

The 3rd International Conference on Sustainable Water Environment: Integrated Water Resources Management - New Steps



■ Date: October 24 (Wed) - 25 (Thur), 2007 ■ Place: Hotel Royton Sapporo, Japan <<http://www.daiwaresort.co.jp/english/index.html>>

Background

Since the Earth Summit held in 1992, there has been a growing consensus in the international community that the water resource management is an indispensable issue for the sustainable development. We are facing a serious water problem that is one of the most pressing issues in 21st century. An efficient water use including a recycling use is essential to maximize the limited water resource. ICSWE has twice taken place in Taiwan aiming to establish a forum for water environment experts to exchange experiences and information on sustainable water resource development practices around the world. Our ultimate goal is to achieve a sustainable water resource system through integrated urban water management.

Plenary Lectures ▶▶▶▶▶



Dr. Peter A. Wilderer
Director, Institute of Advanced Studies on Sustainability, European Academy of Sciences and Arts
Professor Emeritus of Excellence, TUM, Germany



Dr. Norihito Tambo
Professor Emeritus, Hokkaido University and the Open University of Japan
Director, Hokkaido Historical Museum, Japan



Dr. Hiroshi Kida
Director, Research Center for Zoonosis Control
Professor, Graduate School of Veterinary Medicine, Hokkaido University, Japan

Sessions ▶▶▶▶▶

1 Maximizing urban fresh water resource availability



Prof. Pen Chi Chiang
National Taiwan University, Taiwan
(chair)



Dr. Ching Tzone Tien
Maryland Department of the Environment, USA
(chair)



Dr. Robert Summers
Maryland Department of the Environment, USA



Prof. M. Gordon Wolman
The Johns Hopkins University, USA



Mr. Shen-Hsien Chen
Water Resources Agency, MOE, Taiwan



Mr. Fu-Tien Chen
Taiwan Water Corporation, Taiwan

2 Maximizing urban water resource by reclamation and reuse



Prof. Say-Leong Ong
National University of Singapore, Singapore
(chair)



Dr. Glen Daigger
CH2M Hill, USA
(chair)



Prof. How Yong Ng
National University of Singapore, Singapore



Prof. Shaw L. Yu
University of Virginia, USA

3 Application of emerging technologies-membrane technology, environmental nano and bio technology



Prof. Suing-II Choi
Korea University, Korea
(chair)



Prof. Yoshimasa Watanabe
Hokkaido University, Japan
(chair)



Prof. Bruce Rittmann
Arizona State University, USA



Prof. Pedro Alvarez
Rice University, USA



Prof. Jaeweon Cho
Gwangju Institute of Science and Technology (GIST), Korea



Prof. Seungkwon Hong
Korea University, Korea

4 Environmental implications of emerging materials and chemicals



Prof. Chin-Pao Huang
University of Delaware, USA
(chair)



Prof. Rao Y. Surampalli
U.S. Environmental Protection Agency, USA
(chair)



Prof. Craig Adams
University of Missouri-Rolla, USA



Prof. E.E. Chang
Taipei Medical University, Taiwan



Prof. Tsair-Fuh Lin
National Cheng Kung University, Taiwan



Prof. Jianguyong Hu
National University of Singapore, Singapore

PROGRAM

The 3rd International Conference on Sustainable Water Environment: Integrated Water Resources Management-New Steps

● Date: October 24 (Wed) – 25 (Thur), 2007 ● Place: Hotel Royton Sapporo, Japan

Day 1 Wednesday 24 October

- 8:00 **Registration**
- 9:00 **Opening and Plenary Session**
Chair : Yoshimasa Watanabe
With welcome
Welcome from Pen Chi Chiang
- 9:30 Norihito Tambo
From Centralized World to Characterized Dimensions
- 10:10 **Break**
- 10:20 Peter A. Wilderer
Measuring and Comparing Sustainability of Water Management Systems – A Critical Survey –
- 11:00 **Break**
- 11:10 Hiroshi Kida
Ecology of Influenza Viruses in Nature, Birds and Humans
- 11:50 **Lunch (70 min)**
- 13:00 **Session 1: Maximizing urban fresh water resource availability**
Chairs : P. C. Chiang & C.T. Tien
- 13:00 The Clean Water Act Reflections and Lessons
M. Gordon Wolman
- 13:30 Groundwater Discharge Permit Program and Water Quality Protection in Maryland, USA
Ching Tzone Tien
- 14:00 The Future of Management and Protection of Water Resources in Maryland
Robert M. Summers
- 14:30 **Break (20 min)**
- 14:50 Development of Sustainable Water Resource Management Strategies for Kaoping River Basin
Pen Chi Chiang
- 15:20 Sustainable Development Strategies of Taiwan Water Corporation
Fu-Tien Chen
- 15:50 Diversified Water Resources Management Policy in Taiwan
Shen-Hsien Chen
- 16:20 **Break (20 min)**
- 16:40 **Session 2: Maximizing urban water resource by reclamation and reuse**
Chairs : G. Daigger & S-L Ong
- 16:40 Creation of Sustainable Water Resources by Water Reclamation and Reuse
Glen T. Daigger
- 17:10 Water Reclamation and Reuse – Sustainability through Advanced Technologies
Say-Leong Ong
- 17:40 **Day 1 close**
- 18:30 **Party**

Day 2 Thursday 25 October

- 9:00 **Session 2 (continued from the day before)**
- 9:00 A Discussion on Rainwater Utilization
Shaw L. Yu
- 9:30 High Performance 16-Inch Reverse Osmosis System for Water Reclamation
How Yong Ng
- 10:00 **Break (20 min)**
- 10:20 **Session 3: Application of emerging technologies; membrane technology, environmental nano and bio technology**
Chairs : S-I Choi and Y. Watanabe
- 10:20 Environmental Biotechnology's Essential Role in Water Sustainability
Bruce E. Rittmann
- 10:50 Characteristics, Toxicity, and Control of Nanoparticles
Jaeweon Cho
- 11:20 The Antibacterial Activity of a Fullerene Water Suspension (nC₆₀)
Pedro Alvarez
- 11:50 **Lunch (70 min)**
- 13:00 **Session 3 (continued from the morning)**
- 13:00 Impact of Advanced Treatment Methods and Blending on Distribution Water Qualities
Seungkwan Hong
- 13:30 Applicability of Three Models on Nanomembrane Fouling by Organic Substances
Suing-II Choi
- 14:00 **Break (20 min)**
- 14:20 **Session 4: Environmental implications of emerging materials and chemicals**
Chairs : R. Surampalli & C.P. Huang
- 14:20 Nanomaterials: Applications and Implications
Rao Surampalli
- 14:50 Chemical Reduction of Perchlorate in Dilute Aqueous Solutions
Chin-Pao Huang
- 15:20 Estrogenic Compounds and Their Fates in Water Reclamation System
Jiangyong Hu
- 15:50 **Break (20 min)**
- 16:10 Modeling the Mass Balance of Two Cyanobacterial Odorants in Reservoirs
Tsair-Fuh Lin
- 16:40 Sustainable Approaches for Antibiotics in Municipal Sewage and Animal Agriculture
Craig Adams
- 17:10 Monitoring and Control of EDCs in Water Environment
E. E. Chang
- 17:40 **Closing**

Organized by 21st Century COE Program "Sustainable Metabolic Systems of Water & Waste for Area-based Society" (Project Leader: Prof. Yoshimasa Watanabe, Hokkaido University)

Co-organized by Hokkaido University, Japan

Sponsored by Foundation of Hokkaido River Disaster Prevention Research Center
Sapporo International Communication Plaza Foundation
Japan Society of Water Environment / Taiwan Water Corporation, Ministry of Economics, ROC / Graduate Institute of Environmental Engineering, National Taiwan University / U.S. Environmental Protection Agency / Japan Water Works Association

Contact: T. Kikuchi (Mrs.)
Senior Coordinator
COE Program Office (A3-57)
Graduate School of Engineering
Hokkaido University
N13 W8 Sapporo 060-8628, Japan
Phone: +81 11 706 7162
Fax: +81 11 706 6290
E-mail: tk@eng.hokudai.ac.jp

■ Language : English
■ Registration:
e-mail / tk@eng.hokudai.ac.jp
fax / +81 11 706 7366
■ Registration is free.
■ Party fee is 10,000 yen/person.

FREE