

Alternatives and smart solutions

9.00 Plenary

9.00 Sustainable service provision

Keynote address A framework for developing sustainable water and sanitation services *Peter Binney* Director of Sustainable Planning, Black & Veatch, USA

Case study 24-hour water supply – a key challenge for developing countries – Algiers case study *Clarissa Vitiello* Algeria

Case study A viable and sustainable approach for new source water development *Robert Kelly et al.* USA

Case study Bridging the capacity divide to ensure effective service delivery *Jan Herman Koster* (invited) Netherlands

10.30 Morning break

Room 1	Room 2	Room 3
<p>11.00 Disaster and emergency management</p> <ul style="list-style-type: none"> The importance of coordination, capacity building and integration of different water and sanitation interventions <i>Ilan Juran</i> (invited) USA Emergency water treatment <i>Suresh Nesaratnam</i> United Kingdom Natural disaster crisis management case studies <i>Gerardo Aguilera</i> Soriana France Water quality surveillance in community-based water supply systems – experience in Sri Lanka <i>Piyasena Wellakkage</i> Sri Lanka Through-school versus direct-community training on SODIS water disinfection technology in rural Bolivia <i>Craig Adams et al.</i> USA Dry sanitation design and delivery innovations for rural, urban and emergency settings in Bolivia <i>William Oswald et al.</i> USA Peepoo bag as emergency technology <i>Camilla Wirseen</i> Sweden <p>Dialogue</p>	<p>11.00 Smart sanitation solutions</p> <ul style="list-style-type: none"> Evaluation of promotion of large-scale sanitary latrines in the villages of Shaanxi Province, China <i>Zifu Li</i> PR China Including solid waste management as an option for small-scale water and sanitation providers <i>Reinhard Marth</i> Mexico Recent advances made in achieving basic sanitation in India <i>S Sharma</i> India Economic viability analysis of the environmental sanitation programme for the water sources in the Alto-Tieta Water Basin, Brazil <i>Luis Eduardo Grisotto et al.</i> Brazil The sanitation ladder – need for a revamp? <i>Elisabeth Kvarnstram</i> Sweden <p>Dialogue</p>	<p>11.00 Communication and knowledge sharing</p> <ul style="list-style-type: none"> Citizen involvement and information dissemination – knowledge sharing as a critical component of water management <i>Jacqueline McGlade</i> (invited) Belgium Knowledge sharing as the lynchpin of sustainable water resources management <i>Heidi Snyman</i> South Africa Community water planning – indigenous engagement in water service delivery in the Northern Territory, Australia <i>Nerida Beard</i> Australia Water International Knowledge Transfer Initiative (WIKTI) – a know-how transfer methodology for developing countries <i>Pablo Vizioli et al.</i> France Post-processing data from a management information system through a water poverty index in East Africa <i>Ricard Gina Garriga</i> Spain New regulations and institutional capacity – the disconnect <i>Michelle Tanya Watts</i> Jamaica <p>Dialogue</p>

13.00 Lunch

<p>15.00 Water and energy – managing trade-offs</p> <ul style="list-style-type: none"> Wind energy for water supply in Eritrea – role in the energy – water nexus <i>Robert van Buskirk</i> (invited) USA Cities of the future – water efficiencies for cities and concomitant energy savings <i>Avina Imhoff</i> (invited) Germany Energy management for wastewater and water utilities <i>Rich Brown</i> (invited) USA Cities of the future – integrating social housing with sustainable water, sanitation and energy management <i>Lisa Thompson-Smeddle</i> (invited) South Africa Water and energy – answers for the 21st century <i>Hoyuela Modesta</i> Spain Releasing the energy potential of wastewaters – key challenges to implementation in South Africa <i>Valerie Naidoo</i> South Africa <p>Dialogue</p>	<p>15.00 Smart solutions for coping with water scarcity</p> <ul style="list-style-type: none"> Smart solutions for coping with water scarcity – water harvesting technologies, management and finances <i>Patric Moriarty</i> (invited) Ghana Innovative technologies for water harvesting <i>Ben Pohlner</i> (invited) Australia Innovative low-cost technologies for wells, pumps, storage, irrigation and water treatment <i>Alana Potter</i> (invited) Mozambique Solar disinfection for the post-treatment of greywater by means of a continuous flow reactor <i>Paula Paulo et al.</i> Brazil Subsurface iron and arsenic removal – low-cost technology for community-based drinking water supply in Bangladesh <i>Doris van Halen</i> Netherlands Developing a sustainable water supply for a growing community in the Southwest Desert <i>Perri Standish-Lee</i> USA <p>Dialogue</p>	<p>15.00 Rural water and sanitation solutions</p> <ul style="list-style-type: none"> High quality water and sanitation for children of the Peruvian rainforest – a success story <i>Humphrey Blackburn</i> USA Water supply in Aguelhoc, Mali – a successful partnership between a Malian community, an NGO and an operator <i>Marie Bornl</i> France Developing a sustainable water supply for a growing community in the South-west Desert <i>Peri Standish-Lee</i> USA Integrating improved sanitation systems into informal settlements in East Africa – a mid-term research evaluation <i>Sarah Schreiner</i> Germany Consequences of low sustainability in the effectiveness of national strategies to increase water access in rural areas of Tanzania <i>Alejandro Jimenez et al.</i> Spain <p>Dialogue</p>
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17.00 Afternoon break

17.30 Closing ceremony

Next generation opportunities – solutions worth spreading *Jamie Bartram* Professor & Director Global Institute, University of North Carolina at Chapel Hill, USA

Closing keynote address *José Luis Luege Tamargo* Director General, National Commission for Water, Mexico

19.30 Gala Dinner



Sponsors



Conagua is the National Water Commission of Mexico and part of the Ministry of the Environment and Natural Resources (SEMARNAT). Conagua's mission is to manage and preserve the national waters of Mexico in partnership with federal, state, and municipal governments and society as a whole. Conagua's vision is to be a technical authority on hydrology in Mexico. The vision of Mexico's water sector is to be a nation that has sufficient water in both quantity and quality, acknowledges its strategic value, utilizes it efficiently and protects its water bodies to guarantee sustainable development and preserve the environment.

Conagua (The National Water Commission)
www.cna.gob.mx

10.30 Morning break

Room 4	Room 5
<p>11.00 Innovation and water treatment</p> <ul style="list-style-type: none"> Developing aerobic granular sludge in hot climates <i>Aznah Nor Anuar et al.</i> Malaysia The Rhizopura process ten years on – a green solution for sewage treatment in small communities <i>Gerardo Aguilera Soriano et al.</i> France Process development to obtain biodegradable polymers from fermented palm oil mill effluent using anaerobic-aerobic sequencing batch reactor <i>Salmiati</i> Malaysia Phosphorus removal by apatite in horizontal flow constructed wetlands for small communities – pilot – and full-scale evidence <i>Samuel Martin Ruel et al.</i> France Viability of Ascaris ova in ecological latrine compost in Bolivia <i>Scot Seitz</i> USA Challenges of multi-barrier approaches for health risk mitigation of wastewater reuse in urban agriculture <i>Gualadio Cissa et al.</i> Ivory Coast Sustainable drinking water production unit <i>Heekyung Park</i> Korea Reuse of biosolids from constructed wetland treating faecal sludge for sunflower plantation <i>Thammarat Koottatep et al.</i> Thailand <p>Dialogue</p>	<p>11.00 Workshop</p> <p>Water Operators Partnerships – improved performance through networking</p> <p>Presented by IWA / UNHABITAT</p> <p>Utility managers and operators share the need to find low-cost, workable solutions to improve their operational and management capabilities. The Water Operators Partnerships (WOP) network, consisting of operators from across the globe, facilitates opportunities for utility personnel to share experiences and learning models. Through the WOP network they have the opportunity to function on a peer-to-peer level and extract and explore solutions to common challenges. This workshop will create a further platform where operators will network and strengthen the peer learning process.</p>

13.00 Lunch

<p>15.00 Workshop</p> <p>Good water quality – is it a luxury for developing countries?</p> <p>Presented by UNESCO</p> <p>This workshop will promote discussion of water quality standards for the developing world. Participants will explore the answers to the following questions. Is safe water the same as water of adequate quality? If not, what is the acceptable cost of providing water of adequate quality? Is it enough to ensure the flow of water in the environment or is there also a need to ensure certain levels of ecological quality? Do poor people deserve poor quality water? Is it economically convenient to separate the protection of water quantity and quality? Should developing countries consider low-cost strategies to protect water quality and quantity at the same time? If so, under what conditions?</p>	<p>15.00 Workshop</p> <p>Water Operators Partnerships – improved performance through networking <i>continued</i></p>
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17.00 Afternoon break



19.30 Gala Dinner

Lunch-time events

Workshop
SWASH+ (School water, sanitation and hygiene *plus* community impact)

Presented by Water for People

In the search for sustainable solutions to the global crisis in safe drinking water and sanitation, schools have once again emerged as a potential leverage point for the transformation of communities lacking these basic services. Water For People is partnering in Central America for its schools work with Catholic Relief Services and CARE on an initiative called SWASH+ (School Water, Sanitation and Hygiene *plus* Community Impact). SWASH+ Central America has produced a compelling analysis of the structural reasons behind the failure of most Water, Sanitation and Hygiene (WASH) programmes, along with lessons learned for true sustainability. The workshop will give participants the benefit of those lessons.

Workshop
Water testing in resource poor settings

Presented by Aquatest Research Programme

This workshop will show how the Aquatest device – a low-cost, simple-to-use test for water quality currently under development – will be used in developing countries to curtail contamination of drinking water and reduce water-related mortality. The Aquatest Research Programme is an international, multi-disciplinary consortium that is developing the Aquatest device for widespread use in developing countries. Close collaboration with researchers and potential users in South Africa and India will help to develop a device that meets the needs of its users.