The 12th IWA Leading Edge Conference on Water and Wastewater Technologies (LET) is designed to be the flagship event to introduce new ideas and leading-edge technologies and provide window of opportunity for developing and applying “best of the best” water technologies in the globe.

The LET conference is held annually in different cities since 2003:

- Noordwijk 2003
- Prague 2004
- Sapporo 2005
- Singapore 2007 & 2009
- Zurich 2008
- Phoenix 2010
- Amsterdam 2011
- Brisbane 2012
- Bordeaux 2013
- Abu Dhabi 2014
- **Hong Kong** 2015
Theme: Moving from Pilot to Full Scale

Session Topics:

- ALTERNATIVE WATER SOURCES
- TREATING COMPLEX INDUSTRIAL WASTEWATERS
- DIRECT POTABLE REUSE
- INTEGRATED CHEMICAL AND BIOLOGICAL TREATMENT
- E-TECHNOLOGY IN URBAN WATER MANAGEMENT
- RESOURCE RECOVERY FROM WASTEWATER
- WATER TECHNOLOGY FOR DENSELY POPULATED AND RAPIDLY GROWING CITIES
- GRANULAR SLUDGE PROCESS
Programme Committee

Programme Committee Core Group

- Pedro Alvarez  Rice University, USA
- Guang-hao Chen  Hong Kong University of Science and Technology, Hong Kong, China
- Jurg Keller  University of Queensland, Australia
- Mark van Loosdrecht  Delft University of Technology, The Netherlands
- Bruce Rittmann  Arizona State University, USA

Programme Committee Members

- Gary Amy  National University of Singapore, Singapore
- Carlos Campos Callao  Suez Environnement, France
- Peter Cornel  Technische Universität Darmstadt, Germany
- How Yong Ng  National University of Singapore, Singapore
- Satoshi Okabe  Hokkaido University, Japan
- Rene Rozendal  Paques BV, Netherlands
- Harry Seah  PUB, Singapore
- Chii Shang  Hong Kong University of Science and Technology, Hong Kong, China
- Beverley Stinson  AECOM, USA
- Ai-jie Wang  Harbin Institute of Technology, China
- Mari Winkler  Ghent University, Belgium
## Organising Committee Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guang-hao Chen</td>
<td>Hong Kong University of Science and Technology, Hong Kong, China</td>
</tr>
<tr>
<td>(chair)</td>
<td></td>
</tr>
<tr>
<td>Cheuk-fung Lam</td>
<td>Environmental Protection Department, Hong Kong, China</td>
</tr>
<tr>
<td>Lok-wong Choi</td>
<td>Water Supplies Department, Hong Kong, China</td>
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<tr>
<td>Chun-ming Choi</td>
<td>Drainage Services Department, Hong Kong, China</td>
</tr>
<tr>
<td>Yiu-wing Ha</td>
<td>Hong Kong University of Science and Technology, Hong Kong, China</td>
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<tr>
<td>Di Wu</td>
<td>Hong Kong University of Science and Technology, Hong Kong, China</td>
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<tr>
<td>Hong Li</td>
<td>International Water Association, The Netherlands</td>
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<tr>
<td>Tao Li</td>
<td>International Water Association, China</td>
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</table>
LET2015 Conference Venue

Charles K. Kao Auditorium, Hong Kong Science Park

Website: http://www.hkstp.org

Auditorium (max. 284 seats)  Conference Hall (max. 240 seats)  Atrium (poster room ≈ 500 m²)
LET2015 Conference Overview

Conference Program

30 May (Saturday) 2 Technical Visits
31 May (Sunday) 3 Workshops (17 presentations)
Welcome Reception
1 Jun (Monday) Registration & Opening Ceremony
Plenary Session (6 presentations)
Poster Session (approx. 160 poster presentations)
2 Jun (Tuesday) Parallel conference sessions (24 oral presentations)
3 Jun (Wednesday) 4 Parallel conference sessions (26 oral presentations)
Gala Dinner
Hong Kong Platform Presentations
(1 plenary, 2 keynotes, 2 oral, 2 workshop presentations)

Sunday, 31 May 2015
• Workshop presentation:
  – Stormwater management in Hong Kong, Yiu-kwong Ho, Drainage Services Department (Hong Kong, China)
  – Long Term Experience of seawater toilet flushing practice / Case study of triple water supply at HK International
    Airport, Mabel Lam, Water Supplies Department, Hong Kong, China) and Samuel Chui, HKUST (Hong Kong, China)

Monday, 1 JUNE 2015
• Plenary presentation:
  – Total water management in Hong Kong, Chi-ming Chan, Deputy Secretary for Development (Hong Kong, China)

Tuesday, 2 JUNE 2015
• Keynote oral presentation:
  – Sustainable water resources to meet challenge, Wing-kee Kam, Water Supplies Department (Hong Kong, China)

Wednesday, 3 JUNE 2015
• Keynote oral presentation:
  – Water technology for densely populated and rapidly growing cities, Henry Tam, Drainage Services Department (Hong
    Kong, China)
• Oral presentation:
  – Production of polyhydroxyalkanoates (PHA) from treated industrial effluent and their characteristics, Y.F. Tsang and
    D. He (Hong Kong, China)
  – New microorganisms, new EBPR for tropical coastal cities, H. Wang, D. Wu, R. Liu and G.H. Chen (Hong Kong, China)
Conference Technical Visits

SATURDAY, 30 MAY 2015
13:30 – 17:30

Technical Tour 1 – The Sludge Treatment Facility
Location: Tuen Mun

Technical Tour 2 – Seawater Pumping Station & SANI Demonstration Plant
Location: Sha Tin

* Shuttle buses will pick up delegates that have signed up for the visits from the 3 hotels to conference venue at 11:00 on 30 May 2015 for registration. Light refreshment (a bottle of water and sandwich) will be provided.
## Conference Workshops

**SUNDAY, 31 MAY 2015**  
**13:30 – 17:30**

<table>
<thead>
<tr>
<th>Workshop 1</th>
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<tr>
<td>Innovations to create and scale up a sanitation industry</td>
<td>Water Sensitive Cities: designing and planning for water resilient societies with diversified water supply</td>
<td>Food Waste: From Waste to Resource</td>
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<td>Bill &amp; Melinda Gates Foundation</td>
<td>Jurg Keller (Australia); Valerie Naidoo (South Africa) and Guang-hao Chen (Hong Kong, China)</td>
<td>George A Ekama (University of Cape Town, South Africa) and Guang-hao Chen (Hong Kong, China)</td>
</tr>
</tbody>
</table>
# Conference Opening Ceremony

**MONDAY, 1 JUNE 2015**  
8:45 – 9:30

<table>
<thead>
<tr>
<th>Opening Address</th>
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<tbody>
<tr>
<td>Mark van Loosdrecht, Programme Committee Chariman of LET2015</td>
</tr>
<tr>
<td>Helmut Kroiss, President of the International Water Association</td>
</tr>
<tr>
<td>Tony F Chan, President of the Hong Kong University of Science and Technology</td>
</tr>
<tr>
<td>Wong Kam-sing, JP, Secretary for the Environment of the Hong Kong Special Administrative Region Government</td>
</tr>
<tr>
<td>Allen Ma Ka-sing, Chief Executive Officer of Hong Kong Science and Technology Parks Corporation</td>
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</tbody>
</table>
Conference Logistic

In addition to the Technical Visits, Workshops and Main Conference, we also provide

- 2 Social Functions (Welcome Reception (18:00, 31 May) and Gala Dinner (18:00, 3 Jun))
- 7 Coffee breaks and 3 Conference Lunch
- Shuttle bus (between 3 Conference Hotels and Conference Venue/Technical Visits)
- 5-day Registration Counter Service
- 24-hours Hotline

HKUST has 10+ Staff and 20+ student helpers working as volunteers for this conference.
LET2015 Conference Registration

Registration Status (update to 8 May 2015)

- Complimentary (nos.)
- Paid Delegates 44203 (nos.)
  (expected > 250 paid delegates)

<table>
<thead>
<tr>
<th>Delegate Registration Fees</th>
<th>EARLY BIRD if payment received by 15 April 2015</th>
<th>NORMAL if payment received by 25 May 2015</th>
<th>ON-SITE applicable after 25 May 2015 and on-site</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Income Country IWA Member</td>
<td>€ 650</td>
<td>€ 750</td>
<td>€ 850</td>
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<tr>
<td>Low-Income Country IWA Member</td>
<td>€ 450</td>
<td>€ 500</td>
<td>€ 550</td>
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<tr>
<td>Student IWA Member</td>
<td>€ 450</td>
<td>€ 500</td>
<td>€ 550</td>
</tr>
<tr>
<td>High-Income Country Non-IWA Member</td>
<td>€ 780</td>
<td>€ 880</td>
<td>€ 1000</td>
</tr>
<tr>
<td>Low-Income Country Non-IWA Member</td>
<td>€ 480</td>
<td>€ 550</td>
<td>€ 600</td>
</tr>
<tr>
<td>Student Non-IWA Member</td>
<td>€ 480</td>
<td>€ 550</td>
<td>€ 600</td>
</tr>
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</table>

Early Bird Paid Delegates = 203
(Expected Paid Delegates ≈ 250)

Paid Delegates
(Local) = 63
Paid Delegates
(China and Oversea) = 140

Breakdown of the Local Paid Delegates (63)

Consultant/Contractor = 2
University and Educational Institution =25
Government = 36
(*HKUST = 15)
## Open Workshop Registration

<table>
<thead>
<tr>
<th>WORKSHOP REGISTRATION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops on 31 May 2015</td>
<td>€ 70 (Local resident)</td>
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<tr>
<td></td>
<td>€ 50 (Student, IWA YWP member)</td>
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</tbody>
</table>

Registration:

(i) International registration, please visit the Conference Website: [http://www.let2015.org/registration](http://www.let2015.org/registration)

(i) Local registration, please contact the Conference Assistant:

Ms Karen Leung, kityan@ust.hk
<table>
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**Organiser:**
Bill & Melinda Gates Foundation

**Agenda:**
Reinventing the sanitation industry to better servicing the poor in developing countries (30 min)

Update on lead technologies to Reinvent the Toilet and improve fecal sludge management

(a) Development of Distributed and Integrated off-grid Wastewater Treatment Systems for Use in the Developing World (25 min)

(b) Microbial Fuel Cells and their role in Sanitation (25 min)

(c) Size Matters: Creating Toilet Business at scale vs. Scaling up? (25 min)

(d) The biocharomni processor, a transportable sludge management solution (25 min)

Global Market assessment and market size of reinvented toilet and sanitation innovation (35 min)

**Organisers:**
Jurg Keller (Australia); Valerie Naidoo (South Africa) and Guang-hao Chen (Hong Kong, China)

**Agenda:**
Stormwater Management in Hong Kong (15 min)

Overview of the state of uptake of sustainable urban drainage systems in South Africa – Challenges and Opportunities (15 min)

“Rainwater’s fine but I won’t use recycled water”: the role of community in diversified water supplies (20 min)

Long Term Experience of seawater toilet flushing practice / Case study of triple water supply at HK International Airport (20 min)

Water sensitive Design: Alternative Water Supply and preparing for the Future in South Africa (15 min)

How to create a direct potable water recycling solution while avoiding the 'toilet-to-tap' issue? (15 min)

**Organisers:**
George A Ekama (University of Cape Town, South Africa) and Guang-hao Chen (Hong Kong, China)

**Agenda:**
Food Waste: From Waste to Resource (30 min)

Commodities from Municipal Solid Waste (40 min)

Pretreatments for anaerobic codigestion in sewage treatment facilities (40 min)

Bioconversion of Food Wastes to Biofuel and Animal Feed through Insect Farming (40 min)

The advantages and disadvantages of food waste discharge to sewer: A case study on the Sha Tin WWTP (30 min)
Thank You