Day 1 June 16(Monday), 2014

as of June 10, 2014

9:00　Room A

Opening Address

Katsuki Kimura

9:10　Room A

Welcome from the Founder of the Particle Separation Specialist Group

Norihito Tambo

9:20-10:40　Room A

Keynote Lectures -Swing Session-

Chair: Yoshimasa Watanabe

【Keynote 1】

Filterability of MBR sludge: ten years of experience

Prof. Jaap van der Graaf

TU Delf

【Keynote 2】

Linking macro, micro and nano sized observation of aquatic particles

Prof. Markus Boller

EAWAG

10:40-11:00

Coffee Break

Day 1 June 16(Monday), 2014

as of June 10, 2014

11:00-12:30 Room A

Chair: Desmond Lawler

【1A-01】

Application of Laser-Induced Breakdown-Detection as a sensitive detector for UF membrane surrogate challenge tests

Martin Tröster, Pia Lipp, Frank Sacher, Thilo Hofmann, Heinz-Jürgen Brauch

DVGW-Technologiezentrum Wasser (Germany)

【1A-02】

Crossflow microfiltration of distillery effluent aiming its use as grow medium for microalgae cultivation

Gabriel Dibbern Sacchi, Andressa Bichara, Marco Antonio Penalva Reali, Mirna Helena Regali Seleghim

University of São Paulo (Brazil)

【1A-03】

What can fouling indices tell us about pre-treatment efficiency and RO operation?

Sergio Salinas Rodriguez, G.L. Amy, J.C. Schippers, M.D. Kennedy

UNESCO – IHE (the Netherlands)

【1A-04】

Linking influent disturbances and membrane fouling by dedicated small particle range investigation

Lieven De Temmerman, Thomas Maere, Arie Zwijnenburg, Hardy Temmink, Ingmar Nopens

Ghent University (Belgium)

12:30-14:00

Lunch

11:00-12:30 Room B

Chair: Qilin Li

【1B-01】

Reliance of photocatalytic activity of TiO_2 nanotube arrays on its geometrical characteristics

Tahereh Noeiaghaei, Jung Ho Yun, Seung-Woo Nam, Kyung-Duk Zoh, Vincent Gomes, Jong-Oh Kim

So-Ryong Chae

The University of Sydney (Australia)

【1B-02】

Separation of TiO_2 nanoparticles by aggregation and flotation from aqueous suspensions

Ming Zhang, Pascal Guiraud

Université de Toulouse; INSA (France)

【1B-03】

A novel molecularly imprinted composites for preferential *p*-nitrophenol catalytic ozonation

Chun He, Shuzhen Li, Yibin Gong, Yichang Yang, Lingling Hu, Dong Shu

Sun Yat-sen University (China)

Day 1 June 16(Monday), 2014

as of June 10, 2014

14:00-15:30 Room A

Chair: Martin Jekel

【1A-05】

Impacts and nature of ferrate induced particle formation in drinking water treatment

John E. Tobiason, Joseph Goodwill, Yanjum Jiang
David A. Reckhow
University of Massachusetts (USA)

【1A-06】

Membrane separation of human noroviruses in combination with enteric bacteria bearing histo-blood group antigen (HBGA)-like substances

Kalahe Panditha Koralage Mohan Amarasiri,
Takeshi Yoshimura, Satoshi Okabe, Daisuke Sano
Hokkaido University (Japan)

【1A-07】

Detection, separation and quantification of nanoparticles by means of field flow fractionation and mass spectrometry

Patrick S. Bäuerlein, Pol Herrero, Erik Emke, Eva Pocurull,
Pim de Voogt
KWR Watercycle Research Institute (The Netherlands)

【1A-08】

Image analysis of flocs and mathematical modelling applied to coagulation-flocculation process

Nataliia Sivchenko, Knut Kvaal, Harsha Ratnaweera
Norwegian University of Life Sciences (Norway)

【1A-09】

Particle Separation and the Accumulation of Clogging Matters in Three Bio-filters Treating Urban Stormwater

Yaoping Chen, Siping Niu, Youngchul Kim
Hanseo University (Korea)

【1A-10】

Stability of aerobic granules under different loading and pH conditions for biological wastewater treatment

Li Yun, Li Xiao-yan
The University of Hong Kong (Hong Kong)

【1A-11】

Challenges with the measurement of sphericity used for modelling in water filtration

Philani Ncube, Garry Hoyland, Peter Jarvis
Cranfield University (UK)

14:00-15:30 Room B

Chair: Mark Wiesner

【1B-04】

Engineered nanomaterials in wetlands constructed for wastewater and urban stormwater treatment

Lars Duester, Anne-Lena Fabricius, Diederik Rousseau,
Gijs Du Laing
Federal Institute of Hydrology (Germany)

【1B-05】

Nanoparticle removal from sewage in The Netherlands

Jan Hofman, Patrick Bäuerlein, Erik Emke, Pim de Voogt
KWR Watercycle Research Institute (The Netherlands)

【1B-06】

Analysing Transparent Exopolymer Particles (TEP) from µm to nm scale in Aquatic Environment

Justin Chun-Te Lin, Thuy Nguyen Thi, C.P. Huang
National Chiao Tung University (Taiwan)

【1B-07】

Electrically enhanced MBR for membrane fouling control: Performance, optimization and mechanism

Jiao Zhang, Kang Xiao, T. David Waite, Xia Huang
Tsinghua University (China)

【1B-08】

High-Performance PVDF Ultrafiltration Membrane Doped with PVP-g-MMT Nanoclays

Panpan Wang, Jun Ma
Harbin Institute of Technology (China)

【1B-09】

Characterization of Nano-Sized Particles in Selected Wastewater Effluents in Central Taiwan

Meng-HauSung, Chia-Chi Tsao, Chia-Hung Hou,
Hsing-Lung Lien
Thnghai University (Taiwan)

【1B-10】

Dissolved Organic Matter adsorption to titanium dioxide nanoparticles in wastewater: effect of molecular weight fractions and the interaction mechanisms

Xiaonan Yang, Fuyi Cui, Tao Jiang, Junguo He
Harbin Institute of Technology (China)

Day 1 June 16(Monday), 2014

as of June 10, 2014

15:30-16:00

Coffee Break

16:00-17:30 Room A

Chair: Harsha Ratnaweera

【1A-12】

Application of Fe(II)/K_2MnO_4 as a pre-treatment for controlling UF membrane fouling in drinking water treatment

Wenzheng Yu, Nigel J.D. Graham

Imperial College London (UK)

【1A-13】

A study on the sintered diatomite membrane for potential microfiltration

Jang-Hoon Ha, Eunji Oh, In-Hyuck Song

Korea Institute of Materials Science (Korea)

【1A-14】

Effect of mesh pore size on dynamic membrane formation

Hongguang Yu, Zhiwei Wang, Zhichao Wu

Tongji University (China)

【1A-15】

Effect of PAM and PAC addition on membrane fouling control in anaerobic membrane bioreactor

Zhiyong Yu, Xianghua Wen, Xia Huang

Tsinghua University (China)

【1A-16】

Retrofitting membrane processes for enhanced NOM removal in a drinking water treatment plant

Panu Laurell, Heikki Poutanen, Veli-Pekka Vuorilehto, Mehrdad Hesampour, Vesa Kettunen, Riku Vahala

Aalto University (Finland)

【1A-17】

Floc size distribution in coagulation pre-treatment: implication for membrane fouling prevention

Qing Ding, Hiroshi Yamamura, Naoki Murata, Nobuhiro Aoki, Hitoshi Yonekawa, Yoshimasa Watanabe

Chuo University (Japan)

【1A-18】

Regenerable Antimicrobial Activity in Polyamide Thin Film Composite Membranes for Sustainable Control of Membrane Biofouling

Jinjian Wu, Cong Yu, Qilin Li

Rice University (USA)

16:00-17:30 Room B

Chair: Jan Hofman

【1B-11】

A nano- ZnO catalyst to enhance the ozonation of geosmin and 2-methylisoborneol in drinking water

Winn-Jung Huang, Chen-Lin Hong, and Ting-Hsiang Wu

Hungkuang University (Taiwan)

【1B-12】

Removal of nanosilica particles by colloidal gas aphrons (CGAs) involved flotation

Ming Zhang, Pascal Guiraud

Université de Toulouse; INSA (France)

【1B-13】

Stability of zero-valent iron nanoparticles in natural groundwater conditions: Effect of polymer coating

Cheolyong Kim, Jun-Young Ahn, Tuan Ngoc Huync, Hong-Seok Kim, Inseong Hwang

Pusan National University (Korea)

【1B-14】

Electrochemical Degradation of Sulfamethoxazole Using Anode coated with Nanoparticles of RuPt

Yu-Tsun Kuo, Chiung-Fen Chang

Tunghai University (Taiwan)

【1B-15】

Preparation of Magnetic Ordered Mesoporous Sieve Materials as Potential Catalysts and Adsorbents in Environmental Applications

Hsin-Yi Kuo and Chiung-Fen Chang

Tunghai University (Taiwan)

【1B-16】

Synthesis and Application of Magnetic Visible-Light-Active Titania Photocatalysts

Chiung-Fen Chuang, Bo-Yen Wang , and Fu-Chun Chuang

Tunghai University (Taiwan)

Day 1 June 16(Monday), 2014

as of June 10, 2014

【1A-19】

Identification of signal molecules in bacterial quorum sensing related to foulant production resulting in biofouling.

Miwa Ishizuka, Tomohiro Morohoshi, Tsukasa Ikeda

Toshiba Corporation (Japan)

【1A-20】

Application of biofouling-resistant membranes with natural compounds for brackish water treatments

Jaehyun Jung, Youngjin Kim, Haewook Nam, Yunjung Kim, Eunsu Lee, Jihyeon Song, Younil Lee, Jihyang Kweon

Konkuk University (Korea)

【1B-17】

The effect of clay and humic acid on the aggregation of titanium dioxide nanoparticles and silver nanoparticles

Hongtao Wang, Miao Zhu, Tao Wang, Fengting Li

Tongji University (China)

【1B-18】

Release of engineered TiO_2 particles from landfills

Ralf Kaegi, Silvan Staehli, Brian Sinnet, Michael Burkhardt

Eawag, Swiss Federal Institute of Aquatic Science and Technology(Switzerland)

17:30-19:00

KURITA Poster Session