



<p><b>08:30 – 10:00</b> <b>SCIENCE AND APPLICATION OF WATER MANAGEMENT</b> <b>Room 1</b></p> <p><b>W</b> <b>Good modelling practice – guidelines for use of activated sludge models</b> <b>Chair Günter Langergraber Austria</b></p> <p>08:30 Welcome <b>Günter Langergraber Austria</b></p> <p>08:40 Introduction to the Good Modelling Practice Scientific and Technical Report <b>Leiv Rieger Canada</b></p> <p>08:50 The unified protocol and application matrix <b>Andrew Shaw US</b></p> <p>09:15 Walk-through of the GMP STR Project definition <b>Takayuki Ohtsuki Japan</b> Data collection and reconciliation <b>Leiv Rieger Canada</b> Plant model set-up <b>Leiv Rieger Canada</b></p>	<p><b>09:00 – 10:00</b> <b>YOUNG WATER PROFESSIONALS FORUM</b> <b>Room 6</b></p> <p><b>W</b> 09:00 The Young Water Professionals (YWP) programme is now a well-established part of the congress. The YWP forum will provide an opportunity for YWPs to network with one another and senior water professionals and discuss the future challenges and opportunities in the water sector. There will be other activities for YWPs throughout the week of the congress.</p>
<p><b>10:00 – 10:30 Morning break</b> <b>Foyer</b></p>	
<p><b>10:30 – 12:00</b> <b>SCIENCE AND APPLICATION OF WATER MANAGEMENT</b> <b>Room 1</b></p> <p><b>W</b> <b>Good modelling practice – guidelines for use of activated sludge models</b> <b>Chair Günter Langergraber Austria</b></p> <p>10:30 Walk-through of the GMP STR (cont'd) Calibration and validation <b>Leiv Rieger Canada</b> Simulation and results interpretation <b>Andrew Shaw US</b></p> <p>11:00 Discussion of GMP STR <b>Gustaf Olsson Sweden</b></p> <p>11:45 Summary and close <b>Günter Langergraber Austria</b></p>	<p><b>10:30 – 12:00</b> <b>YOUNG WATER PROFESSIONALS FORUM</b> <b>Room 6</b></p> <p><b>W</b> 10:30 Continued</p>
<p><b>12:00 – 13:00 Lunch</b> <b>Foyer</b></p>	
<p><b>13:00 – 14:30</b> <b>WATER, CLIMATE AND ENERGY</b> <b>Room 1</b></p> <p><b>W</b> <b>Are positive energy wastewater treatment plants feasible?</b> <b>Chair Fernando Fdz-Polanco Spain</b></p> <p>13:00 Context – playing with mass and energy balances <b>Jean-Marc Audic France</b></p> <p>13:15 Four kinds of energy potential for the wastewater treatment plant France</p> <p>13:30 Membrane bioreactor energy optimisation <b>Jianjun Qin Singapore</b></p> <p>13:45 Energy recovery – Degrés Bleus, urban heating and cooling, using thermal energy from wastewater <b>Bernard Brouillet, Mathieu Ahyerre, Mathieu de Kervenoael France</b></p>	<p><b>13:00 – 14:30</b> <b>YOUNG WATER PROFESSIONALS FORUM</b> <b>Room 6</b></p> <p><b>W</b> 13:00 Continued</p>
<p><b>14:30 – 15:00 Afternoon break</b> <b>Foyer</b></p>	
<p><b>15:00 – 16:30</b> <b>WATER, CLIMATE AND ENERGY</b> <b>Room 1</b></p> <p><b>W</b> <b>Are positive energy wastewater treatment plants feasible?</b> <b>Chair Fernando Fdz-Polanco Spain</b></p> <p>14:30 Biomass – fuel cell <b>Daniel Karcher Germany</b></p> <p>14:50 Biomass – sludge or biosolid combustion – overview of municipal sludge fluid bed incineration in North America – from green to greener – Northeast Ohio Regional Sewer District experience <b>James Welp, Ky Dangtran US</b></p> <p>15:10 Panel discussion</p>	<p><b>15:00 – 16:30</b> <b>YOUNG WATER PROFESSIONALS FORUM</b> <b>Room 6</b></p> <p><b>W</b> 15:00 Continued</p>
<p><b>16:30 Opening ceremony</b> <b>Room 17</b></p>	



<p><b>08:30 – 10:00</b> <b>WATER AND HEALTH</b> <b>Room 7</b></p> <p><b>W</b> Introduction and use of QMRA for addressing safety and security in the water environment Chair <b>Mark H Weir</b> US</p> <p>08:30 QMRA – a primer to a science in evolution <b>Joan B Rose</b> US</p> <p>09:00 Understanding your enemy – pathogens in drinking water and exercise 1 <b>Gertjan Medema</b> Netherlands</p> <p>09:35 Risk assessment conduit 1 – the dose response assessment of pathogens and exercise 2 <b>Charles N Haas</b> US</p>	<p><b>08:30 – 10:00</b> <b>SCIENCE AND APPLICATION OF WATER MANAGEMENT</b> <b>Room 8</b></p> <p><b>W</b> CAS upgrade life-cycle cost assessment simulation – digital game-based learning Chair <b>Dave Kinnear</b> US</p> <p>08:30 Introduction <b>Marie-Laure Pellegrin</b> US <b>Ingmar Nopens</b> Belgium</p> <p>08:40 Game background <b>Dave Kinnear</b> US</p> <p>09:00 Learning sessions in working groups <b>Various groups</b></p> <p>09:30 Capital cost game segment <b>Charrette groups</b></p>
<p><b>10:00 – 10:30 Morning break</b> <b>Foyer</b></p>	
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<p><b>13:00 – 14:30</b> <b>WATER AND HEALTH</b> <b>Room 7</b></p> <p><b>W</b> How dead are 'dead' microbes? Chair <b>Hans-Curt Flemming</b> Germany</p> <p>13:00 Introduction <b>Hans-Curt Flemming</b> Germany</p> <p>13:10 The VBNC paradigm <b>Rita Colwell</b> US</p> <p>13:35 Between life and death <b>Thomas Egli</b> Switzerland</p> <p>14:00 Detection of non-viable pathogens <b>Stefan Wuertz</b> US</p>	<p><b>13:00 – 14:30</b> <b>SCIENCE AND APPLICATION OF WATER MANAGEMENT</b> <b>Room 8</b></p> <p><b>W</b> CAS upgrade life-cycle cost assessment simulation – digital game-based learning Chair <b>Dave Kinnear</b> US</p> <p>13:00 Operating cost game segment <b>Charrett groups</b></p>
<p><b>14:30 – 15:00 Afternoon break</b> <b>Foyer</b></p>	
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<p><b>16:30 Opening ceremony</b> <b>Room 17</b></p>	



<p><b>08:30 – 10:00</b> <b>SECURING NEW AND TRADITIONAL WATER RESOURCES</b> <b>Room 9</b></p> <p><b>W</b> <b>The role of rainwater harvesting in the context of social, environmental and economic aspects</b> <b>Chair Steve Moddemeyer US</b></p> <p>09:00 Welcome by Chairman of RWHM <b>Mooyoung Han</b> Korea</p> <p>09:05 Climate change adaptation through the promotion of rain cities <b>Mooyoung Han</b> Korea</p> <p>09:20 A rainwater harvesting initiative – 3R (recharge, retention and reuse of groundwater and rainwater) <b>Matthijs Bonte</b> Netherlands</p> <p>09:40 Floodwater harvesting to improve dryland agriculture <b>Javad Tabatabaee Yazdi</b> Iran</p> <p>10:00 Assessing domestic vulnerability to health risks related to rainwater harvesting in rural households <b>David Baguma</b> Austria</p>	<p><b>08:30 – 10:00</b> <b>SCIENCE AND APPLICATION OF WATER MANAGEMENT</b> <b>Room 10</b></p> <p><b>W</b> <b>Nutrient removal standards – which SLOT?</b> <b>Chair Frank Rogalia Spain</b></p> <p>08:30 This WEF workshop on the sustainable limits of technology (SLOT) for nutrient removal standards will consist of two, two-hour workshops, each with an invited keynote speaker, two further presentations and a facilitated discussion.</p> <p>The first workshop will focus on regulations. It will discuss:</p> <ul style="list-style-type: none"> <li>• value for money or waste of resources?</li> <li>• the EU case study</li> <li>• an example of a regional river basin</li> <li>• the holistic view.</li> </ul>
<b>10:00 – 10:30 Morning break</b> <b>Foyer</b>	
<p><b>10:30 – 12:00</b> <b>SECURING NEW AND TRADITIONAL WATER RESOURCES</b> <b>Room 9</b></p> <p><b>W</b> <b>The role of rainwater harvesting in the context of social, environmental and economic aspects</b> <b>Chair S Vigneswaran Australia</b></p> <p>10:30 Zero runoff in Seattle – two projects <b>Steve Moddemeyer</b> US</p> <p>10:50 Eco-efficient and conflict-free water management – Star City rainwater management system <b>Jungsoo Moon</b> Korea</p> <p>11:10 Traditional and current RWHM projects in Japan <b>Furumai and Okui</b> Japan</p> <p>11:30 First flush harvesting and management strategy in urban riverfront areas of rivers with a high water level in China <b>Guan Yuntao</b> China</p> <p>11:50 Discussion</p>	<p><b>10:30 – 12:00</b> <b>SCIENCE AND APPLICATION OF WATER MANAGEMENT</b> <b>Room 10</b></p> <p><b>W</b> <b>Nutrient removal standards – which SLOT?</b> <b>Chair Frank Rogalia Spain</b></p> <p>10:30 The second session will focus on technology. It will discuss:</p> <ul style="list-style-type: none"> <li>• the law of diminishing returns</li> <li>• costs of various technology and alternatives</li> <li>• nutrient balance in receiving waters</li> <li>• the secondary impacts of tight water regulations.</li> </ul>
<b>12:00 – 13:00 Lunch</b> <b>Foyer</b>	
<p><b>13:00 – 14:30</b> <b>SECURING NEW AND TRADITIONAL WATER RESOURCES</b> <b>Room 9</b></p> <p><b>W</b> <b>The role of rainwater harvesting in the context of social, environmental and economic aspects</b> <b>Chair Mooyoung Han Korea</b></p> <p>13:00 Experience of socio-economic approach to using rainwater harvesting to meet the MDGs</p> <p>13:20 Rooftop rainwater harvesting – an alternative option to urban flood mitigation and groundwater recharge for the City of Dhaka, Bangladesh <b>Mohammad Fazlul Karim</b> Bangladesh</p> <p>13:40 Water quality of rainwater tanks in Sydney rural and metropolitan areas compared against the Australian guidelines <b>S Vigneswaran</b> Australia</p> <p>14:00 Social, environmental and economic strategy for realisation of Rain City at Suwon, Korea <b>Yeom, TY &amp; Weon J Y</b> Korea</p> <p>14:20 Discussion</p>	<p><b>13:00 – 14:30</b> <b>SCIENCE AND APPLICATION OF WATER MANAGEMENT</b> <b>Room 10</b></p> <p><b>W</b> <b>Nutrient removal standards – which SLOT?</b> <b>Chair Frank Rogalia Spain</b></p> <p>13:00 Continued</p>
<b>14:30 – 15:00 Afternoon break</b> <b>Foyer</b>	
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<b>16:30 Opening ceremony</b> <b>Room 17</b>	



		<b>08:30 – 10:00</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b>	<b>Room 12</b>
		<b>W</b> <b>Forum: Urban disaster resiliency – governance assessment, social and economic revitalisation, reconstruction and sustainable development challenges</b> <b>Chair Ilan Juran US</b> 08:30 Welcome <b>Ilan Juran US</b> 08:45 Introduction <b>Ilan Juran US</b> <b>Ase Johannessen</b> Netherlands 09:15 Update from the forum <b>Joao Fidalgo</b> Portugal 09:45 National challenges – water, sanitation and public health <b>Marie Laurence J Lassegue</b> Minister of Culture and Communication, Haiti	
<b>10:00 – 10:30 Morning break</b>		<b>Foyer</b>	
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		<b>W</b> <b>Forum: Urban disaster resiliency – governance assessment, social and economic revitalisation, reconstruction and sustainable development challenges</b> <b>Chair Ilan Juran US</b> 10:30 Local government perspectives <b>Yvon Jerome</b> Mayor of Carrefour, Haiti 11:15 Economic and societal revitalisation challenges <b>Kely C Bastien</b> Haiti 11:35 Q&A and discussion	
<b>12:00 – 13:00 Lunch</b>		<b>Foyer</b>	
<b>13:00 – 14:30</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b>	<b>Room 11</b>	<b>13:00 – 14:30</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b>	<b>Room 12</b>
<b>W</b> <b>Water management in a cold climate</b> 13:00 This workshop will consider the management of drinking water and wastewater systems in cold climate conditions. Issues to be addressed include: <ul style="list-style-type: none"> <li>• infrastructure design and construction, maintenance in the event of failure, operations involving chemical treatment and the efficacy of additives</li> <li>• source control technologies for areas subject to cold climate conditions</li> <li>• policies, regulations and incentives for the implementation of source control.</li> </ul>		<b>W</b> <b>Forum: Urban disaster resiliency – governance assessment, social and economic revitalisation, reconstruction and sustainable development challenges</b> <b>Chair Ilan Juran US</b> 13:00 Reconstruction of water supply and sanitation systems <b>Max Antoine II</b> Haiti 13:15 Sharing experiences from the earthquake in Chile <b>Pedro Pablo Errázuriz</b> Chile 13:30 Discussion	
<b>14:30 – 15:00 Afternoon break</b>		<b>Foyer</b>	
<b>15:00 – 16:30</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b>	<b>Room 11</b>		
<b>W</b> <b>Water management in a cold climate</b> 15:00 Continued			
<b>16:30 Opening ceremony</b>		<b>Room 17</b>	



<p><b>08:30 – 10:00</b> <b>WATER, CLIMATE AND ENERGY</b> <b>Room 13</b></p> <p><b>W</b> <b>Global changes in climate and demographics – adaptive management of source water odours</b> <b>Chairs Sue Watson Canada, Tsair Fuh Lin Chinese Taiwan</b></p> <p>09:00 Climate change and source water taste–odour across Canadian geographic and demographic diversity <b>Larry Moore</b> Canada</p> <p>09:20 Reservoir management under climate related flow and demand scenarios <b>Tsair Fuh Lin</b> Chinese Taiwan</p> <p>09:40 Surviving the heatwave – odour production from cells through ecosystems <b>Sue Watson</b> Canada</p>	<p><b>08:30 – 10:00</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b> <b>Room 14</b></p> <p><b>W</b> <b>From performance assessment to benchmarking</b> <b>Chairs Heimo Theuretzbacher-Fritz Austria, Enrique Cabrera Spain</b></p> <p>08:30 A new framework and common language for benchmarking – the new IWA–AWWA Manual of Best Practice <b>Enrique Cabrera</b> Spain</p> <p>08:50 How to prepare and join a benchmarking activity – project planning, training and project control <b>Peter Dane</b> Netherlands</p> <p>09:10 How to assess performance in benchmarking – data acquisition, validation, analysis and reporting <b>Heimo Theuretzbacher-Fritz</b> Austria</p> <p>09:30 How to get from assessment results to performance improvement – planning, executing and reviewing improvement actions <b>Scott Haskins</b> US</p>
<p><b>10:00 – 10:30 Morning break</b> <b>Foyer</b></p>	
<p><b>10:30 – 12:00</b> <b>WATER, CLIMATE AND ENERGY</b> <b>Room 13</b></p> <p><b>W</b> <b>Global changes in climate and demographics – adaptive management of source water odours</b> <b>Chairs Sue Watson Canada, Tsair Fuh Lin Chinese Taiwan</b></p> <p>10:30 Weathering changes in supply and demand – taste–odour secondary standards as reference points <b>Mel Suffet</b> US</p> <p>10:50 Diagnosing chemical culprits – analytical advances and issues <b>Auguste Bruchet</b> France</p> <p>11:10 Treatment issues under climate change scenarios <b>Gayle Newcombe</b> Australia</p> <p>11:30 Adaptive management in the face of changing treatment technology and source water stressors <b>Djanette Khairi</b> US</p> <p>11:50 Climate change and taste and odours – sources, adaptive management and treatment <b>William Becker</b> US</p> <p>12:10 Q&amp;A and discussion</p>	<p><b>10:30 – 12:00</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b> <b>Room 14</b></p> <p><b>W</b> <b>From performance assessment to benchmarking</b> <b>Chairs Heimo Theuretzbacher-Fritz Austria, Enrique Cabrera Spain</b></p> <p>10:30 Practice reports from utilities and benchmarking experts</p> <p>11:45 Q&amp;A and discussion</p>
<p><b>12:00 – 13:00 Lunch</b> <b>Foyer</b></p>	
<p><b>13:00 – 14:30</b> <b>WATER, CLIMATE AND ENERGY</b> <b>Room 13</b></p> <p><b>W</b> <b>Global changes in climate and demographics – adaptive management of source water odours</b> <b>Chair Sue Watson Canada, Tsair Fuh Lin Chinese Taiwan</b></p> <p>13:00 Emerging markets with taste and odour issues – case studies in China <b>Min Yang</b> PR China</p> <p>13:20 Senses, society and socioeconomics – culture and acceptance of source water aesthetics <b>Andrea Dietrich</b> US</p> <p>13:40 Staying cool under the heat – tracking consumer complaints <b>Dan Gallagher</b> US</p> <p>14:00 China's hotspots – off flavours in Lake Taihu and noxious cyanobacteria <b>Qinglong Wu</b> PR China</p>	<p><b>13:00 – 14:30</b> <b>WATER, CLIMATE AND ENERGY</b> <b>Room 14</b></p> <p><b>W</b> <b>Water resources and climate change in a development context – towards integrated policies</b> <b>Chairs Carol Howe Netherlands, Henk van Schaik Netherlands, Geoff Parker UK</b></p> <p>13:00 Introduction</p> <p>13:10 African Water Congress recap <b>Jennifer Mercer</b> Canada</p> <p>13:30 Q&amp;A and discussion</p> <p>13:40 WHO Vision 2030 recap <b>Chew Chee Keong</b> Switzerland</p> <p>14:00 Q&amp;A and discussion</p> <p>14:10 GWI Africa water resources workshop <b>Charles Kennel</b> US</p>
<p><b>14:30 – 15:00 Afternoon break</b> <b>Foyer</b></p>	
<p><b>15:00 – 16:30</b> <b>WATER, CLIMATE AND ENERGY</b> <b>Room 13</b></p> <p><b>W</b> <b>Global changes in climate and demographics – adaptive management of source water odours</b> <b>Chair Sue Watson Canada, Tsair Fuh Lin Chinese Taiwan</b></p> <p>15:00 Climate induced changes in taste and odour production and transported sources impacting the Indianapolis drinking water supply <b>Leonore P Tedesco</b> US</p> <p>15:20 Scotland – fish, water and whiskey (as a preview to SG Off Flavours meeting in Aberdeen, 2011) <b>Linda Lawton</b> UK</p> <p>15:40 Q&amp;A and discussion</p>	<p><b>15:00 – 16:30</b> <b>WATER, CLIMATE AND ENERGY</b> <b>Room 14</b></p> <p><b>W</b> <b>Water resources and climate change in a development context – towards integrated policies</b> <b>Chairs Carol Howe Netherlands, Henk van Schaik Netherlands, Geoff Parker UK</b></p> <p>15:00 Recap of the first session and group discussion on areas of common interest between the audience and panel</p>
<p><b>16:30 Opening ceremony</b> <b>Room 17</b></p>	