One-day Special Workshop on

"Frontier of Wastewater Treatment Research and Development"

6th August 2010 (Friday)

Lecture Theatre G

The Hong Kong University of Science & Technology

Organized by

香港科技大學
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Supported by

IWA International Water Association

The Regional Committee of Hong Kong, China
國際水協中國香港地區委員會

AECOM

WORKSHOP LECTURER

Professor George A. EKAMA

The University of Cape Town

Fellow of the Royal Society of South Africa

Fellow of the Academies of Science and of Engineering of South Africa

&

Professor Guang-Hao Chen

The Hong Kong University of Science & Technology

Plenary Keynote Speaker of the 7th IWA leading-edge technology Conference on Water and Wastewater Treatment

Coordinator of The University of Tokyo, HKUST and Sun Yat-sen University (China) Joint Program for Incubation of Asian Environmental Leaders

Workshop Programme on August 06 2010 (Friday)
Lecture Theatre G at HKUST

Topics	Duration	Lecturer
AM Session (9:00 to 12:30 am)		
A steady state model for biological sulphate reduction with sewage organics.	90 minutes	George
Coffee Break 10:30-11:00: am		
Design, startup, performance and modelling of anaerobic membrane reactor for treatment of high strength (18gCOD/l) acidic (pH<4) organic petrochemical wastewater.	90 minutes	George
Lunch Break 12:30 to 1:30 pm		
PM Session (1:30 pm to 5:00 pm)		
Leading-edge wastewater treatment technologies developed at HKUST (part 1)	90 minutes	GH
Coffee Break 3:00-3:30 pm		
SANI process and its application perspectives (part 2)	90 minutes	GH

Registration Fee

HK$980 per person. To register in this prestigious workshop before the deadline of **August 01 2008**, please send your cheque, made payable to **"The Hong Kong University of Science"** with completed payment form in the attachment or simply send your completed credit card payment form to Ms. Kachi Chan (2358-7161, email:egkachi@ust.hk), Department of Civil & Environmental Engineering, HKUST, Clear Water Bay, Hong Kong.

Please feel free to contact the workshop organizer, Prof. GH Chen at 2358-8752 or email: ceghchen@ust.hk for any inquiry on this workshop.

Privileges

Free beverages during two coffee breaks

Free parking (please book with Ms. Kachi Chan, 2358-7234)

One set of the hand-out of the workshop

A one-day CPD course attendance certificate

Biography of the Lecturers

Professor George A Ekama, PhD, has 35 years research experience into activated sludge systems at the University of Cape Town, where some of the original biological N and P removal development and kinetic simulation modelling research were done in the 1980s, which found its way into activated sludge models No 1 and 2. Over the years he has been at the forefront of developments in BNR activated sludge systems modelling, filamentous bulking control, secondary settling tank design, anaerobic digestion and plant wide WWTP modelling. He has published over 170 research papers on these subjects and he and his research group have been co-authors of 4 of the International Water Association (IWA) Scientific and Technical Reports (STR) on activated sludge modelling, community analysis and secondary settling tanks. He has been visiting Professor at Virginia Tech, University of Padua, UNESCO- IHE in Delft, and HKUST in Hong Kong, teaching graduate courses on wastewater treatment. He regularly teaches courses for local authorities and industry, both nationally and internationally, such as for the Hong Kong SAR Government in 1999, 2003 and 2008, and Beijing Water Corporation in 2006. He is one of a few environmental engineering professors listed on Thomson's ISI Highly Cited website (www.isihighlycited.com). He is co-author and co-editor of the recently published (2008) internet learning course called "Biological wastewater treatment - Principles, modelling and design" sponsored by the UNESCO-IHE and the IWA, which includes a book, down-loadable course notes and video-filmed lectures. His current research interests are: 1) including C into steady state and simulation models for plant wide WWTP modelling, 2) biological sulphate reduction of acid mine drainage using sewage sludge and other concentrated organics waste streams, 3) energy recovery from concentrated organics waste streams in membrane anaerobic digesters, 7) impact of source separation of urine on biological nutrient removal, and 8) biological sulphate reduction and autotrophic denitrification with sulphide in saline sewage treatment arising from seawater toilet flushing. Professor Ekama is a fellow of several

institutions such as the Water Institute of Southern Africa, Royal Society of South Africa and the academies of Science and of Engineering of South Africa.

Professor GH Chen obtained PhD degree in Environmental Engineering from Kyoto University in 1990. He then worked as environmental consultant in Japan for 3 years. GH joined the Hong Kong University of Science & Technology in 1995. He has 25 years research experience in wastewater treatment. His major expertise includes: biological sewage treatment, sewer biofilm modeling, urine separation and treatment, and membrane bioreactor (MBR). GH is an elected committee member of IWA Sewer Network and Process, Associate editors of **Water Research**, **Water Science & Technology**, and **AQUA**. Since 1992 GH has organized four IWA sponsored international conferences with world's leading experts in water and wastewater treatment. In 2002 GH initiated the **Annual Forum of China Young Leading Scholars in Environmental Science and Engineering**. In the past 10 years GH has delivered 14 invited presentations at various international conferences/workshops and edited 12 journal special issues/conference proceedings/book chapters and published 140 research papers. In the past 7 years, GH and his research team has proposed/developed 10 innovative wastewater treatment technologies including: No-biosolid-producing SANI process, Non-fouling MBR, MEPT process, Sludge-minimizing NOSA process, Urine nitrifying biomass granulation, Deep-shaft urine-nitrifying SBR, and In-sewer denitrification process.