

IWA Specialist Conference

# Sustainable Wastewater Treatment and Resource Recovery: Research, Planning, Design and Operation



Call for Abstracts

7-10 November, 2017, Chongqing, China  
[www.nrr-lwwtp2017.com](http://www.nrr-lwwtp2017.com)



## Organisers & Sponsors



## The Organisers

This conference is jointly organised by:

- **Chongqing University**
- **IWA Specialist Groups on Design, Operation and Costs of Large Wastewater Treatment Plants**
- **IWA Specialist Groups on Nutrient Removal and Recovery**

## Welcome and Invitation from Conference Chairs



**Prof. Qiang He**

Professor,  
Chongqing  
University



**Dr. Sudhir Murthy**

Chairman, IWA Specialist  
Group on Nutrient Removal  
and Recovery



**Prof. Norbert Jardin**

Chairman, IWA Specialist  
Group on Design, Operation  
and Costs of Large  
Wastewater Treatment  
Plants

On behalf of the International Water Association (IWA), the IWA Specialist Groups on Design, Operation and Costs of Large Wastewater Treatment Plants and Nutrient Removal and Recovery, Organising Committee of the Conference and the School of Urban Construction and Environmental Engineering, Chongqing University, it is our pleasure to invite you to join us for the IWA Specialised Conference: **Sustainable Wastewater Treatment and Resource Recovery: Research, Planning, Design and Operation. 7-10 November, 2017, Chongqing, China.**

While at the beginning of the 20<sup>th</sup> century less than 15% of the total population in China lived in towns, today already 56% and in 2050 it is predicted that nearly 80% of all people live in urban agglomerations. There are already 14 cities with a population exceeding 5 million people. This will change our way of managing water in the “**Cities of the Future**”. In addition to centralised wastewater collection and treatment systems, semi-centralised or distributed concepts for water management are also urgently needed to cope with the challenges of water management in large cities. The main objective of wastewater treatment has to be accomplished by an efficient water reuse and resource recovery including the development of technologies for improving energy efficiency.

The conference will focus on the aspects of researches and technologies of **nutrient removal and recovery** and also the **design and operation of large wastewater treatment plants**. It will bring together mainly operators, designers and consultants on one side with researchers, university teachers, IWA specialists, developers, technology and equipment providers on the other side. Special emphasis will be given to **active participation of young professionals**.

The **lecture programme** will be accompanied by a **poster session**. The poster session will enlarge the number of conference contributions and will provide a lively forum for discussion and idea exchange between conference participants and poster authors. To encourage young professionals to participate in the poster session, the scientific committee will **select the best poster paper** and **announce the winner** of this contest at the **conference's closing ceremony**.

The programme of **oral presentations** will be developed in close co-operation of the IWA Specialist Groups on Design, Operation and Costs of Large Wastewater Treatment Plants and Nutrient Removal and Recovery with support from the Specialist Group on Anaerobic Digestion. In addition a **pre-conference training course on Modelling Activated Sludge Plants, YWPs workshop** and conference **technical tours** will also be organised.

We cordially invite you to join us for this conference and are looking forward to an inspiring event

## Key Dates

First announcement and call for abstracts	<b>1 November, 2016</b>
Deadline for abstract submission	<b>15 April, 2017</b>
Date for notifying successful authors	<b>15 May, 2017</b>
Deadline for full paper submission	<b>30 August, 2017</b>
Early Bird registration before	<b>15 September, 2017</b>
Pre-conference training course	<b>5-6 November, 2017</b>
Conference takes place	<b>7-10 November, 2017</b>

# About the Conference



## Conference Themes:

Research and Scientific Themes	Planning, Design and Operation Themes
<ul style="list-style-type: none"> <li><input type="checkbox"/> Advanced technologies for nutrient removal and recovery</li> <li><input type="checkbox"/> Conventional biological nutrient removal (BNR) processes</li> <li><input type="checkbox"/> Chemical nutrient removal</li> <li><input type="checkbox"/> Carbon augmentation, fermentation and redirection for biological nutrient removal</li> <li><input type="checkbox"/> Emission of N<sub>2</sub>O and greenhouse gases</li> <li><input type="checkbox"/> Intensification of treatment (granular sludge, attached growth, ballasting)</li> <li><input type="checkbox"/> Microbial ecology and fundamental mechanisms</li> <li><input type="checkbox"/> Nutrient management in biosolids streams</li> <li><input type="checkbox"/> Nutrient recovery including source separation</li> <li><input type="checkbox"/> Nutrient removal and recovery in engineered ecosystem</li> <li><input type="checkbox"/> Short-Cut nitrogen removal</li> <li><input type="checkbox"/> Strategies for achieving low effluent nutrient level</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Asset management and strategic planning</li> <li><input type="checkbox"/> Benchmarking of LWWTPs</li> <li><input type="checkbox"/> Case studies (design)</li> <li><input type="checkbox"/> Chemical wastewater treatment</li> <li><input type="checkbox"/> CFD modelling</li> <li><input type="checkbox"/> Costs and energy efficiency (including energy neutral flowsheets)</li> <li><input type="checkbox"/> Eutrophication and its control</li> <li><input type="checkbox"/> Flood protection of WWTPs</li> <li><input type="checkbox"/> Good modeling practice</li> <li><input type="checkbox"/> Management of gaseous emission</li> <li><input type="checkbox"/> Membrane technology</li> <li><input type="checkbox"/> Monitoring and control</li> <li><input type="checkbox"/> New design approaches</li> <li><input type="checkbox"/> Nutrient management and pollution control of the eutrophic surface water in Asia and around the world</li> <li><input type="checkbox"/> Operation of LWWTPs (including optimization)</li> <li><input type="checkbox"/> Policy and planning for sustainable and economic nutrient management</li> <li><input type="checkbox"/> Regulation and institutions</li> <li><input type="checkbox"/> Sludge treatment and disposal</li> <li><input type="checkbox"/> Tertiary treatment, removal of micropollutants</li> <li><input type="checkbox"/> WW reuse and water resources recovery</li> </ul>

## Programme Committee:

Qiang He (China)  
 Norbert Jardin (Germany)  
 Jörg Krampe (Austria)  
 Helmut Kroiss (Austria)  
 Tao Li (China)  
 Jacek Makinia (Poland)  
 Sudhir Murthy (USA)  
 Jan Oleszkiewicz (Canada)  
 Miklos Patziger (Hungary)  
 Jun Zhai (China)

## Organising Committee:

Qiang He (Chair, China)  
 Jun Zhai (Co-Chair, China)  
 Fangying Ji (China)  
 Xuebin Hu (China)  
 Qi Zhou (China)  
 Xia Huang (China)  
 Baoqing Shan (China)  
 Jun Ma (China)  
 Xiaochang Wang (China)  
 Chen Zhang (China)

Tao Li (China)  
 Yipang Gan (China)  
 Xingcan Zheng (China)  
 Shijun Hang (China)  
 Hongchen Wang (China)  
 Xiaohu Dai (China)  
 Fengqing Wang (China)  
 Zhongjian Xiao (China)  
 Chun Yang (China)  
 Xuan Xu (China)

Yi Chen (China)  
 Hainan Ai (China)  
 Li Gu (China)  
 Hongxiang Chai (China)

## Scientific Committee:

Qiang He (China, Chair)  
 Sudhir Murthy (USA, Chair)  
 Norbert Jardin (Germany, Chair)  
 Jun Zhai (China, Secretary)  
 Jacek Makinia (Poland, Secretary)  
 Miklos Patziger (Hungary, Secretary)  
 James Barnard (USA)  
 Harro Bode (Germany)  
 Bilsen Beler Baykal (Turkey)  
 Charles Bott (USA)  
 Messaoud Djeddou (Algeria)  
 George Ekama (South Africa)  
 Tao Guihe (Singapore)  
 Kartik Chandran (USA)

Helmut Kroiss (IWA)  
 Harald Kainz (Austria)  
 Jörg Krampe (Austria)  
 Susanne Lackner (Germany)  
 Zuliang Liao (Norway)  
 Günter Langergraber (Austria)  
 Doug Lumley (Sweden)  
 Dawen Gao (China)  
 Jan Oleszkiewicz (Canada)  
 Tao Li (China)  
 Norbert Matsché (Austria)  
 Pusker Regmi (USA)  
 Frank Rogalla (Spain)

Mark van Loosdrecht (The Netherlands)  
 Helle van der Roest (The Netherlands)  
 Aurora Seco (Spain)  
 László Somlyódy (Hungary)  
 Mathieu Sperandio (France)  
 Michele Torregrosa (Italy)  
 Burkhard Teichgräber (Germany)  
 Zhiguo Yuan (Australia)  
 Siegfried Vlaeminck (Belgium)  
 Jiri Wanner (Czech Republic)  
 Julian Sandino (USA)  
 Elzbieta Plaza (Sweden)  
 Brian Shutes (UK)

# Partial list of Keynote Speakers

## Dr Sudhir Murthy



- Dr. Murthy serves as Innovations Chief at DC Water, USA
- Chair IWA SG Nutrient Removal and Recovery; IWA & WEF fellow
- Founding chair of the Leaders Innovation Forum for Technology (LIFT)
- Authored more than 100 peer review publications

## Prof. Dr.-Ing. Norbert Jardin



- Chief Technology Officer of Ruhrverband in Essen (Germany) and Honorary Professor at Darmstadt University
- Served as a director on the IWA Board of Directors
- Chair IWA SGs on Design, Operation and Costs of Large Wastewater Treatment Plants
- Authored more than 120 articles in national and international journals

## Prof. Helmut Kroiss



- Professor at Vienna University of Technology
- Past president of IWA
- International consultant for industrial and municipal wastewater treatment plant design and operation

## Prof.dr.ir. Mark van Loosdrecht



- Professor in Environmental Biotechnology at Delft University of Technology
- Editor in Chief of Water Research
- Published over 500 scientific papers, has 15 patents and has supervised over 50 PhD students

## Prof.dr. Willy Verstraete



- Emeritus professor at Gent University
- Research area: Microbial Resource Management; i.e. the design, operation and control of processes mediated by mixed microbial cultures
- h-index of 80; total citation 30,000 (May 2015)

## Mr. Harry Seah



- Serves as the Chief Technology Officer of Public Utilities Board (PUB), Singapore
- Director of Technology Development of Environmental and Water Industry (EWI) Programme Office
- Member of Advisory Council at Emerald Technology Ventures AG

## Prof. Hallvard Ødegaard



- Emeritus professor at Norwegian University of Science and Technology
- Inventor of the Moving Bed Biofilm Reactor for wastewater treatment
- Published over 500 scientific papers

## Prof. Xingcan Zheng



- Chief engineer of North China Municipal Engineering Design and Research Institute
- Science and technology committee member of Ministry of Housing and Urban-Rural Development of People's Republic of China
- Member of Water Environment Federation (WEF) council
- State-council allowance obtained expert

## Prof. Qiang He



- Professor and Deputy Dean at Faculty of Urban Construction and Environmental Engineering, Chongqing University
- Scientific committee member of IWA
- State-council allowance obtained expert
- National key talent project selected expert

## Conference Language

The official language of the conference will be English. There will be oral and poster presentations, with pre-printed abstracts of conference papers.

## Registration Fees\*

Categories	Early Bird (Before 15 <sup>th</sup> September, 2017)	Late Registration (From 15 <sup>th</sup> September, 2017)
IWA member (HIC)	3500 RMB	4000 RMB
IWA non-member (HIC)	4200 RMB	4700 RMB
Student/YWPs (HIC)	2500 RMB	3000 RMB
IWA member (LIC)	2800 RMB	3300 RMB
IWA non-member (LIC)	3500 RMB	4000 RMB
Student/YWPs (LIC)	2000 RMB	2500 RMB

HIC: High Income Countries; LIC: Low Income Countries; YWPs: Young Water Professionals

\* Fees excluding pre-conference training, need separate registration for training course

## Programme Outline

Sunday-Monday, 5-6 Nov. 2017	Tuesday, 7 Nov. 2017	Wednesday, 8 Nov. 2017	Thursday, 9 Nov. 2017	Friday, 10 Nov. 2017
<ul style="list-style-type: none"> <li>✦ Registration</li> <li>✦ Poster set-up</li> <li>✦ YWPs workshop</li> <li>✦ Welcome reception</li> <li>✦ Pre-conference training*</li> </ul>	<ul style="list-style-type: none"> <li>✦ Welcome session</li> <li>✦ Keynote session</li> <li>✦ Parallel sessions</li> <li>✦ SG meeting 1</li> </ul>	<ul style="list-style-type: none"> <li>✦ Parallel sessions</li> <li>✦ SG meeting 2</li> <li>✦ Gala dinner</li> </ul>	<ul style="list-style-type: none"> <li>✦ Parallel sessions</li> <li>✦ Closing session</li> </ul>	<ul style="list-style-type: none"> <li>✦ Technical Tour 1</li> <li>✦ Technical Tour 2</li> </ul>

## Conference Venue

The conference will take place in Radisson Blu Hotel, a five stars hotel located at Li Shu Bay, Shapingba District, Chongqing. This is an international business hotel, which has 1300 square meter grand Hall that can accommodate up to 2000 guests for social or corporate events, and is equipped with advanced multimedia presentation system.



## Technical Tour

### Technical Tour 1: Chongqing Garden Expo Park

Chongqing Garden Expo Park is located in Longjingshu Park in the Northern New District of Chongqing and covers an area of 3300 ha, with views of nearby mountains, lakes, gorges - and Beipei city.



Garden Expo Park

### Technical Tour 2: Chongqing Jiguanshi and Tangjiatuo Wastewater Treatment Plant

- Chongqing Jiguanshi sewage treatment plant located in nan'an district of Chongqing, Jiguanshi main street No. 99. Its design processing capacity of sewage is 800000 cubic meters per day.
- Tangjiatuo Wastewater Treatment Plant is located in the Yubei District of Chongqing at the bank of Yangtze River which treats WW of 8.2M PE.



Jiguanshi WWTP



Tangjiatuo WWTP

## Call for Abstracts

### Abstract submission

Authors are invited to submit an abstract according to format before **15<sup>th</sup> April 2017**. The procedure as well as template for submission is available on the official conference website: [www.nrr-lwwtp2017.com](http://www.nrr-lwwtp2017.com) or directly send email to [secretary@nrr-lwwtp2017.com](mailto:secretary@nrr-lwwtp2017.com)

All submissions should be original and not been previously accepted for publication in a journal. Authors whose abstracts are selected will be invited to give oral presentations or a poster presentations in the conference. The authors will be notified of acceptance by 15<sup>th</sup> May 2017, and full papers are encouraged to be submitted by 30<sup>th</sup> August 2017.

### Paper selection and publication (SCI Journal)

After the conference, full papers will be further reviewed and recommended for publication in IWA Publishing Journals:

- Water Science and Technology
- Journal of Water and Health

## Contacting Information

[www.nrr-lwwtp2017.com](http://www.nrr-lwwtp2017.com)

**Prof. Jun Zhai**  
Conference Secretary  
Department of Water Science and Engineering  
School of Urban Construction and Environmental Engineering, Chongqing University  
Shazheng Street, No.83, Shapingba District, Chongqing, 400045, P.R.China  
Mobile: +86-13637966883  
Tel / Fax: +86-23-65120810  
Email: [secretary@nrr-lwwtp2017.com](mailto:secretary@nrr-lwwtp2017.com)

**Dr. Tao Li**  
Director, IWA China Regional Office  
Room C205, 18 Shuangqing Road, Haidian District  
Beijing, 100085, China  
Office: +86 10 62849589  
Mobile: +86 13810031231  
Email: [tao.li@iwahq.org](mailto:tao.li@iwahq.org)



(Scan for WeChat)