shift and, for the first time in human history, over half of the world's population now live in urban areas. Continued population growth and urbanisation in both secondary cities and megacities, and across the spectrum of high medium and low income circumstances will frame the challenges we face in the decades ahead. In Vienna the leading thinkers, will assemble to discuss and present the latest research ideas and practical case studies within a rich set of workshops and sessions aimed at "cities of the future" in both developing and developed countries.

**Climate Change** – The impacts of climate change on water scarcity, water quality, coastal hydraulics, flooding and urban drainage are already being seen from Peru to Perth and, in line with predictions, the impacts of climate change are being felt first in the context of water. Workshops in Vienna will bring together the worlds leading figures on this subject and provide an excellent opportunity to learn about the impacts and begin to strategise about potential adaptation strategies that will necessarily be highly specific to local circumstances.

**Water and Energy** – We will be examining the key relationships related to climate change mitigation including the energy needed to produce water and the water needed to produce energy. Although elements of the water and energy picture are well known to some, the complete picture is new to most. Water and energy is a compelling subject because of mitigation measures that will be required from both water and energy producers.



**Frontiers of Science, Research and Technology** – This theme will build on the research expertise of IWA members and permit a further exploration of the rapidly emerging water-specific frontiers of science, research and technology. Breakthroughs in microbial ecology and bio-engineering, material sciences and nano-technologies will be explored and debated in the context of the very significant challenges that we face in achieving the quality and sustainability imperatives ahead. I expect that new Specialist Groups and task groups will emerge from the high quality interchange that will result from the Vienna Congress.

**The Future of Sanitation** – Perhaps the most challenging of endeavours facing us in the next decade is coming to terms with the need to provide sanitation to almost half the world's population. It is clear to all that we will not meet this challenge through business as usual approaches to the problem. The Vienna programme will feature keynote presentation, workshops and scientific discussions, many of which seek innovative approaches to traditional problems. Given that the

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world's leading sanitation experts are prominent members of IWA, a focus on the future of sanitation in Vienna provides a rare opportunity to think together about both the problems and challenges we face building on the work already undertaken through Sanitation 21.

**Desalination and Reuse** – Membrane technologies in the form of desalination and

reuse offer one of the truly bright spots in responding to the global challenges ahead. But we are just at the beginning of the large scale application of these technologies and there are many obstacles to confront forming the basis for some exciting workshops and scientific session in Vienna.

I have highlighted just a few aspects of the compelling programme offerings in Vienna. A total of 110 scientific sessions, over 30

workshops and 10 keynote speeches will make up the Technical Programme of the Vienna Congress (without thinking of the exhibition) – far too much to describe in this short column.

Taken together, I believe we have a great programme for you and the water community at large – an event that really speaks to the challenges of today and tomorrow. I look forward to sharing your thoughts and experiences in Vienna.

## IWA News Update

### IWA Seeks Award Nominees for 2008

IWA recognises the special contributions of its members and water sector professionals through a programme of Honours and Awards.

Nominations are sought for these prestigious awards which will be conferred at the Biennial World Water Congress that will take place in Vienna 7-12 September 2008. A summary of the award eligibility criteria is set out below. Nominations must be made in writing, addressed to the Executive Director of IWA. **The closing date for nominations is Friday 25 April 2008.**

**The IWA Grand Award:** For outstanding achievement of any kind in relation to IWA's activities and field of interest. The following criteria will form the basis for selection:

- Demonstrated excellence in science, technology, management or policy
- Vision, leadership, knowledge, persistence, creating new directions and opening new fields
- Recognised internationally within the membership of IWA
- Awardees need not be an IWA member

**Honorary Membership:** Individual members or employees of corporate members of IWA who have made an outstanding contribution to the Association and to the water sector.

**IWA Young Professionals Award** (given in honour of Dr Maarten Schalekamp): This award recognises professionals under the age of 35, who are either water sector practitioners or from research/academia. Awardees will have had both outstanding career achievement to date and the potential to play a large and influential role in the water industry in the future. The award is not restricted to members of IWA. The successful awardee receives a cash prize of £1,000.

**IWA Outstanding Service Award** (given in honour of Dr Samuel H Jenkins): The award is given for consistent and outstanding service to the Association. Awardees may be individual members, representatives of corporate members, members of editorial boards and permanent staff of the Association.

**IWA Award for Outstanding Contribution to**

## WST Journal Re-instated A message from Gustaf Olsson, Editor-in-Chief WST

I am pleased to report that ISI have confirmed that they have completed their evaluation of Water Science and Technology and are relisting it in Web of Science, effective from the start of 2008.

This reverses the decision taken last year by ISI that led to the absence of a 2006 Journal Citation Index for WST. This rapid recognition of our journal's high scientific quality and its significant value to a worldwide readership is a direct result of the new editorial policy adopted for WST (and its adjunct journal Water Science and Technology: Water Supply) of inviting direct submission of papers on all aspects of the science and technology of water and wastewater. All papers are rigorously peer reviewed under the control of the Editorial Board, using the Editorial Manager online submission and peer review system (<http://www.editorialmanager.com/wst/>).

The journals have also been redesigned, with a new size and new designs for the covers and the page format, starting with the first issues of 2008.

**Gustaf Olsson, Editor-in-Chief**

**Water Management and Science** (given in honour of Dr Karl Imhoff and Dr Pierre Koch): The award will be made to an individual member of IWA or official representative of a corporate member who has been responsible for an outstanding and innovatory contribution of international impact, relating to leadership, systems operation, or technical innovation. e.g. a new treatment process or technique, a novel aspect of reticulation systems for water or wastewater, an innovation in the management, administration or financing of water sector activities, a major piece of outstanding research with potential widespread international effect, etc.

**IWA Publishing Award:** Recognises significant contributions to IWA Publishing activities as determined by the Publications Committee of the Association. The award is not restricted to members of IWA.

**IWA Hei-jin Woo Award:** The IWA Hei-jin Woo Award is dedicated to the memory of Hei-jin Woo, a Korean female engineer and scientist working in the water field. The Award further

serves to recognize the achievements of women engineers in the water field.

**IWA Communications and Marketing Awards:** Assessed by the IWA Marketing and Communications Specialist Group, these awards seek to:

- Enhance an integrated and sustainable view on Water as the Essential Good
- Heighten the awareness among water utilities world wide of the increasing importance of establishing professional and effective communications with users of water and water services.

Entries for awards under this heading should reflect any aspect concerned with the provision of water and wastewater services – the Essential Services. The categories:

- Best popular presentation of water science
- Best promoted water protection activity or programme

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## Important Notes for all Awards

Recipients of IWA Awards will be given comprehensive publicity in Water21, on IWA's Website as well as via press releases to the world's leading water sector media.

All recipients must be able to attend the awards ceremony at the forthcoming World Water Congress to be held in Vienna in September. Thus proposers should check that nominees can meet this key condition. Full details of the eligibility criteria and nomination process are available on the IWA website [www.iwahq.org](http://www.iwahq.org) or via IWA Executive Secretary, Bernie O'Neill, email [Bernie.oneill@iwahq.org](mailto:Bernie.oneill@iwahq.org) Tel: +31 703 150 789

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- Best water professionals recruiting programme
- Reports
- School information programme
- Customer bills
- Customer services activities

**IWA Project Innovation Awards:** recognises excellence and innovation in project conception and results; focuses on water engineering projects

throughout the world and builds on a national awards programme at its base. The programme runs on a two-year cycle with the regional project awards presented in regional forums, and the global project awards being delivered at the biennial IWA World Water Congress. Eligibility, criteria and entry forms for the 2008 Awards are available at [www.iwahq.org](http://www.iwahq.org) and the deadline for entries will be 14 March 2008.

**IWA Sustainability Specialist Group Prizes:** seeks to encourage reflection by researchers and practitioners about the implications of their work for sustainable water management and

to recognise contributions which demonstrate significant progress towards the sustainable management of water resources in an urban environment. The prize recognises two types of award: research (the IWA Sustainability Specialist Group prize for research excellence in support of sustainable urban water management) and practice (IWA Sustainability Specialist Group prize for innovation in the practical realisation of sustainable urban water management). Eligibility, criteria and entry forms for the 2008 Awards are available at [www.iwahq.org](http://www.iwahq.org) and the deadline for entries will be 1 June 2008.

## The IWA Project Innovation Awards 2008

The IWA Project Innovation Awards programme recognises excellence and innovation in water engineering projects throughout the world these are identified by five key criteria in the following areas:

- applied research projects
- planning projects
- design projects
- operations/management
- small projects

The programme runs on a two-year cycle with the regional project awards presented in regional forums, and the global project awards being delivered at the biennial IWA World Water Congress, the last one being at the Beijing Congress in 2006. The programme's goal is in keeping with the IWA's founding mission of "connecting water professionals worldwide to lead the development of effective and sustainable approaches to water management".

### Key Features of the Programme

- recognise excellence and innovation in project conception and results

- focuses on engineering and water
- builds on national awards programmes to
- create a set of regional and global awards
- web and email based application and judging

There are three regional bases of North America (AAEE), East Asia and Pacific or Europe. The winners of the regional programme will be announced at invitation-only events 30 April 2008, Washington DC (AAEE awards lunch), 13 May 2008, Amsterdam, (as part of an introduction to the Aquatech conference and exhibition) and 26 June 2008, Singapore, (as part of the Signapore Water Week).

The global award winners will be presented at an awards dinner at the IWA World Water Congress in Vienna, 10 September 2008. Winners will be entitled to a physical display of their entry at the Congress Exhibition Centre, a feature article in Water 21 and the IWA Yearbook, and the use of the IWA Project Innovations Awards certificate in advertising.

An international panel of judges drawn from IWA membership will be used to evaluate



the submissions against an established set of criteria that focus on excellence and innovation in project conception and results.

### Many thanks to our sponsors:



## Sustainability in Urban Water Management awards

The IWA Specialist Group on Sustainability in the Water Sector is pleased to announce that nominations are now open for its 2008 Sustainability in Urban Water Management awards. The general objective of the awards is to encourage reflection by researchers and practitioners about the implications of their work for sustainable water management and to recognise contributions which demonstrate significant progress towards the sustainable management of water resources in an urban environment. These awards, sponsored by CH2MHILL, recognise and celebrate distinctive contributions in the field of sustainable urban water resources management.

Two categories of award are open for nomination, which close on 1st June 2008.

- Research excellence in support of sustainable urban water management



- recognising excellence in any area of scientific research or theory development related to sustainable urban water management. Nominations for this award will be in the form of a published paper or article in any peer reviewed journal and the award recipient will be the author or authors of the contribution.

- Innovation in the practical realisation of sustainable urban water management - recognising innovation in the application of sustainable urban water management. Nominations for this award will focus on a project or programme of water management interventions and the prize recipient(s) will be representatives of the project / programme implementation team.

Winning entries will be showcased and prizes awarded during the IWA World Water Congress which will be held in Vienna, 7-12 September 2008.

Further details about the prizes and nomination forms can be found at [http://www.iwahq.org/templates/ld\\_templates/layout\\_633184.aspx?ObjectId=669872](http://www.iwahq.org/templates/ld_templates/layout_633184.aspx?ObjectId=669872), alternatively, please contact us on [sustainability-prize@iwahq.org](mailto:sustainability-prize@iwahq.org)



World Water Congress  
and Exhibition

It's all about water

7-12 September 2008



VIENNA



Enquiries

Conference [2008vienna@iwahq.org.uk](mailto:2008vienna@iwahq.org.uk) +44 20 7654 5500  
Exhibition [roy.agterbos@iwa-exhibitions.com](mailto:roy.agterbos@iwa-exhibitions.com) +31 23 7505105

[www.iwa2008vienna.org](http://www.iwa2008vienna.org)

## Water and climate change on IWA World Water Congress agenda

It is seven years since the IWA World Water Congress has been held in Europe. This year it will be in Vienna, Austria, from 7 to 12 September.

During those seven years there have been many changes, including the Water Framework Directive (WFD) and the rise of the European Union. Delegates at the Vienna Congress will hear about the latest trends and developments in water management worldwide.

The Association received 1,346 papers for this event, reflecting a great interest in the design and operation of water systems, the management and planning of water services and measures to mitigate the impacts of climate change.

2008 marks the United Nations' International Year of Sanitation, so the Congress is an ideal global platform for countries to work on reviewing, developing and strengthening their sanitation policies.

The latest cutting-edge technologies from around the world and the Danube region will be on display in the exhibition. There will also be

national pavilions from Germany, Austria, Israel, the Netherlands, Norway, Sweden, Italy, Japan, Korea and Singapore.

- IWA is grateful to the sponsors whose financial support will make it possible for large numbers of delegates to attend. Those providing the greatest support are the City of Vienna as institutional partner, Siemens, Suez and Veolia Water as principal sponsors

and ITT as platinum sponsor. They are joined by three new gold sponsors: Miya, Buderus and BWT.

Registration for the IWA World Water Congress in Vienna opens in April. In the meantime, information to help you plan your European visit will be uploaded progressively at [www.iwa2008vienna.org](http://www.iwa2008vienna.org)



## IWA STAFF NEWS –

### Ase Johannessen new IWA Programme Development Officer



Ase is supporting the development and deployment of the Association's Global Development Solutions (GDS) programme internationally and regionally.

Until November 2007 Ase worked with strategic communications with the IUCN - The World Conservation Union, giving technical support to the Okavango Delta Management Plan in Botswana and IUCN's programmatic work in Southern Africa, including the water programme.

Ase's interest in water and sanitation is focused on innovative and strategic solutions for planning and communication. Ase is a

practical person who wants to create value and sustainability in the sector, ultimately for the benefit of the world's developing community. Ase is excited about the opportunities that IWA provides being an honest broker and drawing from the vast capacity of practice and expertise of the IWA membership.

Ase has an MSc in Biology (1999) specialising in systems ecology. Ase is currently working on her PhD thesis on the role of communication for collaboration and learning in freshwater management and hopes to graduate partly in March 2008.

Ase has a project management background from working at Stockholm International Water Institute (SIWI) with the Stockholm Junior Water Prize, a project coordinating about 20 youth competitions in different countries.

Ase has further been authoring water educational material for African water classrooms. She has worked as a policy advisor at Defra's Water Directorate, UK Government, in water supply and regulation, and as a consultant for Water Research center WRc (UK) on social learning and contributing to the (UK) Environment Agency's communication strategy for river basin management.

Ase is from the Swedish countryside and loves to be outdoors, hiking, cycling, canoeing etc. One of her passions is meeting people, and she is very interested in different cultures, artistic expressions, and knowing about our common history.

Contact details: Tel: +31 703 150 797

E-mail: [Ase.johannessen@iwahq.org](mailto:Ase.johannessen@iwahq.org)

# IWA and International Year of Sanitation 2008



## Preamble and background

As part of a wider process to focus attention on this neglected issue, 2008 was designated as the International Year of Sanitation [IYOS] by the United Nations on 21 November 2006. The UN identified eight broad based objectives for IYOS including:

- Increasing awareness and commitment from actors at all levels;
- Mobilising Governments (from national to local) existing alliances, financial institutions, sanitation and other service providers;
- Securing real commitments to review, develop and implement effective action to scale up sanitation programmes;
- Encouraging demand driven, sustainable & traditional solutions;
- Securing increased financing to jump start and sustain progress via commitments;
- Developing and strengthening institutional and human capacity;
- Enhancing the sustainability and therefore the effectiveness of available sanitation solutions and;
- Promoting and capturing learning to enhance the evidence base and knowledge on sanitation.

The response from the international community to IYOS has been predictable; a great deal of initiative launching, documents and events. In planning the Association's response to the IYOS, we need to be conscious of how activities will add value for members and have longer lasting impact beyond 2008.

This document sets out the response and initiatives that IWA will apply to the IYOS.

## Anticipated outcomes for IWA from IYOS

- Awareness raised about IWAs role and activities in supporting sustainable sanitation interventions;
- High value, high profile activities that members are actively engaged in;
- Clear indication of IWA activities and intent on this subject;

## Objectives for IWA during IYOS

- Communicate the range of IWAs existing work on sanitation to a cross-section of its membership [and non-members];
- Deliver selected, high value, high quality deliverables, activities and events

## Summary activities

The following activities are planned by IWA for IYOS:

### Events

- Vienna Congress, September 2008 [seminars | papers | keynote speeches]
- SIWI World Water Week 2008, August 2008 [2 workshops | 2 seminars | media work on this subject]
- Sanitation 21 task force, quarter 2, 2008 [consultation event on Sanitation Charter]
- Existing IWA calendar of sanitation related events, including:
  - Water Safety Plans: Global Experiences & Future Trends - Lisbon, Portugal 12-May-08 - 14-May-08



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- Sanitation Challenge - Wageningen, The Netherlands 19-May-08 - 21-May-08
- Aquatech Amsterdam 2008: Millennium Development Goals on Sanitation - Amsterdam, The Netherlands 30-Sep-08 - 03-Oct-08

## Documents

- Sanitation Charter – a document outlining 10 principles of good sanitation programming to which organisations in the sector will subscribe / endorse;
- IWA Reference Paper – providing a clear message about the impacts of sanitation and promising examples
- Article series in Water 21 [three articles articulating main issues, followed by summary article following World Water Week and World Water Congress outcomes]
- Booklet containing all articles for general promotional use in 2008 and beyond

## Initiatives

- Community of Practice for Young Water Professionals – mobilising and mentoring the next generation of young professionals interested in sanitation [research and practice focused]
- Sanitation Connection – an online, full text directory of key sanitation related documents
- Sanitation Lexicon – an open source website that allows practitioners to develop consensus on key terms in use in the sector
- Sanitation Learning Alliance – an alliance of practitioners working locally on the marketing of sanitation.

## Timeline

- Development of Charter – Q2-Q3, with launch at the Vienna Congress
- Reference paper [revision] – Jan/Feb 2008
- Article series in Water 21 – Q2-Q3
- Summary booklet – Vienna Congress
- Community of Practice for YWP
- periodic in 2008
- Sanitation Connection – soft launch in March 2008
- Sanitation Lexicon – soft launch in March 2008
- Sanitation Learning Alliance – periodic in 2008

## A focus on IWA's Aspire region

### IWA Executive Director visits Vietnam and Philippines

IWA Executive Director Paul Reiter and Director of IWA Singapore Regional Office Ryan Yuen visited Vietnam and Manila in the Philippines from 13-19 January 2008 as part of IWA's regionalisation efforts to reach out to countries within the East Asia & Pacific region. It was the first trip by IWA to both countries since the Singapore regional office opened in June 2007.

The visit in Vietnam covered Hanoi, Haiphong and Ho Chi Minh City and primarily consisted of visits to water supply companies, associations and academic institutions (see below for listing) to allow IWA to gain a better understanding of the water supply and sanitation situation in Vietnam.

- Hanoi University of Civil Engineering
- Vietnam Water Supply and Sewerage Association
- Hanoi Water Works (Business Company No. 1)
- Hanoi Water Business Company No. 2
- Haiphong Water Supply Company
- Haiphong Sewerage & Drainage Company
- Binh Duong Water Supply – Sewerage – Environment Co Ltd
- Saigon Water Corporation

Of particular significance was the meeting with the Vice-Minister of the Ministry of Construction in Vietnam Mr Tran Ngoc Chinh. Besides introducing the Association and securing the support of the Ministry in the IWA activities in Vietnam, the Vice-Minister also verbally accepted the invitation to attend the Vienna biennial Congress. As our important partner for the region, there were also substantive discussions with SEAWUN (Southeast Asian Water Utilities Network) on a three-year collaborative workplan between IWA and SEAWUN, including the agreement to jointly organise a Conference on Sanitation Options in the Asia-Pacific in Hanoi on 18-20 November 2008.

The Manila-leg of the trip also achieved several positive outcomes, notably a good meeting with the Asian Development Bank where both organisations agreed to work jointly on efforts in the implementation of Water Operator Partnership (WOPs) within the region and other joint collaborative activities such as workshops, seminars and publishing. The IWA delegation also had the privilege of inducting the newly elected President and Board of Directors of the Philippine Waterworks Association (PWWA) at a simple dinner ceremony, and



Group Photo with the Vice-Minister of Ministry of Construction, Vietnam



A photo with Manager of PWWA Neneth Javier in front of the PWWA Building

held subsequent discussions with the PWWA on support for its activities in the Philippines. The delegation also met both concessionaires operating in Metropolitan Manila – Maynilad Water Services and Manila Water Company.

All in, the trip to Vietnam and Manila turned out to be extremely successful with good outcomes at all levels for IWA. More importantly, it helped IWA to reestablish and strengthen its linkages with the water sector in both countries. I believe we can look forward to the future with great optimism as IWA continues its engagement with both countries through the regional office. In turn, we can expect greater commitment and participation from both countries in future IWA programmes and activities, particularly in the ASPIRE region.



Paul Reiter inducting the new Board of Directors of the Philippine Waterworks Association



Visit to Haiphong Water Supply Company

# 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.

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](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](mailto:members@iwahq.org)) and tell us which groups you would like to join.

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

- IAHR/IWA SG on Marine Outfall Systems
- Rainwater Harvesting & Management
- Sludge Management

professionals to promote and support rainwater harvesting initiatives worldwide as an important component in the sustainable provision of freshwater to individuals and communities. The group seeks to achieve this by the sharing of expertise and experience among its members and with other interested individuals and organisations, by organising specialist workshops and conferences, the issuance of newsletters, and undertaking cooperative projects and activities with other groups of the International Water Association.

Further information about the group can be found at the groups web-page at:

[http://www.iwahq.org/templates/ld\\_templates/layout\\_633184.aspx?ObjectId=646599](http://www.iwahq.org/templates/ld_templates/layout_633184.aspx?ObjectId=646599)

## IAHR/IWA SG on Marine Outfall Systems



### Background

Worldwide, the use of outfalls is increasing rapidly. Submerged multiport diffusers are gaining increased acceptance as effective means for the disposal of treated municipal or industrial wastewater, stormwater and combined sewer overflows, cooling water, and brine effluents from desalination plants into coastal waters and estuaries. Although the science and technology for the design and construction of such installations has advanced significantly, major questions remain, especially related to measurements and predictions of the impacts on the environment, hydraulic design and structural protection, and understanding of long-term effects in order to achieve sustainable solutions to wastewater management in coastal regions.

### Objectives

The main objectives of the Committee are to advance the science and technology of all aspects of coastal wastewater discharges from outfalls and their design, and to facilitate communication between the diverse groups of practitioners in the field. The Committee recognises the considerable potential for integrated systems of wastewater treatment and disposal that consider the response of the receiving waters and their natural assimilative capacity. The design and siting of submarine outfalls is a complex task that relies on many disciplines including oceanography, civil and environmental engineering, marine biology, construction, economics, and public relations. These diverse disciplines are rarely brought together in a single group and the strength of

the Joint Committee would be the linkage of the expertise of IWA, which is more oriented towards wastewater treatment and water quality issues (e.g. bacteria modeling, nutrient transformation, algae growth, sedimentation and flocculation processes), with the expertise of IAHR, which is more oriented towards hydraulics and fluid mechanics (e.g. jets and plumes, stratified flows, coastal flows, mixing and transport processes, physical and numerical modeling, wave forcing, pipe scouring, internal manifold hydraulics).

The group are planning to have elections in the next months, nominations are welcome. Please send your CV to the Specialist Group Programme Officer at: [frances.lucraft@iwahq.org](mailto:frances.lucraft@iwahq.org)

Further details can be found at the IWA web-page at the following link: [http://www.iwahq.org/templates/ld\\_templates/layout\\_633184.aspx?ObjectId=633935](http://www.iwahq.org/templates/ld_templates/layout_633184.aspx?ObjectId=633935)

Further details about the group can be found on their website at: [www.outfalls.net.ms](http://www.outfalls.net.ms)

## Rainwater Harvesting & Management

Many communities around the world have always harvested rainwater for their freshwater needs because it was the simplest solution. It has been a traditional strategy for islanders and dry land inhabitants and it has helped them to conserve their ecosystems. Now other communities drastically affected by changing climate and rainfall patterns are using RWH to help their adaptation to these conditions. The objective of the group is to be a forum for water



## Sludge Management

The group deals with all kinds of sludge (sewage, waterworks, etc.). The objectives of the group are to advance knowledge and transfer scientific and technical information on all aspects of sludge management, including production, characterisation, stabilisation, digestion, thickening, dewatering, thermal processing, agricultural reuse, production of usable materials, and ultimate disposal. Relevant to the group activity is also the integrated management of sludge with other organic wastes. The group generally intends to organise two events in each year there is not an IWA World Water Congress and there should be significant time between events, or significant differences in focus/theme or geographic location of the events to ensure adequate attendance at both events. The group also operates the "Sludge Network", established in 1975, for research scientists and operators involved in wastewater sludge. The group also planned the establishment of an International Sludge Research Centre at Nanyang Technological University in Singapore for promoting research and information exchange on sludge management.

Other activities undertaken by the Group include:

- establishing an International Sludge Research Centre at Nanyang Technological University, Singapore) for promoting research and information exchange on sludge management;
- developing a sludge "Decision making map" to help decision makers in taking the most appropriate solution to their specific sludge problem; and
- developing the Sludge Network to serve as a resource for research scientists and operators involved in water and wastewater residuals.

For further details please view the groups web-page at: [http://www.iwahq.org/templates/ld\\_templates/layout\\_633184.aspx?ObjectId=633931](http://www.iwahq.org/templates/ld_templates/layout_633184.aspx?ObjectId=633931)

## 60 second interview – Doulaye Koné

**Dr Doulaye Koné, MAS, MSc,  
BSc**

**Swiss Federal Institute of  
Aquatic Science and Technology  
(Eawag)**

**Department of Water and  
Sanitation in Developing  
Countries (Sandec)**

**8600 Dübendorf Switzerland**

Doulaye Koné was born in Côte d'Ivoire. He holds a PhD and MAS in sanitary and environmental engineering; a MSc. and BSc in Physics and Chemistry. Currently a Programme Officer, Excreta and Wastewater Management at Eawag, the Swiss Federal Institute of Aquatic Science and Technology, Department of Water and Sanitation in Developing Countries (Sandec), he has 12 years research and teaching experience on cost effective solutions for excreta and wastewater management and capacity development in developing countries.

Prior to Sandec, Koné worked as a researcher in Belgium at the Department of Environmental Management (University of Liège, campus Arlon) on the influence of aquatic micro fauna grazing activity on the fate of bacteria in natural treatment plant (stabilizations ponds; constructed wetlands). These investigations continued later in Burkina Faso, where his research aimed at designing treatment plants for enhancing nitrogen recovery and pathogen removal under reduced hydraulic retention time conditions.

Dr Doulaye Koné joined Eawag/Sandec in 2003 to lead research programmes on his chosen topics of faecal sludge management and greywater / wastewater management in developing countries. His current research activities aim at linking sanitation infrastructure planning to cities' economic development agenda. He is also involved in individual and institutional capacity development programmes, and his geographical field of expertise includes Africa, Asia and Latin America where most of his projects are engaged. In addition to lecturing at the Swiss Federal Institute of Technology, Zurich, Koné is a guest lecturer at UNESCO-IHE and the International Institute for Water and Environmental Engineering (2iE) in Burkina Faso.

**What do you consider to be the most significant recent change in your field of expertise to have occurred in the last 10 years?**

The most significant changes in the last five years have been in raising the profile and importance of sanitation in the international

policy arena; in the agenda of donor agencies, and through initiatives such as 'WASH' (Water, Sanitation and Hygiene) campaign.

**What do you consider to be the most significant future challenge that professionals must deal with in the next 10 years?**

Today, the challenges for access to sanitation and water are well known and documented, even at municipal level. However, the capacities and expertise required to provide these services are still weak, at all levels. When visiting projects which have a strong focus on infrastructure investment, it is common that beneficiaries ask for external expertise to support them in operation and maintenance procedures or to develop further technology to cope with future changes. Transformation in social life and interaction can lead to behaviour change; hence, technology needs to be adapted, continuously to the social, cultural, health and environmental norms locally.

To cope with change and adapt solutions to current and future challenges, we need to develop and strengthen capacities at national and local levels. Current capacity building programmes neglect the role of universities. Access to appropriate educational programmes in most Universities is limited only to masters and doctoral schools - this should be extended to BSc level to create a cadre of researchers and operators. Good local capacity is the key to sustaining investment and achievement in the sector.

**Whom do you consider to be the leading experts in your field, outside of your own organization, and why?**

I would like to refer to Professor Lucien-Yves Maystre from the Swiss Federal Institute of Technology, Lausanne and Dr. Cheikh Touré (former Director CREPA) who launched a small project 20 years ago with the Swiss Development Cooperation to investigate low cost solutions for sanitation and water supply in West Africa. This project has developed further to give birth to an international research, training and development organisation in 1988 – CREPA - the regional Centre for low-cost Water Supply and Sanitation. CREPA is a well established international institution in the sector and has national branches in 12 countries which are heavily involved in policy dialogue, advocacy, training, research, and project implementation. This network is playing a vital role in awareness raising, advocacy, research and training for the francophone countries and shares its experiences with other networks.

**Which report, product or service from your organization deserves more attention and why?**

A major contribution of Sandec's work to the international water and sanitation community



is the development of the Household Centred Environmental Sanitation Approach (HCES), jointly published with Water Supply and Sanitation Collaborative Council (WSSCC) in 2005. As a response to the need to challenge conventional thinking in environmental sanitation (going beyond business as usual), HCES is a radical departure from past central planning approaches as it places the household and its neighbourhood at the core of the planning process. The approach does not promote any technology or technology arrangement, but a planning process which leads to the identification and selection of sustainable sanitation systems taking into account the local technology, institutional, socio-economic, health and ecological arrangements.

**In what ways would you like to see IWA change in the next 5 years?**

I see a role for IWA in stimulating regional cooperation or networking, a model which IWA has successfully implemented internationally. These regional networks will create a platform for scientific and professional exchange, bringing practitioners and researchers together. Whilst some regional networks are already established within IWA, the effort needs to be pursued and tailored more towards the participation of donor agencies, consultants and other potential users or funders of research.

**A review of significant work interests, specialisms**

One third of the world does not have access to adequate sanitation, and yet, we do not have sufficient capacity and financial resources to service this population. Hence, many countries are still off-track to meet the Millennium Development Goal target for sanitation. Among the serviced population, 2.6 billion are using onsite sanitation infrastructure for excreta, greywater and wastewater disposal. These technologies produce liquid, solids (bio solids) or a mixture of sludge which in the majority of cases cannot be safely treated, disposed or reused



within the household compound.

Since 1982, Eawag/Sandec has been working to make onsite sanitation systems sustainable through its programme on faecal sludge management. Many results are available but still this topic is not given adequate prominence. Upgrading existing systems in "latrines-based cities" is an urgent priority in order to reduce excreta-related disease burden and protect the living and natural environment. It is a dream to believe that existing onsite technologies (latrines, septic tanks, small bore sewers) can simply be phased-out while we are lacking resources to service the unserved with networked sanitation infrastructure.

### Identification of fracture points within their discipline – issues of conflict, debate

Most leading research institutions working towards the achievement of the MDGs are located in the North (i.e., Europe, USA). As a consequence, the best training curricula for sanitary engineers are co-located in Northern institutions. Although this situation reinforces the development of North-South partnerships, it induces a bias in the debate about what is a sustainable sanitation system. Technologies and concepts are developed, often in North, and then proposed for implementation or promotion. The strong focus on technology or infrastructure provision as the only way to achieve the MDGs targets for sanitation is keeping us away from a

much needed systems approach (such as the Bellagio Principles and IWA's own "Sanitation 21" framework). This systems approach forces planners, engineers and donors to consider the whole chain and discuss the sustainability of technology. The system should be at the heart of the discussion and should be looked at in the light of sustainability criteria in different context.

### Forthcoming news of interest from the interviewee in respect of their work programme – publications, workshops, initiatives

Eawag/Sandec is currently testing the preliminary guideline for the implementation of the Bellagio Principles: the Household Centre Sanitation Planning Approach (HCES). The EU-Netssaf project (Network for the Development of Sustainable Approaches) being implemented in West Africa (which Eawag/Sandec is part of) is setting the ground for implementing large scale sustainable sanitation solutions. The results will be available in 2008, the international year dedicated to Sanitation! Furthermore, I trust that the Sustainable Sanitation Alliance, which started in the last month of 2006 to develop key activities for 2008, will continue its work beyond 2008!

### Career defining moments; changes in direction or thinking; core lesson learned

Eawag/Sandec, as an international actor in the sanitation and water sector is a bridge for Southern-oriented research partnerships. Through its efforts, it has overcome some of the bias I mentioned above. We do research not only in order to generate knowledge, but to develop capacities, especially in developing countries where most of our projects are located. We focus on the development of new concepts and technologies in water and environmental sanitation. Our research on technology development includes technical, economic, social, institutional, health and environmental aspects of any "solution". We are also involved in advocacy, education and awareness raising activities to making the results of our research available and well-known by potential users. I am a strong believer in our mission statement.

### Contact Details

**Doulaye Koné, PhD**

**Programme Officer, Sanitation**

**Swiss Federal Institute of Aquatic Science and Technology (Eawag)**

**Department of Water and Sanitation in Developing Countries (Sandec)**

**Überlandstrasse 133 - P.O. Box 611, 8600 Dübendorf, Switzerland**

**Tel: +41 (0)44 823 55 53**

**Fax: +41 (0)44 823 53 99**

**Email : [Doulaye.Kone@eawag.ch](mailto:Doulaye.Kone@eawag.ch)**

**<http://www.sandec.ch/>**

**<http://www.north-south.unibe.ch/>**

## Membership news

IWA would like to thank all those members who have already renewed their membership for 2008.

Remember, Individual Members can renew online or email [members@iwahq.org](mailto:members@iwahq.org) for help. If Corporate Members should have any problems they can contact IWA's dedicated Corporate Membership Officer Skye Rytenschild at [skye.rytenschild@iwahq.org](mailto:skye.rytenschild@iwahq.org).

By the beginning of January, IWA had already renewed membership records for 2,420 individuals and 238 corporates.

These are mainly members who have:

- Taken out the multi-year option
- Renewed after receipt of the 1st reminder

At the same point in 2007 the figures were 2,144 for individuals and 160 for corporates.

At the time of writing, the number of active members has risen significantly to 3,032 for individuals and 283 for corporates! These are the highest number of active members by beginning of February we have seen since 2002!

To ensure that your IWA membership profile and contact details are correct in the forthcoming 2008 IWA yearbook please update any changes to your membership record by the end of March online at <https://www.portlandpress.com/iwa/membership/change.cfm>

## Introducing IWA's new Corporate Membership Officer – Skye Rytenschild

Skye has joined the team at IWAHQ to facilitate the strengthening of personal relations between IWAHQ and the corporate community.

Skye graduated from the University of Queensland in 2004 with a Bachelor of Arts, majoring in Politics and Literary Studies. She then spent two years working and travelling in Asia – teaching English in Osaka, Japan and working for an aid organisation based in Hong Kong.

Languages English (Native); Japanese (Basic Conversational)

Contact Details Direct Line: +31 70 3150 785

Email: [skye.rytenschild@iwahq.org](mailto:skye.rytenschild@iwahq.org)



## New Corporate Members Update

The following list of organisations provides an overview of the type and geographic reach of companies that have recently joined IWA.

- **IRAR (Portugal)**  
[www.irar.pt](http://www.irar.pt)

IRAR (Instituto Regulador de Águas e Resíduos) are responsible for the consolidation of a clear and effective regulation model for the public water supply, urban wastewater and solid waste management in Portugal. They are responsible for the structural regulation of the sector and the regulation of utilities performance (including economic performance, quality of service performance and water quality performance).

The Water and Waste Regulatory Institute (IRAR), as the Portuguese drinking water authority, recognises the importance of "The Bonn Charter for Safe Drinking Water" and the necessity of its adoption by all the player makers involved in the drinking water thematic, and is promoting its key principles to the Portuguese water suppliers.

- **World Toilet Association (Korea)**  
<http://en.wtaa.or.kr/>

The World Toilet Association is an international organisation for the promotion of sustainable toilet and water management, with a world wide operation. Their main objective is to build and improve sanitation conditions on a sustainable basis; advocating and raising awareness on sanitation issues worldwide. WTA works with communities, partner organizations, local, regional and national government bodies undertaking sustainable development projects, emergency work, research, lobbying and campaigning for an improvement of the toilet facilities and sanitation in the world. WTA works on various issues including health education, school sanitation and hygiene practices, building capacity and transferring information and sustainable technology for toilet facilities and water management around the world

- **Baoshan Iron & Steel (China)**

[www.baosteel.com](http://www.baosteel.com)

Baoshan Iron & Steel is a subsidiary of Baosteel - a large iron and steel conglomerate with the largest scale of production and the most complete varieties and specifications of products in China. It focuses on high value-added market segments. Its annual steel-making capacity has reached 20 million tons. Baosteel's product mix is dominated by steel plate & tube supplemented by steel bar & wire. It is also currently developing stainless steel products. High grade steel products, such as automobile steel, shipbuilding steel, household electric appliance steel, pipeline steel and oil tube, produced by Baosteel dominate the domestic market.

- **Water Works of Budapest (Hungary)**

[www.vizmuvek.hu/](http://www.vizmuvek.hu/)

Water Works of Budapest provide potable water supply to over 2 million people in the Hungarian capital and provide potable water of excellent quality to 21 settlements situated near Budapest. Their water pipes cover a network of almost 5000 kilometres in the city. Their activities of water treatment, maintenance and repair and water quality analyses are supported by world standard technologies. Over 700 potable water producing wells are operating on the Szentendre Island, Csepel Island, Margaret Island, and on the right and left bank of the Danube. These render possible the supply of up to 1 200 000 cubic meters of potable water daily, exceeding the typical daily consumption of 600 000 - 800 000 cubic meters of the inhabitants in Budapest.

- **Halo Source, Inc (USA)**

[www.halosource.com](http://www.halosource.com)

HaloSource is a global antimicrobial and clean technology solutions company whose goal is to improve quality of life and health through unique proprietary antimicrobial solutions that reliably and effectively purify water and

kill germs. HaloSource's ingredient brands provide reliable, tested and proven solutions in the product categories of clean water and antimicrobial protection. HaloSource provides partners unique, proprietary solutions that offer broad market potential and acceptance and help partners differentiate their offerings from competitors.

- **Veolia Viz (Hungary)**

[www.veoliaviz.hu](http://www.veoliaviz.hu)

The world's largest water utility service provider, Veolia Eau, is also a market leader in Hungary in water and wastewater services, and on the related civil and construction engineering markets. In Hungary Veolia Viz supplies 16 million m3 of healthy drinking water to its private consumers every year and takes care of the collection and treatment of 300 million m3 of wastewater and rainwater. The staff of more than 2000 specialists provides the local authorities with a quality service day in day out that satisfies all requirements.

- **RUWAS (Uganda)**

[www.ruwas.co.ug/](http://www.ruwas.co.ug/)

RUWAS (Reform of Urban Water and Sanitation Sector Programme) was established in 2002 to support the urban water and sanitation reforms. A joint project of the Ministry of Water and Environment and German Technical Cooperation (GTZ), RUWAS was commissioned by the governments of Germany and Uganda. It supports the development of innovative solutions to improve urban sanitation services and hygiene behaviour, especially relying on partnerships between the public and private sectors. They work across several areas, which include the testing and sharing of good practices for sanitation and hygiene, drawing from the broad international experience of GTZ in this area. They also support sector-wide initiatives, especially through the National sanitation Working Group, to develop an enabling environment and promote awareness of the value of good sanitation and hygiene practices.

## Making the most of IWA

### CLIMATE CHANGE - A CALL FOR MEMBER CASE STUDIES

IWA is calling for member case studies with the aim to create a portfolio of solutions that deals with the challenges of climate change. This will provide an important resource for members who would like to learn from the experiences in the IWA network. It will also be an entry point for direct exchange. The case studies will be available for members on the IWA website. Case studies should be able to give examples of adaptation measures, for example how to diversify sources, adapting operations and design to deal with extreme events, build incentives to save water and energy, and to build robustness and resilience etc.

**What to do?** Please find a questionnaire online for the case studies here [[http://www.iwahq.org/templates/ld\\_templates/layout\\_633184.aspx?ObjectId=645440](http://www.iwahq.org/templates/ld_templates/layout_633184.aspx?ObjectId=645440)] and follow the link to climate change. Please direct any questions to [ase.johannessen@iwahq.org](mailto:ase.johannessen@iwahq.org)



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#### Registration Enquiries

LET-2008 Organising Committee  
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Email: [info@cbs-congress.ch](mailto:info@cbs-congress.ch)

#### Exhibition Enquiries

Robert Melaard  
Tel: **+31 653 162 094**  
Email: [robert.melaard@iwa-exhibitions.com](mailto:robert.melaard@iwa-exhibitions.com)

[www.eawag.ch/let2008](http://www.eawag.ch/let2008)

# IWA Events 2008

## Managing Rainfall Runoff in the Urban Environment – Minimising Problems and Maximising Benefits

10-11 June 2008

In March 2007, the UK's Royal Commission on Environmental Pollution issued a report that was the outcome of a three year investigation: The Urban Environment. The issues in that study that impact on water management are picked up in the theme for the conference; especially the need for new approaches to managing inter-related disciplines in towns and cities. The conference, organised by the UK Branch of IWA, will feature speakers from the development sector, the water industry, local authorities, and specialist researchers and contractors with experience of applying a joined up approach to urban water issues: drainage, water quality improvement, habitat creation, amenity and social engagement.

Email: [marie-pierre.whaley@nwl.co.uk](mailto:marie-pierre.whaley@nwl.co.uk)

## Aquatech Amsterdam 2008: Design and Operation of Membrane Plants for Water, Wastewater, Industrial Effluents

1 - 2 October 2008, Amsterdam,  
The Netherlands

Practical case studies and results of research projects will be presented with focus on techno-economical aspects of design and operation. The conference aims to develop and encourage international cooperation towards optimal membrane performance, cost reduction, energy consumption, process integration, waste production, importance of pretreatment. It will support operational research efforts and management modelling of membrane systems. Research needs will be identified and an international technology transfer process related to membrane application for improvement of water and waste water treatment processes in relation to regulations will be developed.

The proposed themes

- Practical case studies
- Membrane fouling and cleaning
- Minimizing energy consumption
- Minimizing environmental impact and costs
- Pretreatment
- System selection and integration
- Membrane life time
- Maintenance
- Alternative use of membranes in water systems

- Process engineering aspects

Email: [info@moorga.com](mailto:info@moorga.com)

Website: [www.moorga.com](http://www.moorga.com); [www.aquatechtrade.com](http://www.aquatechtrade.com)

## 5th IWA Specialist Conference Oxidation Technologies for Water and Wastewater Treatment

30 March - 1 April 2009, Berlin,  
Germany

Continuous basic and applied R&D already helped to improve the effort-benefit ratio of AOP in many applications as well as exploring and consolidating new fields of application and concepts of AOPs. The conference will bring together both experts from research and development as well as from industry. The discussion about novel developments of models, measurements, reactors and processes together with experience in recent full-scale applications including operational problems should promote the further progress of AOP.

The proposed themes

- Water and wastewater treatment
- Soil treatment
- Treatment of emerging contaminants
- Fundamentals
- Innovations and applications:

Email: [aop5@cutec.de](mailto:aop5@cutec.de)

Website: [www.aspd5.com](http://www.aspd5.com)

## Water Loss 2009

26-29 April 2009, Cape Town,  
South Africa

The Conference is the fourth event in a series of IWA water loss reduction specialist conferences, following the "Leakage 2007" that is at present being held in Bucharest, Romania.

The Water Loss Task Force chose Cape Town, South Africa, as the location for Water Loss 2009. It was brought to the African Region in order to address the need for water loss reduction in Africa as well as the strengthening the ties of the IWA with the African water utilities.

The proposed themes

- Water Loss Reduction in Africa
- Performance Indicators
- Real Losses
- Apparent Losses
- Pressure management
- District Metered Areas
- Economics of Leakage Management

Email: [waterloss2009@randwater.co.za](mailto:waterloss2009@randwater.co.za)

Web: [www.waterloss2009.com](http://www.waterloss2009.com)

## Microbial Population Dynamics in Biological Wastewater Treatment

24-27 May 2009, Aalborg,  
Denmark

The specialist group on Activated Sludge Population Dynamics (ASPD) organize the next IWA international Specialised Conference on Microbial Population Dynamics in Biological Wastewater treatment in Aalborg, Denmark in May 2009. The conference will examine the development in the field in the period 2005-2009, especially on the effectiveness of solutions unveiled by the new microbial toolbox we have experience the past few years.

The proposed themes, amongst others are:

- Pure culture studies
- Population dynamics of microorganisms
- Storage processes in microbial communities
- Control of activated sludge settling and thickening properties
- General foaming control
- Full scale experiences using new activated sludge systems
- Degradation of xenobiotics

Email: [phn@bio.aau.dk](mailto:phn@bio.aau.dk)

Website: [www.aspd5.com](http://www.aspd5.com)

### DEADLINES

**28 March 2008** for submission of abstracts to 10th Latin American Workshop and Symposium on Anaerobic Digestion (18-19 October 2008, Eastern Island, Chile)

Contact: [adla2008@ucv.cl](mailto:adla2008@ucv.cl)

**31 March 2008** for submission of revised full papers to 11th International Specialised Conference on Watershed & River Basin Management (4-5 September 2008, Budapest, Hungary)

Contact: [trivent@trivent.hu](mailto:trivent@trivent.hu)

**7 April 2008** for submission of full papers to 2008 IWA North American Regional Membrane Research Conference (10-13 August 2008, Amherst, Massachusetts, USA)

Contact: [membrane@ecs.umass.edu](mailto:membrane@ecs.umass.edu)

# News from IWA Publishing – [www.iwapublishing.com](http://www.iwapublishing.com)

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

## Risk Management for Water and Wastewater Utilities



Author: Simon Pollard

The provision of safe drinking water and the protection of public health and the environment through the treatment of wastewaters is increasingly informed by risk-based decision-making. Aspects of utility management such as process design and optimisation, asset management and compliance monitoring rely on a mature understanding of process risk within a broader context of business and environmental risk management. Having provided rationale for the importance of risk management, the text begins with the familiar territory of unit processes and process reliability. It then broadens out to consider, first environmental then organisational risk management. The final sections are concerned with better utility decision-making.

This title belongs to the Water and Wastewater Process Technologies Series

ISBN: 1843391376 • January 2008 • 175 pages • Paperback

IWA Members Price: £52.50 / US\$105.00 / €78.75

<http://www.iwapublishing.com/template.cfm?name=isbn1843391376>

## \* Guidelines for the Identification of Ciliates in Wastewater Treatment Plants \*

Authors: Susana Serrano, Lucia Arregui, Blanca Perez-Uz, Pilar Calvo, Almudena Guinea



Ciliated protozoa are one of the most relevant biological communities in the reactors of wastewater treatment plants. These organisms are excellent tools to assess the biological status of the reactor being used to monitor wastewater treatment plants performance. This book has been designed to simplify identification of ciliates, bearing in mind the difficulties on the manipulation and proper identification of these species. The specific role of ciliates in WWTP is discussed; methods for observation together with a glossary of scientific words and a simple and easy key to the taxonomic groups of ciliates are also provided. Illustrations, drawings, photographs and brief morphological descriptions of the species are included. This is the first book to use the new official classification proposed by the Society of Protozoologists (2005).

ISBN: 1843391716 • February 2008 • 120 pages • Paperback

IWA Members price: £41.25 / US\$82.50 / €61.88

<http://www.iwapublishing.com/template.cfm?name=isbn1843391716>

## \* Cryptosporidium and Cryptosporidiosis \*

### Second Edition



Editors: R. Fayer and Lihua Xiao

Continuing to be the seminal work in the field, *Cryptosporidium and Cryptosporidiosis, Second Edition* covers every aspect involved in the study of these highly adaptable parasites from basic biology to the search for a vaccine. It introduces molecular biology by discussing recent discoveries in the genome, genetic regulation, and comparative genomics of several

species. Contributions present new biochemical data including metabolism and the investigation of structural proteins as potential drug targets. The book details transmission dynamics and molecular epidemiology, molecular methods for detecting infection, sources of contamination in foodborne transmission, and outbreaks and governmental regulations concerning drinking water, recreational waters, and waste management.

ISBN: 1843391929 • January 2008 • 576 pages • Hardback

IWA Members Price: £60.00 / US\$120.00 / €90.00

<http://www.iwapublishing.com/template.cfm?name=isbn1843391929>

## \* Restoring Floodplains in Europe \* Policy Contexts and Project Experiences



Editors: Timothy Moss and Jochen Monstadt

This book explores the reasons behind the discrepancy between growing policy interest in floodplains and limited instances of restoration. It presents original, comparative analysis of the shifting policy contexts of floodplain restoration in the EU, Germany, France and England and Wales, illustrating how recent reforms and re-thinking are creating new opportunities for restoring floodplains. Case studies of six schemes to restore floodplains - two from each of the countries studied - demonstrate how these opportunities are being exploited, but also what difficulties are being encountered by project managers.

The findings and recommendations of the book are targeted at researchers and professionals engaged in policy development and project implementation at EU, national and local levels in fields relevant to river and floodplain restoration.

ISBN: 1843390906 • February 2008 • 350 pages • Hardback

IWA Members Price: £60.00 / US\$120.00 / €90.00

<http://www.iwapublishing.com/template.cfm?name=isbn1843391317>

## \* Performance Assessment of Urban Infrastructure Services \*



Editors: Enrique A Cabrera, Jr. and Miguel Angel Pardo

Performance assessment has been one of the hottest topics in the water industry in the past decade. In that period, the International Water Association has played a key role, and the performance indicators systems developed for drinking water and wastewater utilities have become a reference worldwide.

This book represents a collection of the papers presented to the PI08 Conference, in Valencia, Spain (March 2008). The conference represents the final stage in the COST C18 Action, funded by the EU and brings together some of the most relevant professionals in the water industry. The included papers cover the latest trends in performance assessment, as well as some relevant case studies from practical applications in utilities around the globe.

ISBN: 1843391910 • March 2008 • 540 pages • Hardback

IWA Members Price: £63.75 / US\$127.50 / €95.63

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