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WaterMicro2015

registration is now open at www.watermicro2015.org and abstract submission is open till April 23, 2015



WaterMicro 2015

September 13-19

Lisbon, Portugal

The Organizing Committee of the 18th International Symposium on Health-Related Water Microbiology welcomes you to the WaterMicro 2015 Symposium, which will be held in Lisbon, Portugal, from 13th to 19th September.

This is an important and singular opportunity for the meeting and exchanging of ideas between the scientific community, students and professionals, providing the perfect opportunity to explore the state of the art and to debate essential issues related to these areas of expertise.

The topics covered at WaterMicro 2015 will be: viruses in water, water and sanitation in developing countries, microbial risk assessment, metagenomics, epidemiology of waterborne diseases, recreational water and health, microbial source tracking, catchment protection, water food and health, water reuse and microbiological quality of shellfish growing areas.

The Symposium will also offer workshops, including a workshop organized in collaboration with the WHO on Friday September 18.

On behalf of the Organizing Committee, we cordially invite you to join us in Portugal for a enjoyable and high quality scientific exchange,

Ricardo Santos & Silvia Monteiro
Instituto Superior Técnico

WaterMicro 2015

Abstract Submission: abstract submission for oral and poster presentations is April 23, 2015. Notification of acceptance for all abstracts will be sent by June 22, 2015.

Willie Grabow & Bursary Awards: The application deadline for bursary awards is April 23, 2015. Notification of acceptance will be sent by June 22, 2015.

Registration: Please visit www.watermicro2015.org to register securely online. Registration is now open. Early bird rates apply through June 30, 2015.

Entertainment: Lisbon culture is based on a past that dates from prehistoric times into the eras of the Roman and Moorish invasions. All have left their traces in a rich legacy of archaeological remains. Throughout the centuries, Portugal's arts have been enriched by foreign influences, including Flemish, French and Italian. The voyages of the Portuguese discoverers opened the country to Oriental influences and the shipping home of Brazil's wealth of gold and jewels fed the Baroque flame of decoration. Throughout the city you will find museums, gardens, monuments and an assortment of events where local and historical culture comes to life. The true "lisboeta" (person from Lisbon) soul is to be found truly and deeply in Fado. Love, fate, sadness, nostalgia... feelings whispered on a strong, but gentle, voice that can never be explained but only felt... The charm of Lisbon's cuisine lives in its traditions. Grilled sardine is the queen during the summer. Restaurants and "tascas" (small taverns) offer an exquisite variety of snacks and appetizers, like boiled snails or deep fried green beans. Also famous for its wines, Portuguese choose national wine as the ubiquitous table beverage. Although Portugal's waters abound with fresh fish, the dried, salted codfish known as 'bacalhau' is the national dish, boiled, with olive oil, potatoes, cabbage and sometimes chick-peas.



Grabow award

The IWA-HRWM Willie Grabow Young Investigator Award was established in honor of Professor Willie Grabow, a brilliant environmental virologist who stood at the cradle of our Specialist Group, and gave scientific support to developing countries in the environmental microbiology field and continues to inspire emerging scientists. The award, generously sponsored by IDEXX Laboratories, Inc. is presented at WaterMicro2015

The Young Investigator Award is to encourage young outstanding scientists in our field, specifically in developing countries. The award consists of a stipend for travel, lodging and registration costs for WaterMicro2015.

To nominate a young investigator for the award please visit www.watermicro2015.org to see the application process (due April 23, 2015). Please email nomination packets and questions to Bettina Genthe at bgenthe@csir.co.za.

Bursaries WaterMicro2015

Applications for Bursaries to attend WaterMicro 2015 are due on April 23, 2015. Students going to school in a developing country/region (IWA Low Income Countries), scientists working in a developing country/region, and mentor/student teams representing a developing country/region are eligible to apply. Awards support travel and attendance of WaterMicro2015. The application form can be requested at gertjan.medema@kwrwater.nl and will be made available on the WaterMicro2015 website. Submit applications as instructed on the form. The awardees will be notified by June 1, 2015.

Conferences

13 - 14 April 2015

International Conference on Waterborne Pathogens

Savannah, USA

<http://www.awwa.org/conferences-education/conferences/waterborne-pathogens.aspx>

18 - 22 May 2015

Water Microbiology Conference

Chapel Hill, USA

<http://waterinstitute.unc.edu/water/micro/>

30 May – 5 June 2015

12th IWA Leading Edge Conference on Water and Wastewater Technologies, LET 2015

Hong Kong

<http://let2015.org/>

13 - 19 September

WaterMicro2015

18th Health-Related Water Microbiology Symposium

Lisbon, Portugal

<http://www.watermicro2015.org>

October 26-30, 2015

2015 Water & Health Conference

where science meets policy

Chapel Hill, USA

<http://waterinstitute.unc.edu/waterandhealth/>

Joint workshop proposal on

Sanitation safety Planning

IWA Development Congress, 12-15 October 2015, Jordan

The IWA Specialist Groups Resources-Oriented Sanitation, Wetlands Systems for Water Pollution Control and Health-Related Water Microbiology have joint forces in a proposal for a workshop on Sanitation Safety Planning at the [Water and Development Congress of IWA](#).

Recovery of other resources from human waste and wastewater is becoming more and more important. Reuse of treated wastewater becomes especially important in countries where water is scarce. Exposure and negative health and environmental impact have to be minimised when using products produced from human excreta and wastewater. In 2010, the WHO published a concept note on “Sanitation Safety Plans – A vehicle for guideline implementation” to initiate the adaptation of the Water Safety Plan (WSP) concept for the sanitation sector. Sanitation Safety Plans (SSPs) should facilitate safe sanitation practices and the implementation of the WHO guidelines on safe use of wastewater, excreta and greywater in agriculture and aquaculture specifically. Whereas WSP is targeting in the prevention of drinking-water from being contaminated, SSP aims at reducing the exposure and negative health and environmental impact of wastewater, excreta or greywater disposal and use as well as prevent wastewater from contaminating fresh water sources.

For the preparation of a Manual on Sanitation Safety Planning with “hands-on” tools and best practice examples (representing the counterpart to the Manual for WHO Water Safety Planning) a number of pilot projects have been started (in Ghana, India, Malaysia, Portugal, Peru, the Philippines, Tanzania, Uganda, Vietnam).

The workshop will present findings from the SSP pilot projects with a special focus on the implementation of the SSP approach in the developing world. Additionally, we will present and discuss findings from other projects that shall foster bringing the SSP approach into practice. The additional topics include:

- Within the NaWaTech project (www.nawatech.net), key elements of WHO's WSP and SSP concepts were selected, adapted to develop a safety, operation and maintenance (O&M) planning approach that shall result in long-term sustainable O&M of implemented sanitation systems.
- Requirements for risk assessment and techniques to measure microbial quality shall be discussed having in mind practical challenges in the developing world.

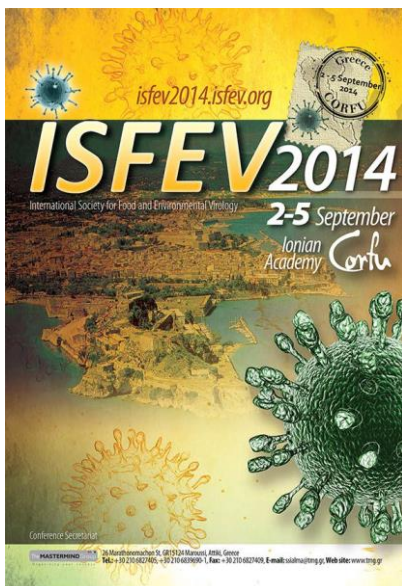
HRWM at the 4th Food and Environmental Virology conference

The 4th Food and Environmental Virology conference (FEV) has been organized by Apostolos Vantarakis, University of Patras, and the International Society of Food and Environmental Virology (ISFEV) in September 2-5, 2014 in Corfu town (Greece).

The Conference was focused on environmental, food and health impacts of viruses. The conference topics were specifically focused on health impact of foodborne and waterborne viruses, analytical methods, emerging issues considering recent outbreaks and new methodologies, viruses used as microbial source tracking, Quantitative Microbial Risk Assessment, Disinfection and Virus stability & inactivation,

Members of HRWM participated with key lectures reviewing current state of the art in the different sessions and research studies that were presented orally or as a poster. Information produced by the application of NGS technologies was presented, discussing the applicability of the new technologies in the study of waterborne viruses.

The meeting was interesting and there was a good participation of young researchers. However discussing science is not easy in Corfu, with spectacular seawater even under the rain.



Nominations

HRWM will elect a new Vice Chair later this year. The current Chairperson, Dr. Marion Savill will move to the position of Past Chair and the current Vice Chair, Dr. Gary Toranzos will move into the position of Chairperson following the WaterMicro 2015 Symposium.

The elected Vice Chair will serve HRWM for 6 years in total; 2 years as Vice Chair, followed by 2 years as Chair, and 2 years as Past Chair.

In addition to officer elections, voting will also take place for the destination for the next HRWM Symposium, WaterMicro 2017.

Online voting will begin prior to the 2013 WaterMicro Symposium and in person voting will take place at the HRWM Business Meeting held at the Symposium.

To nominate yourself or someone else for the HRWM Vice Chair positions please send an email to the attention of Gertjan Medema at gertjan.medema@kwrwater.nl no later than April 23, 2015.

Call to host WaterMicro 2017

Are you interested in hosting the 2017 HRWM Symposium? If so, please email your interest to the HRWM board at marionsavill@xtra.co.nz

You will then be sent details on submitting a full proposal and budget outline. The deadline for proposals is April 23, 2015.

Research spotlight

Aquavalens



AQUAVALENS

Aquavalens research and development work will lead to better knowledge that will be used to improve water safety plans and enable a more reliable assessment of risks posed by climate change and emerging pathogens. Primarily this will be achieved through the development, validation and application of quantitative detection and identification technologies for waterborne microbial pathogens.

This exciting research programme is led by Professor Paul Hunter of the University of East Anglia. The large FP7 funded research programme involves 39 partners from 14 European countries. We are currently in the second year of the five year project, so we are completing the scientific analysis of the agreed pathogens and have started looking at which tests and machines might be used to improve our water testing capability. There are so many researchers involved in the Executive Team and the overall research team, there is very likely to be representation from your country. To find out more about the team look at the partner's page in our website: <http://aquavalens.org/partners>

New research approaches are needed to enable rapid determination of the pathogen load of European drinking water sources and supply systems used for food processing and preparation, human consumption and drinking. The new approaches should be based on molecular methods and complement the current time-consuming microbiological techniques, which are based on the cultivation of indicator bacteria. Highly standardised methods are essential, validated with certified molecular reference material. The new techniques will result in detailed insight into the pathogen load, the hygienic quality and the specific microbial strains (viruses, bacteria, protozoa) responsible for outbreaks of waterborne infections.

If you want to know more, visit the website and register your interest on the contacts page so you can receive emailed updates: <http://aquavalens.org/contact-us>

Please inform us of research you are doing if you believe it is relevant.



AQUAVALENS is a Collaborative project supported by the European Commission, FP7, Theme Microbially safe water for human consumption. Grant agreement no: 311846.



MICHIGAN STATE
UNIVERSITY

Research spotlight

Global Waterborne Pathogens Project

Background: Although clean water and sanitation are a human right, the combination of inadequate sanitation, poor hygiene, and unsafe drinking water is responsible for an estimated annual burden of 2 million diarrheal deaths. The WHO reported in 2014 that 1.8 billion people use a drinking water source contaminated with feces. Almost 85% of the world's total wastewater is discharged without adequate or any treatment. Climate change is aggravating this situation. In response, adequate management of wastewater must address the risk factors constituted by water pathogens. Feachem et al. 1983 currently remains the most comprehensive overview of fecal indicators and pathogens occurrence, characteristics, development, control and dissemination in the environment. Since its publication it has played a key role in the prevention of incidence and mortality associated with water-related diseases. However, its content requires updating because of the dramatic increase of relevant knowledge and data over the past 30 years. [GWPP](#) will create an updated book and open-access online resource.

Objectives: To reduce the lack of sustainable access to safe drinking water and basic sanitation by updating knowledge on water pathogens using advanced information technologies by publishing and disseminating a state-of-the-art reference work on water-related disease risks and intervention measures (replacing *Sanitation and Disease Health Aspects of Excreta and Wastewater Management* by Feachem, Bradley, Garelick and Mara. 1983) and creating an online open-access data base and knowledge platform. [GWPP](#) will provide an updated review of the efficacy of sanitation technologies and serve as a compendium of waterborne pathogen information and quantitative data to support risk assessment to protect water safety. Work will also be conducted with the World Health Organization to support its Sanitation Guidelines.

Principal leaders: Blanca Jiménez-Cisneros (Secretary of UNESCO's International Hydrological Programme) is in charge of the publication and dissemination of the book and Joan B. Rose (Michigan State University) leads the development of the online resource.

Editors: Ashbolt, N.; Blanch, A.; Farnleitner, A.; Fayer, R.; Garelick, H.; Girones, R.; Haas, C.; Jakubowski, W.; Mara, D.; Medema, G.; Meschke, S.; Mitchell, J.; Petterson, S.; Pruden, A.; Robertson, L.; Taylor, H.; Weir, M.; Yates, Y. have agreed to serve as thematic leaders of the GWP network, working directly with the Information Technology (IT) group Agroknow, responsible for the online resource.

The major sections of both resources: *Sanitation and Health Theory; Indicators and Microbial Source Tracking; Viruses; Protists, Bacteria, Helminths; Persistence; Sanitation Technology and Disinfection; Case-Studies and Quantitative Microbial Risk Assessment.*

Process: The [GWP](#) network has created a table of contents and identified approximately 100 authors to contribute to each pathogen-specific and cross-cutting chapter under major sections. Editors will help the authors to develop outlines, set up peer review and work with the IT team in order to create a seamless online process for building content, review and release to the public site and publication. Workshops will bring authors, editors and the IT team together and an international conference will launch the book. The [GWP](#) network is connecting with the user community from professional, civil society and political sectors.



News from IWA Headquarter

Unlock the power of the IWA Network

Launching www.iwa-network.org

Responding to and embracing the rapidly evolving digital realities of our world, the IWA has launched a new website: www.iwa-network.org. The website provides a rich digital experience for all users, those who already know the IWA and those who are new to the association. The website is still in its BETA testing phase but will be launched fully in 2015.

We look forward to seeing you at the www.iwa-network.org

Welcome to the IWA Online Network Database

The IWA Online Network Directory is your gateway to access the full IWA 10,000-strong global network of professionals. You will be able to connect on an ongoing basis, share content, grow your network and take the steps you need to help you enhance and achieve your professional goals.

[Click here](#) to gain access to the Online Network Directory.

The IWA Online Network Directory is your portal through which you will be able to actively manage your engagement within the network including the ability to renew your membership for 2015.

However, this is just the start. In 2015 we will take your [IWA network experience](#) to new heights. We want to enable you to reach out in a more meaningful way to connect with people across the network based on your preferences and interests. We have ambitious plans, and new features will be added regularly.

2015 IWA Membership Renewals

As you may have seen, the renewal process is quite different this year so this is a quick reminder of the key steps to proceeding to your IWA renewal in case you have not done so already:

1. Login into the [Online Network Directory](#) and go to My Profile > Settings
2. Go to Account Summary tab and review your personal data.
3. In the Renewal tab select your 2015 membership package and proceed to payment via credit card or PayPal.

Once you have completed your renewal, a receipt of your membership will be available to download under the Renewals tab in your profile.

If you experience any difficulties with your renewal then we are here to help! Feel free to send us an email at members@iwahq.org or call us on +31 (0) 70 8903524 and we will get back to you as quickly as possible.



News from IWA Headquarter

IWA Water and Development Congress & Exhibition, Jordan, 18 – 22 October 2015 --- Water Security for Sustainable Growth

Water security is one of the most critical issues the world is confronted with today. Emerging economies and developing countries face some of the biggest and most disruptive water challenges, yet they provide some of the greatest opportunities to get ‘water’ right.

The Water and Development Congress & Exhibition organized by the International Water Association (IWA) (Jordan, 18 – 22 October 2015), is the global event on water solutions focusing on emerging economies and developing countries. The event brings together thought leaders, decision makers, leading scientist and business representatives from within and outside the water sector.

Connecting science and research with the private sector and financial institutions, the Congress acts as a catalyst for sustainable water development. It provides a space where water professionals can meet and exchange information and know-how. It brings to the fore the latest regulatory initiatives and leading-edge practices. It presents new research findings, technology developments and business opportunities.

The 12th IWA Leading Edge Conference on Water and Wastewater Technologies, 30 May – 3 June, 2015, Hong Kong, China

--- Moving from Pilot to Full Scale

www.let2015.org

Deadline for early bird registration: 15th April

The 12th IWA Leading Edge Conference on Water and Wastewater Technologies (LET2015) is designed to be the place where new ideas are introduced and the opportunity is provided to interact with the “best of the best”. For those who are looking to introduce new ideas and concepts, and those looking for them, this is the one conference of the year that should not be missed.

The LET2015 conference has 8 themes including:

- Alternative Water Sources
- Direct Potable Reuse
- E-technology in urban water management
- Granular sludge processes
- Integrated chemical and biological treatment
- Resource Recovery from Wastewater
- Treating Complex Industrial Wastewaters
- Water Technology for Densely Populated and Rapidly Growing Cities

Please visit the conference website www.let2015.org for the information on plenary speakers, the advanced program and register before 15 April to benefit from discounted registration rate.



News from IWA Headquarter

The “Lisbon Charter”: Improving water services through innovations in regulation

Water is considered to be the greatest risk facing the world over coming decades; a risk of high likelihood and even higher impact. For water managers, regulators and policy makers, there is a critical opportunity for a transformation in public policy and the regulation of water services to meet these future challenges. Securing the future sustainability of water, sanitation and wastewater services depends upon realising this transformation. The “Lisbon Charter” offers a vision for reforming water management that will help us achieve that goal.

Public water policies and regulation remain obscure to many people, yet they determine how water services are delivered, the quality of those services and the price we all pay for them. Water policies and regulation can provide a critical breakthrough in reforming the water sector and attracting investments for much-needed infrastructure and human resource development.

A new set of guiding principles for sound public policies and regulation for water services, adopted by the International Water Association, promises to deliver a vital stimulus for the water sector to innovate. These principles, embedded in the “Lisbon Charter”, offer a practical pathway for delivering improved water and sanitation services. These principles are equally adaptable in any water utility anywhere in the world.

Updating public policies and regulation forms part of a government’s primary responsibility for public policy making. Today a wide variety of models of public water policy and regulation exist around the world. The “Lisbon Charter” brings the experience of these together and sets out five leading principles:

- Water management forms a key factor in sustainable development;
- Accountability and transparency form the basis of reliable water services;
- Only long term investments and cost recovery can create and sustain water services;
- Financial, social and environmental aspects of water resources underpin water services provision;
- Collective actions of interdependent stakeholders make water services provisions succeed.

The “Lisbon Charter” goes beyond the role of governments. It covers the broader rights, responsibilities and good practices for each group of stakeholders by defining the roles of governments and public administrations, regulatory authorities, service providers, water professionals and end-users. For all stakeholders to accept their roles and live-up to the associated expectations continues to be a challenge for the water sector.

The “Lisbon Charter” provides a vision for this, but it is also an opportunity for all stakeholders to work from a solid and practical base and renew their contribution to the delivery of safe water, sanitation and wastewater services to all citizens around the world.



News from IWA Headquarter

IWA World Water Congress and Exhibition, Lisbon, 21-26 September, 2014

The IWA World Water Congress & Exhibition in Lisbon was a hugely successful gathering that brought together more than 5,500 water professionals from 109 countries. Wide ranging discussions on the challenges and opportunities facing water management led to the sharing of knowledge on best practices and new technologies; and by connecting a diverse set of stakeholders it fostered further cooperation between industry, science and technology to accelerate change and find lasting solutions.

The Congress positioned water as the fuel of sustainable, profitable industry, the catalyst of productive agriculture, the liquid force that turns or cools turbines, and the source of life on land, in rivers, and through estuaries that nourish the oceans. In short, it revealed water as the currency of the 21st century.

Videos of the Keynote presentations from the Congress are available at <https://vimeo.com/iwahq>

A new Congress Synthesis Report will be available to download from the www.iwa-network.org

New books

Environmental Indicators (Springer)

Robert H. Armon & Osmo Hänninen

This book is a compilation and in depth description of a large variety of indicators, used as warning signs of environmental pollution numerous aspects. It covers many environmental problems such as: chemical, biological and physical pollutants and their health aspects. The book list of subjects has been carefully chosen from the European and USA Environmental Protection Agencies' data bases, as seen by those organizations as the critical environmental concerns for the oncoming years! The book level fits both advanced undergraduate and graduate students interested in environmental problems. Environmentalists, environmental engineers and policy maker will find in this book a firm ground for legislations and guidelines policy all based on solid scientific facts.

Waterborne pathogens: detection methods and applications (Elsevier)

Helen Bridle

This book gives an overview of advanced emerging technologies for the detection of a range of waterborne pathogens. The book will present existing methodology and highlight where improvements can be made, as well as have a strong focus on applications and the ways in which new technology could be applied in water management. Additionally, it addresses issues of sample preparation (from sampling to concentration and enrichment), a key stage in any detection protocol.

Quantitative Microbial Risk Assessment (Wiley & Sons, 2nd ed)

Charles N. Haas, Joan B. Rose, Charles P. Gerba

Provides the latest QMRA methodologies to determine infection risk cause by either accidental microbial infections or deliberate infections caused by terrorism. Reviews the latest methodologies to quantify at every step of the microbial exposure pathways, from the first release of a pathogen to the actual human infection. Provides techniques on how to gather information, on how each microorganism moves through the environment, how to determine their survival rates on various media, and how people are exposed to the microorganism. Explains how QMRA can be used as a tool to measure the impact of interventions and identify the best policies and practices to protect public health and safety.

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