



<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 Kervenael 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> <span style="float: right;"><b>Room 7</b></span></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> <span style="float: right;"><b>Room 8</b></span></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> <span style="float: right;"><b>Foyer</b></span></p>	
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<p><b>16:30 Opening ceremony</b> <span style="float: right;"><b>Room 17</b></span></p>	



<p><b>08:30 – 10:00</b> <b>SECURING NEW AND TRADITIONAL WATER RESOURCES 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 09:05 Climate change adaptation through the promotion of rain cities <b>Mooyoung Han</b> Korea 09:20 A rainwater harvesting initiative – 3R (recharge, retention and reuse of groundwater and rainwater) <b>Matthijs Bonte</b> Netherlands 09:40 Floodwater harvesting to improve dryland agriculture <b>Javad Tabatabaee Yazdi</b> Iran 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 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. 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>
<p><b>10:00 – 10:30 Morning break</b> <span style="float: right;"><b>Foyer</b></span></p>	
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<p><b>12:00 – 13:00 Lunch</b> <span style="float: right;"><b>Foyer</b></span></p>	
<p><b>13:00 – 14:30</b> <b>SECURING NEW AND TRADITIONAL WATER RESOURCES 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 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 13:40 Water quality of rainwater tanks in Sydney rural and metropolitan areas compared against the Australian guidelines <b>S Vigneswaran</b> Australia 14:00 Social, environmental and economic strategy for realisation of Rain City at Suwon, Korea <b>Yeom, TY &amp; Weon J Y</b> Korea 14:20 Discussion</p>	<p><b>13:00 – 14:30</b> <b>SCIENCE AND APPLICATION OF WATER MANAGEMENT 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>
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	<p><b>08:30 – 10:00</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b> <span style="float: right;"><b>Room 12</b></span></p> <p><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</p>
<p><b>10:00 – 10:30 Morning break</b> <span style="float: right;"><b>Foyer</b></span></p>	
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<p><b>12:00 – 13:00 Lunch</b> <span style="float: right;"><b>Foyer</b></span></p>	
<p><b>13:00 – 14:30</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b> <span style="float: right;"><b>Room 11</b></span></p> <p><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:</p> <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>	<p><b>13:00 – 14:30</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b> <span style="float: right;"><b>Room 12</b></span></p> <p><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</p>
<p><b>14:30 – 15:00 Afternoon break</b> <span style="float: right;"><b>Foyer</b></span></p>	
<p><b>15:00 – 16:30</b> <b>MANAGING UTILITIES AND THEIR ASSETS</b> <span style="float: right;"><b>Room 11</b></span></p> <p><b>W</b> <b>Water management in a cold climate</b> 15:00 Continued</p>	
<p><b>16:30 Opening ceremony</b> <span style="float: right;"><b>Room 17</b></span></p>	



<p><b>08:30 – 10:00</b> <b>WATER, CLIMATE AND ENERGY</b> <span style="float: right;"><b>Room 13</b></span></p> <p><b>W</b> <b>Global changes in climate and demographics – adaptive management of source water odours</b> Chairs <b>Sue Watson</b> Canada, <b>Tsair Fuh Lin</b> Chinese Taiwan</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> <span style="float: right;"><b>Room 14</b></span></p> <p><b>W</b> <b>From performance assessment to benchmarking</b> Chairs <b>Heimo Theuretzbacher-Fritz</b> Austria, <b>Enrique Cabrera</b> Spain</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> <span style="float: right;"><b>Foyer</b></span></p>	
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<p><b>12:00 – 13:00 Lunch</b> <span style="float: right;"><b>Foyer</b></span></p>	
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<p><b>14:30 – 15:00 Afternoon break</b> <span style="float: right;"><b>Foyer</b></span></p>	
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<p><b>16:30 Opening ceremony</b> <span style="float: right;"><b>Room 17</b></span></p>	