



## AGRO'2014

## 9<sup>th</sup> IWA International Symposium on Waste Management Problems in Agro-Industries

## Programme

-Organiser-AGRO'2014 Organising Committee

-Co-organisers-Japan Society on Water Environment Kochi University Japan Science and Technology Agency

Kochi, Japan

24-26 November, 2014

## Welcome Message

On behalf of the organising committee of the ninth IWA International Symposium on Waste Management Problems in Agro-Industries (AGRO'2014), I would like to welcome all participants from all over the world to this symposium.

This series of symposia was initiated in Istanbul, Turkey, in 1989 to discuss and find solutions for environmental issues in such agro- industries as textiles, pulp and paper, leather, and various foodstuffs, including sugar, edible oils, and beverages. The wide interest among participating scientists and the high quality of their contributions helped establish a series of IAWQ symposia, with the second event being held again in Istanbul, in 1992. The third, fourth, and fifth symposia were held in Mexico City in 1995, Istanbul in 1998, and Shiga, Japan, in 2001. The sixth IWA specialty symposium was held in Seoul in 2003, and it primarily addressed the issue of "Strong Nitrogenous and Agro Wastewater." The seventh and eighth symposia were held in the Netherlands in 2006 and in Çeşme, Turkey, in 2011. AGRO'2014 will thus be the ninth of this series of regular scientific events organized under the same umbrella.

The AGRO series of symposia will continue to be the most effective platform for discussing waste-management problems in the agro-industries. Among other areas, contributions in AGRO'2014 are expected on the treatment and use of waste from stockbreeding, runoff and control of pollutants from agricultural areas, and climate change mitigation and adaptation by the agro-industries. In addition, AGRO'2014 aims to provide special forums, CREST and SATREPS sessions, to discuss innovative technologies and systems for the management of water and waste in agricultural areas.

The venue for AGRO'2014 is located across from Kochi Castle, which is listed as one of Japan's Important Cultural Properties. I hope that symposium participants will be able to exchange information in a relaxed atmosphere during their stay in Kochi, with its beautiful scenery, clean water environment, and traditional dishes made using fresh agricultural and marine products.

We hope you enjoy AGRO'2014 and your stay in Kochi.

Jaku Fujiwara

Prof. Dr. Taku Fujiwara Chair of AGRO'2014

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## Organiser, Co-organisers, and Supporters

Organiser AGRO'2014 Organising Committee

Co-Organisers

Japan Society on Water Environment Kochi University Japan Science and Technology Agency

Supporters

Ministry of the Environment Ministry of Agriculture, Forestry and Fisheries Ministry of Land, Infrastructure, Transport and Tourism Kochi Prefecture Kochi City Japan Sewage Works Association



9<sup>th</sup> IWA International Symposium on Waste Management Problems in Agro-Industries 24-26, November, 2014, Kochi, Japan





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 Prof. Dr. Saburo Matsui, Japan
 Prof. Dr. Hiroshi Tsuno, Japan
 Prof. Dr. Shinichiro Ohgaki, Japan
 Prof. Dr. Tsuyoshi Miyazaki, Japan

- Chair of AGRO'2014 -Taku Fujiwara, Japan
- Vice-Chair of AGRO'2014 -Masaki Takaoka, Japan

- Organising Committee –

Atsushi Miyata, Japan Daisuke Inoue, Japan Daisuke Yasutake, Japan Hao Zhang, Japan Haruhisa Fukada, Japan Hideaki Ichiura, Japan Hideaki Nagare, Japan Hirofumi Tsutsui, Japan Kazutsugu Matsukawa, Japan Kazuyuki Oshita, Japan Keisuke Kondo, Japan Masato Nishiwaki, Japan Masato Yamada, Japan Morihiro Maeda, Japan Ryusei Ito, Japan Satoshi Akao, Japan Shuji Fukahori, Japan Taira Hidaka, Japan Takanori Masuda, Japan Takeshi Miyamoto, Japan Takeshi Tanigawa, Japan Tomijiro Kubota, Japan Tomijiro Kubota, Japan Toshiaki Suzuki, Japan Xiaoqiang Chen, Japan





- Chair of Programme Committee -Hiroshi Tsuno, Japan

- Programme Committee -Alessandra Carucci, Italy Amadou Hama Maiga, Burkina Faso Ayşe Filibeli, Turkey Banu Örmeci, Canada Blanca Jimenez Cisneros, Mexico Damien Batstone, Australia Derin Orhon, Turkey Gianluca Li Puma, UK Hung-Yee Shu, Chinese Taiwan Işık Kabdaşlı, Turkey Jega V. Jegatheesan, Australia Karl-Heinz Rosenwinkel, Germany Latifa Bousselmi, Tunusia Mark van Loosdrecht, Netherlands Mengiseny E. Kaseva, Tanzania Michihiko Ike, Japan Naoyuki Funamizu, Japan Otto Nowak, Austria Rüya Taşlı Toraman, Turkey Seong-Wook Oa, South Korea Spyros G. Pavlostathis, USA Simon A. Parsons, UK Taku Fujiwara, Japan





## General Information of AGRO'2014

#### 9<sup>th</sup> IWA International Symposium on Waste Management Problems in Agro-Industries

Date: 24 – 26 November, 2014 Venue: The Crown Palais New Hankyu Kochi, Kochi, Japan Website: http://www.kochi-u.ac.jp/agro2014/index.html

Language: The official language of the symposium is English.



#### **Registration desk**

The registration/information desk will be opened during the following times at lobby of 3rd floor.

Sunday, 23 November,	:14:00 - 18:00
Monday, 24 November,	: 8:00 - 18:00
Tuesday, 25 November,	: 8:00 - 18:00
Wednesday, 26 November,	: 8:00 - 15:00

#### Secretariat

The symposium secretariat is located on the 3rd floor. For any inquiry, please feel free to contact our staff members there.

#### Welcome Cocktail

The welcome cocktail will take place on 24 November, at Room C and D on 3rd floor of the venue.

#### **Conference Dinner**

The conference dinner will take place on 25 November, at Room A and B on 3rd floor of the venue.

#### **CREST Session and SATREPS (Ameli-eaur) Session**

Two special sessions are organized on 24 November, at Room A, to discuss innovative technologies and systems for the management of water and waste in agricultural areas. CREST session is supported by Japan Science and Technology Agency, Japan and SATREPS session is supported by Japan Science and Technology Agency and Japan International Cooperation Agency.

#### **Oral presentation**

Presentations are limited to 15 minutes: 12 minutes for presentation and 3 minutes for discussion. Slide must be in Powerpoint or PDF format. Speakers are requested to copy their presentation file





directly to the computer in the presentation room, and to confirm its appearance on the screen, at least 20 minutes prior to the start of the session. (Room will be opened 8:30 in the morning.).

#### Poster presentation

Poster boards with 90 cm width and 210 cm height will be prepared in the Poster Presentation Room. The formal poster session is 16:00–18:00 on Tuesday, 25 November, however your poster can be on display for the duration of the conference. Poster presenters are required to stand by your poster, at least during the formal poster session, to answer questions and meet colleagues with similar research interests. Put your poster on the board with the identified presentation number between 8:00-12:00 on Tuesday, 25 November, and remove your poster after the presentation by 16:00 on Wednesday, 26 November.

#### Awards

#### "AGRO'2014 presentation award for young researchers"

#### "AGRO'2014 poster award for young researchers"

"AGRO'2014 presentation award for young researchers" and "AGRO'2014 poster award for young researchers" will be given for the outstanding presentations (oral and poster presentations) by the young researchers (below 36 years old at 26 November, 2014) including students from both industry and academia.

#### Lunch Distribution

Lunch can be available on 4th floor of the venue on 24 and 25 November. You can take the lunch box on 26 November.

#### Name Badge and Identification

All participants and accompanying persons <u>must</u> wear the conference identification badge at all time during the conference. Accompanying persons are <u>not</u> permitted to attend the conference sessions.

#### JSWE-IDEA International Activity Award

The Japan Society on Water Environment (JSWE) recognizes activities that are selected as excellent international activities that meet the goals of JSWE as JSWE-IDEA International Activity Award to encourage international interaction and cooperation, and provides grants to cover the partial or entire costs of the selected activity. AGRO'2014 organising committee is proud to announce that AGRO'2014 has received from JSWE for JSWE-IDEA International Activity Award of the Year 2014.

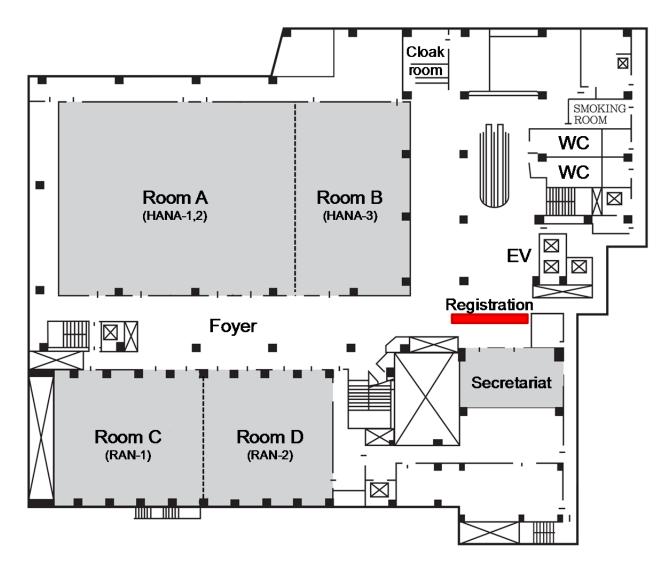




## Venue Floor

## The Crown Palais New Hankyu Kochi

## 3rd Floor







## Programme at a Glance

Time	Time Monday, 24 November			
	Room A	Room B	Room C	Room D
9:00-9:20	Opening Ceremony			
9:20-9:50	Keynote Speech 1 Prof. Dr. Olcay Tünay			
9:50-10:20	<b>Keynote Speech 2</b> Prof. Dr. Shinichiro Ohgaki			
10:20-10:45		Coffee Break		
10:45-12:00	Session 1-1 Biological treatment of wastewaters and wastes	Session 2-1 Chemical treatment of wastewaters and wastes	Session 4-1 Resources recovery and reuse	
12:00-13:30		Lunch		
13:30-14:00	Keynote Speech 3 Prof. Dr. Taku Fujiwara			
14:00-14:30				
14:30-15:00	CREST Session	Session 2-2 Chemical treatment of wastewaters and wastes		
15:00-15:45		Session 5-1 Advanced treatment processes and innovative technological applications		
15:45-16:15		Coffee Break		
16:15-16:40	<b>Keynote Speech 4</b> Prof. Dr. Amadou Hama Maiga			
16:40 (16:45) -18:30 (18:15)	SATREPS (Ameli-eaur) Session	Session 5-2 Advanced treatment processes and innovative technological applications		
18:30-20:00		·	Welcome Cockta	il





Time		Tuesday, 25 Nove	mber	
	Room A	Room B	Room C	Room D
9:00-9:30	Keynote Speech 5 Prof. Dr. Gianluca Li Puma			
9:30-10:15	Session 5-3 Advanced treatment processes and innovative technological applications	<b>Session 1-2</b> Biological treatment of wastewaters and wastes	Session 4-2 Resources recovery and reuse	
10:15-10:45		Coffee Break		
10:45-11:15	Session 5-4 Advanced treatment processes and innovative technological applications	Session 1-3 Biological treatment of	Session 4-3 Resources recovery and	
11:15-11:45	Session 6 Modeling and design interaction	wastewaters and wastes	reuse	Poster
11:45-13:30		Lunch	•	and Exhibition
13:30-14:00	<b>Keynote Speech 6</b> Prof. Dr. Seong-Wook Oa			
14:00-14:45	Session 8 Treatment and use of waste from stockbreeding	Session 1-4 Biological treatment of wastewaters and wastes	<b>Session 9-1</b> Run-off and control of pollutants from agricultural areas	
14:45-15:15		Coffee Break		
15:15-16:00	<b>Session 7-1</b> Sludge stabilization, utilization and disposal	Session 1-5 Biological treatment of wastewaters and wastes	Session 9-2 Run-off and control of pollutants from agricultural areas	
16:00-18:00		·	·	Poster Presentation (Core time)
18:00-20:00	Conferenc	e Dinner		





Time		Wednesday, 26 Nov	rember	
	Room A	Room B	Room C	Room D
9:00-9:30	<b>Keynote Speech 7</b> Prof. Dr. Yoshito Yuyama			
9:30-10:15	<b>Session 7-2</b> Sludge stabilization, utilization and disposal	<b>Session 1-6</b> Biological treatment of wastewaters and wastes	<b>Session 9-3</b> Run-off and control of pollutants from agricultural areas	
10:15-10:45		Coffee Break		
10:45-11:45	<b>Session 7-3</b> Sludge stabilization, utilization and disposal	<b>Session 11-1</b> The climate change mitigation and adaptation in agro-industries	Session 9-4 Run-off and control of pollutants from agricultural areas	
11:45-13:30		Lunch		Poster and Exhibition
13:30-14:00	<b>Keynote Speech 8</b> Prof. Dr. Banu Örmeci			EXHIBITION
14:00-14:45	Session 3-1 Nutrient removal and recovery	<b>Session 11-2</b> The climate change mitigation and adaptation in agro-industries	Session 10-1 Innovative water and waste management system for agricultural area	
14:45-15:15		Coffee Break		
15:15-16:00	Session 3-2 Nutrient removal and recovery	<b>Session 11-3</b> The climate change mitigation and adaptation in agro-industries	Session 10-2 Innovative water and waste management system for agricultural area	
16:15-17:00	Closing Ceremony			





## Keynote Speakers

## Prof. Dr. Olcay Tünay

Professor in the Department of Environmental Engineering, Civil Engineering Faculty, Istanbul Technical University, Turkey



He received ME in Chemical Engineering and Ph.D. in Environmental Sciences from Istanbul Technical University. He conducted and joined national and international research projects mostly with European institutions. Major areas of research are; aquatic chemistry, chemical treatment of wastewaters, industrial pollution control and treatment and recovery of nutrients from human wastes.

### Prof. Dr. Shinichiro Ohgaki

#### President of Japan Water Research Center (JWRC), Japan



Prof. Shinichiro Ohgaki is currently the President of Japan Water Research Center (JWRC). He used to be appointed to the President of National Institute for Environmental Studies, Japan since April 2009 to March 2013. He was a professor at the Department of Urban Engineering, the University of Tokyo until March 2009, and he is Prof. Emeritus. He was awarded PhD in the field of environmental engineering from the University of Tokyo in 1974. He has long experience of education and research in environmental engineering, water supply technology, urban environmental policy and sustainable development at Tohoku University, the University of Tokyo, and Asian Institute of Technology

(AIT, Thailand).

He directed and managed the Graduate School of Engineering, the University of Tokyo, as a dean from April 2002 to March 2004. He served also as the vice-president to Science Council of Japan (SCJ).

He worked as a project leader in several great research projects. He directs currently as the research supervisor CREST Project related to sustainable water use under support of Japan Science and Technology Agency (JST) In International Water Association (IWA), he was a steering committee member of Health-Related Water Microbiology Specialist Group, and one of the Vice Presidents from 2006 to 2008.





## Prof. Dr. Taku Fujiwara

#### Professor in the Agriculture Unit at Kochi University, Japan



Prof. Taku Fujiwara completed his Ph.D. in Environmental Engineering at Kyoto University, Japan, in 1999. He is a Professor in the Agriculture Unit at Kochi University, Japan.

He is a research director of a national project launched in 2009 entitled "Development of an innovative water management system with decentralized water reclamation and cascading material-cycle for agricultural areas under the consideration of climate change" in CREST research area of Innovative Technology and System for Sustainable Water Use by Japan

Science and Technology Agency.

As a Chair of AGRO' 2014, he welcomes all participants from all over the world to this symposium.

#### Prof. Dr. Amadou Hama Maiga

Director General of the International Institute for Water and Environemental Engineering :2iE in Ouagadougou, Burkina Faso



Prof Amadou Hama Maiga, was graduated as Civil Engineer in 1979. He has PhD degree in Water and Environment Sciences and Engineering from the Swiss Federal Institute of Technology Lausanne (EPFL). Before he joins the 2iE (formally EIER-ETSHER in 1986), he has worked as Engineer and as a lecturer at different companies in Switzerland and Mali.

At 2iE he has occupied positions of lecturer, Head of the Department of Sanitary Engineering, Director for Research. and Deputy Director Général. He has developped and leaded the laboratory of Pollution Control and Water Treatment of 2iE. He funded f the 2iE Journal "Sud Sciences et Technologie". He is member of many scientific committees and international

Consortiums and Associations such as The Scientific Council of the Canadian Consortium for Research on Climate Adaptation: Ouranos; the Board of the African Water Association: AfWA; the Board of Section I

"Water and soil" of the International Commission of Agricultural Engineering: CIGR; the Scientific Council of the French Inter-Agency for Research and Development (AIRD). Prof Amadou Hama Maiga is Governor for World Water Council since 2012.

Professor Amadou Hama Maiga was awarded of the 2009 Grand Prix of the Foundation of Suez Environment - for his research and innovative works on water supply to underprivileged populations.





## Prof. Dr. Gianluca Li Puma

Professor of Chemical and Environmental Engineering at Loughborough University, United Kingdom

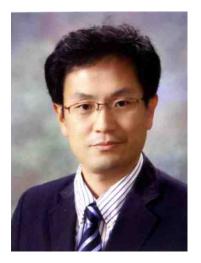


Gianluca Li Puma is Professor of Chemical and Environmental Engineering at Loughborough University and leads "Environmental Nanocatalysis and Photoreaction Engineering" research in the fields of photocatalysis, environmental nanocatalysis, advanced oxidation processes, environmental applications, solar energy conversion and solar engineering. He is an international expert on solar photocatalytic detoxification for the removal of water contaminants. He is Editor of Journal of Hazardous Materials. He is also co-chairman of the 20th International Conference on Advanced Oxidation Technologies (San

Diego, 2014) and ACS symposium on New Advances in the Chemistry and Application of Advanced Oxidation Processes for Removal of Contaminants of Emerging Concern (San Francisco, 2014).

## Prof. Dr. Seong-Wook Oa

Professor of Railroad, Civil & Environmental Engineering, Woosong University, Daejeon, S. Korea



Prof. Seong-Wook Oa received M.S. and Ph.D. in Environmental Engineering from Korea University, Seoul, S. Korea. He is a full professor in the Department of Railroad, Civil & Environmental Engineering at Woosong University, and head of Soil Environmental Research Center since 1996. His research group has been studied in field of resource recovery and nitrogen control from animal wastes supported by Korea Ministry of Environment over the past 10 years. And also he has been trying to control the water resources via management of non-point sources in an agricultural area.





## Dr. Yoshito Yuyama

Chief Researcher at the Renewable Resources Engineering Research Division, National Institute for Rural Engineering, NARO, Japan



He was born on January 16, 1960 in Ehime, Japan. He obtained Ph. D degree from Kyoto University in 1988.

He started his career as irrigation, drainage and environment engineering researcher at National Research Institute of Agricultural Engineering from 1984. He contributed as water management expert of JICA in Thailand for three years. He is now Chief Researcher of Renewable Resources Engineering Research Division, National Institute for Rural Engineering, NARO since April 2011.

His specialties are planning and evaluation of biomass use system, water management, water quality conservation, regional drainage analysis, wastewater treatment technology, and rural planning.

## Prof. Dr. Banu Örmeci

Professor of Department of Civil and Environmental Engineering at Carleton University, Canada



Prof. Banu Örmeci completed her M.S. and Ph.D. in Civil and Environmental Engineering at Duke University (North Carolina, USA). She is a Professor and Canada Research Chair in Wastewater Treatment Engineering in the Department of Civil and Environmental Engineering at Carleton University (Ottawa, Canada), and is the recipient of several prestigious research, teaching, and mentoring awards. Her research focuses on wastewater and biosolids treatment. She is the Chairperson of the International Water Association (IWA)'s Specialist Group on Sludge Management.





## **Oral Presentations Programme**

Time		Monday, 24 Novemb	per	
	Room A	Room B	Room C	Room D
9:00-9:20	Opening Ceremony			
	Keynote Speech 1			
9:20-9:50	The role of chemical treatment in the control of pollution from Agro Industries			
	Prof. Dr. O. Tünay			
9:50-10:20	Keynote Speech 2 Science and technology for sustainable water management Prof. Dr. S. Ohgaki			
10:20-10:45		Coffee Break		
	Session 1-1	Session 2-1	Session 4-1	
	Biological treatment of	Chemical treatment of	Resources recovery and	
	wastewaters and wastes	wastewaters and wastes	reuse	
	Chair	Chair	Chair	
	Prof. Hiroshi Tsuno	Prof. Gianluca Li Puma	Prof. Tsuyoshi Imai	
10:45-11:00	Innovative bioreactors for the treatment/reuse of milking parlor and swine wastewater for land limited application <i>L. Dong, A. C. Liu, C. Y. Chou, P. Y. Yang</i>	Sulphate control by ettringite precipitation in textile industry wastewaters <i>I. Kabdaşlı, A. Bilgin, O. Tünay</i>	Effect of pH on volatile and medium chain fatty acids production during anaerobic digestion process <i>E. Jankowska,</i> <i>J. Chwialkowska,</i> <i>M. Stodolny,</i> <i>P. Oleskowicz-Popiel</i>	
11:00-11:15	Feasibility study of applying anaerobic immobilized cells for treatment of domestic sewage <i>R. Y. Lin, A. C. Liu,</i> <i>C. Y. Chou</i>	Sequential resin fractionation method as a useful tool to characterize olive mill wastewater before and after chemical treatment applications <i>B. H. Gursoy-Haksevenler,</i> <i>I. Arslan-Alaton, T. Olmez-Hanci,</i> <i>O. Tunay</i>	Quantitative X-Ray diffraction (XRD) reveals the influences of calcium and ferric ions on struvite crystallization <i>H. Yan, K. Shih</i>	
11:15-11:30	Treatment of restaurant wastewater by combination system of anaerobic baffled reactor (ABR) and aerobic trickling filter <i>H. Sonaka, K. Nakahara,</i> <i>N. Yokote, D. Tanikawa</i>	Impact of ozonation on water quality change of sewage A. Yoshida, T. Mizuno, Y. Kusuda, F. Nishimura	Duckweed biomass as a renewable biorefinery feedstock: Ethanol and succinate production from <i>Wolffia globosa</i> <i>S. Soda, T. Ohchi,</i> <i>J. Piradee, Y. Takai,</i> <i>M. Ike</i>	
11:30-11:45	Effect of salinity on organic matter removal from polluted agriculture drainage water by moving bed biofilm reactor <i>M. Ateia, M. Nasr,</i>	Using ultraviolet light and high temperature with sodium persulfate to catalyze the azo dye wastewater <i>M. C. Chang, J. S. Tang</i>	Pilot scale resource recovery from cattle paunch waste <i>C. M. Mehta, P. D. Jensen,</i>	
	C. Yoshimura, M. Fujii	Eco-design of Fenton-like processes	D. J. Batstone High solid anaerobic co-	
1:45-12:00		using laterites and activated carbons for the degradation of bio-reluctant organic compounds in wastewater	digestion of garbage, rice straw and rice husk	
		H. Karoui, B. Maba, G. M. R. Kpinsoton, Y. Richardson	R. Yamamoto-Ikemoto, T. Gu, M. Takano, T. Tsuritani, S. Kitano, M. Okamoto	
12:00-13:30		Lunch		





		Monday, 24 November		-
	Room A	Room B	Room C	Roo
13:30-14:00	Keynote Speech 3 Development of an innovative water management system with decentralized water reclamation and cascading material-cycle for agricultural			
	areas Prof. Dr. T. Fujiwara			
	CREST Session	Session 2-2 Chemical treatment of wastewaters and wastes Session 5-1 Advanced treatment processes and innovative technological applications		
	Chair: Dr. Masato Yamada	Chair: Dr. Fumitake Nishimura		
14:00-14:15	Non-sterile simultaneous saccharification and fermentation of corn biomass to L-lactic acid without external nutrient addition <i>S. Akao, H. Nagare,</i> <i>M. Maeda, K. Kondo,</i> <i>T. Fujiwara</i>			
14:15-14:30	Emission and control of nitrous oxide and composition of ash derived from cattle manure combustion using a pilot-scale fluidized bed incinerator <i>K. Oshita, K. Kawaguchi,</i> <i>M. Takaoka, K. Matsukawa,</i> <i>T. Fujimori, T. Fujiwara</i>			
14:30-14:45	Sulfonamide antibiotic removal and nitrogen recovery from synthetic urine by the combination of rotating advanced oxidation contactor and methylene urea synthesis process	Degradation and detoxicity of tetracycline by an enhanced sonolysis		
	S. Fukahori, T. Fujiwara, R. Ito, N. Funamizu	C. Wang, J. J. Jian		
14:45-15:00	Beneficial utilization methods for fish processing by-products as fish feed additives <i>H. Fukada, N. Takahashi,</i> <i>N. Hosomi, T. Masumoto</i>	Synthesis of Fe/ZrO <sub>2</sub> catalyst to remove direct orange 26 from water by Fenton oxidation at wide pH values <i>N. Ayas, Y. Asci, M. Yurdakul</i>		
15:00-15:15	Novel recycling technique of paper sludge using ionic liquid -Preparation of functional materials for water purification- <i>H. Ichiura, M. Kamada,</i>	A comparative study of HO <sup>•</sup> - and SO <sub>4</sub> <sup>•</sup> based AOPs for the degradation of non- ionic surfactant Brij30 <sup>®</sup> <i>I. Kabdaşlı, C. Ecer, T. Olmez-Hanci,</i>		
15:15-15:30	A. Ono, Y. Ohtani Integrated evaluation of the innovative water and waste management system for agricultural areas M. Yamada, T. Masuda, M. Matsuoka, T. Hase,	<ul> <li>Nabdaşlı, C. Ecer, T. Olmez-Hanci, O. Tünay</li> <li>Sulfate radical based oxidation processes for decolorization of azo dye wastewater using nano iron catalyst</li> <li>H. Y. Shu, M. C. Chang, H. W. Hsu</li> </ul>		
15:30-15:45	T. Ishigaki, T. Fujiwara	Removal of endcrinedisrupting compounds from wastewater using polymer particles <i>A. Murray, B. Örmeci, E. P. C. Lai</i>		





Time			Monday, 24 Noveml	ber	
	Room A		Room B	Room C	Room D
16:15-16:40	Keynote Speech 4 Water resources management in West Africa: Threats from global changes, eutrophication and solids transport in water reservoirs in Burkina Faso Prof. Dr. A. H. Maiga				
	SATREPS (Ameli-eaur) Session Chair Prof. Naoyuki Funamizu		Session 5-2 Advanced treatment processes and innovative technological applications Chair Dr. Shuji Fukahori		
16:40-16:50	Political sociology of African peasants' dynamics faced with the new technology of compost toilet: case of Burkina Faso <i>T. Nabeshima</i>	16:45- 17:00	Fabrication and characterization of CdS doped TiO <sub>2</sub> nanotube composite and its photocatalytic activity for the degradation of methyl		
16:50-17:00	Land utilization and property system in Burkina Faso: A case study in Ziniaré <i>F. Hakoyama</i>		orange J. Jung, J. O. Kim		
17:00-17:10	Ceramic filters impregnated with colloidal-silver for point-of- use water treatment in rural and peri urban areas in Burkina Faso <i>Y. Konate, E. Bleu,</i> <i>M. Sou/Dakoure, A. H. Maiga</i>	17:00- 17:15	Treatment of waste-milk containing tetracycline by magnetic activated sludge and contact oxidation process Gaowa, Y. Sakai, M. L. Saha, I. Ihara		
17:10-17:20	Microbial risk assessment associated with post-treatment of compost from the composting toilet <i>H. S. Darimani, R. Ito,</i> <i>M. Sou/Dakoure,</i>	17:15- 17:30	Decomposition of pesticides in water by using a slurry type		
	N. Funamizu, H. Yacouba, A. H. Maiga Maturity and hygienic quality of composts produced with		TiO <sub>2</sub> in water treatment apparatus Y. <i>Hashimoto, K. Hara,</i>		
17:20-17:30	various bulking agents in composting toilet for agriculture reuse S. K. Sossou, M. Sou/Dakoure, N. Hijikata, B. Kamdem Djomou, A. H. Maiga, N. Funamizu		T. Takaoka, B. Sarangaraja, Y. Maruo, D. Ino, M. Aizawa		





Time			Monday, 24 Novemb	er	
	Room A		Room B	Room C	Room D
	SATREPS (Ameli-eaur) Session		Session 5-2 Advanced treatment processes and innovative technological applications		
	Chair Prof. Naoyuki Funamizu		Chair Dr. Shuji Fukahori		
17:30-17:40	Mobilizing communities for use of by-products of sanitation: Case study of the Ameli EAUR project. <i>M. Bologo/Traore,</i> <i>M. Sou/Dakoure, A. H. Maiga,</i> <i>T. Nabeshima, F. Hakoyama,</i> <i>S. Dicko</i>	17:30- 17:45	Application of nitrite build-up for the nitrogen removal from ammonium-rich anaerobic digester supernatant with SBR process <i>K. Gil, J. Im</i>		
17:40-17:50	Salinity assessment in urine application as nitrogen source for vegetable cultivation <i>M. Sou/Dakouré, F. Kagabika,</i> <i>D. Sangaré, R. Lahmar,</i> <i>B. Sawadago,</i> <i>A. H. Maïga</i>	17:45- 18:00	Development of a novel flotation process for enhancing oil recovery from palm oil mill effluent		
17:50-18:00	Reuse of treated greywater for lettuce irrigation: effects on plant growth, yield and soil properties <i>B. Sawadogo, D. Sangare,</i> <i>M. Sou, N. Hijikata,</i> Y. A. Kabore, A. H. Maiga, <i>N. Funamizu</i>		T. V. Le, T. Imai, D. Ayukawa, H. T. Vo, T. Higuchi		
18:00-18:10	Design and operation of high rate algal pond treating greywater and producing reclaimed water and fertilizer <i>M. Takahashi,</i> <i>H. Derabe Maobe,</i> <i>M. Onodera, H. Satoh,</i> <i>T. Fukazawa</i>	18:00- 18:15	Cultivation of a <i>S. platensis</i> with digested piggery wastewater <i>R. Liu, Q. Guo, W. Zheng,</i> <i>L. Chen, J. Luo</i>		
18:10-18:20	Potential of treated wastewater reuse for agricultural irrigation in Ouagadougou, Burkina Faso A. Michinaka, H. Shigemura, R. Kawasumi, H. Yamashita, E. Takashima				
18:20-18:30	Growth characteristics of salt- tolerant plants and salt accumulation in soil using organic composts <i>M. Murakami, T. Nakaso,</i> <i>N. Hijikata, T. Mouri,</i> <i>S. Nishimura, M. Fujimaki</i>				
18:30-20:00	•			Welcome Co	ocktail





Time	Tuesday, 25 November					
	Room A	Room B	Room C	Room D		
	Keynote Speech 5					
9:00-9:30	Advanced oxidation technologies for the treatment and reuse of agro-industrial wastewater and simultaneous production of renewable energy					
	Prof. Dr. Gianluca Li Puma					
	Session 5-3 Advanced treatment processes and innovative technological applications	Session 1-2 Biological treatment of wastewaters and wastes	Session 4-2 Resources recovery and reuse			
	Chair	Chair	Chair			
	Prof. Banu Örmeci	Prof. Emine Çokgör	Prof. Jong-Oh Kim			
9:30-9:45	Partial nitritation (SHARON) of nitrogen-rich refinery wastewater with high C/N ratio	Evaluation of treatment performance of a pilot-scale constructed wetland treating waste landfill leachate in thailand	Production of calcium phosphate on the shell particles of Mizuhopecten yessoensis in urine	Poster		
	S. Milia, M. Perra, G. Cappai, A. Carucci	Y. Ogata, T. Ishigaki, Y. Ebie, N. Sutthasil, C. Chiemchaisri, M. Yamada	R. Ito, N. Funamizu	and Exhibition		
9:45-10:00	Practical use of new system for highly efficient recovery of energy from sewage and garbage	Effects of filter media layer composition and depth on greywater treatment by vermifiltration	Effect of burned shell dosage on crystal species in synthetic cow urine			
	F. Shinya, H. Tsuboi, A. Miyata, M. Shimada, H. Yamashita	A. T. Adugna, H. A. Andrianisa, Y. Konate, A. Ndiaye, A. H. Maiga	S. Kaneko, R. Ito, N. Funamizu			
10:00-10:15	Long term nitrogen compound removal trend of a hybrid subsurface constructed wetland treating milking parlour wastewater throughout its seven years of operation	Removal of (α+β)-endosulfan and endosulfan sulfate from agricultural sewage in a HSBR- GAC system	Development of a new wastewater treatment process for resource recovery as carotenoid			
	J. Harada, T. Inoue, K. Kato, H. Izumoto, X. Zhang, H. Sakuragi, D. Wu, H. letsugu, Y. Sugawara	I. López-Apodaca, P. Gortares, G. Ulloa, E. R. Meza-Escalante, G. Buitrón, D. Serrano	H. Sato, H. Nagare, Huynh Thi Ngoc Chau, H. Komatsu			
10:15-10:45		Coffee Break				





Time	Tuesday, 25 November					
	Room A	Room B	Room C	Room D		
	Session 5-4 Advanced treatment processes and innovative technological applications Session 6 Modeling and design interaction	Session 1-3 Biological treatment of wastewaters and wastes	Session 4-3 Resources recovery and reuse			
	Chair	Chair	Chair			
	Prof. Michihiko Ike	Prof. Ryoko Yamamoto-Ikemoto	Prof. Olcay Tünay			
10:45-11:00	Bulk liquid pertraction of NaCl from aqueous solution using carrier-mediated transport	Anaerobic co-digestion of agro- wastes and pre-treated wastewater sludges	Adequate handling conditions of composting toilets using calcium lime and ash evaluated by microbiological safety of end product			
	M. M. Naim, A. A. El-Shafei, A. A. Moneer, M. M. Elewa, W. G. Kandeel	B. A. Alagöz, A. Erdinçler, O. Yenigün	N. Hijikata, R. Tezuka, S. Kazama, M. Ohtaki, D. Sano, K. Ushijima, R. Ito, S. Okabe, N. Funamizu			
11:00-11:15	Desalination of simulated seawater by purge-air pervaporation using an innovated fabricated membrane	Effect of pretreatment techniques on solubilization and hydrogen and methane generation by thermophilic anaerobic digestion of food waste	Grey water treatment by slanted soil system in terms of phytotoxicity	Poster and Exhibition		
	M. M. Naim, M. M. Elewa, A. A. El-Shafei, A. A. Moneer	A. Menon, F. Ren, A. Giannis, J. Y. Wang	K. Ushijima, N. Hijikata, E. Tanaka, N. Funamizu, R. Ito			
11:15-11:30	Regression-based estimation of nitrogen concentration in groundwater using geographical and statistical information	Expression of acidic failure for the methane fermentation in food waste digestion	Treated wastewater quality and the risk of intestinal helminthes infection for vegetable producer groups in Kossodo, Burkina Faso			
	M. Matsuoka, T. Fujiwara	Ngo Van Anh, Nguyen Thi Ha, Le Van Chieu, R. Goel, M. Terashima, H. Yasui	N. W. Kpoda, M. Sou/Dakouré, A. H. Maïga, G. B. Kabré			
11:30-11:45	Development of a model for evaluation of total recycling and waste treatment system of organic waste -A case study in Kochi prefeture leane	Is it possible to treat faecal sludge of Ouagadougou with constructed wetland planted with <i>Oryzalongistaminata</i> or	Basic study of local production and consumption of phosphorus from sewage in the Shigenobu River Basin			
	prefecture, Japan- T. Hase, Y. Watanabe, M. Yamada, T. Fujiwara	Sporoboluspyramidalis? T. Kouawa, A. Wanko, C. Beck, A. H. Maïga, R. Mose	T. Fukushima			
11:45-13:30		Lunch				





		Tuesday, 25 Nove	ember	
	Room A	Room B	Room C	Room D
13:30-14:00	Keynote Speech 6 Resource recovery processes from animal waste as best available technology Prof. Dr. S.W. Oa			
	Session 8	Session 1-4	Session 9-1	
	Treatment and use of waste	Biological treatment of	Run-off and control of pollutants	
	from stockbreeding	wastewaters and wastes	from agricultural areas	
	Chair	Chair	Chair	
	Dr. Tomonori Ishigaki	Prof. Otto Nowak	Prof. Taku Fujiwara	
14:00-14:15	Feasibility of pig manure treatment by dry-thermophilic anaerobic co- digestion with rice straw	Effects of acetate addition on the recovery of anaerobic ammonium oxidizing bacteria in mixotrophic culture	Decomposition characteristics of dissolved organic matter in paddy field	
	S. Riya, K. Suzuki, S. Zhou, A. Terada, M. Hosomi	P. Noophan, S. Phanwilai	C. Jikumaru, T. Hama, Y. Kawagoshi	
14:15-14:30	Long term assessment of phosphorus emission from cattle fattening <i>H. Tsutsui, H. Sakaguchi, X. Sun,</i>	Identification of 1,4-dioxane degradation genes of <i>Pseudonocardia</i> sp. D17 by microarray expression analysis <i>K. Sawada, D. Inoue,</i>	Phosphorus flow with soil particles in drainage canals of reclaimed paddy fields <i>I. Yoshinaga, K. Takaki, H. Ono,</i>	
	S. Toda, K. Matsukawa, K. Oshita, M. Takaoka, T. Fujiwara	T. Tsunoda, Y. Aoki, M. Kuroda, M. Ike, K. Sei	T. Hama, A. Retyce	
14:30-14:45	Development of a technology for recovering resources from livestock waste	Effects of nutrient and aerating conditions on selenium metabolisms by <i>Pseudomonas</i> <i>stutzeri</i> NT-I	Evaluation of radiocesium outflow from paddy fields drainage during land preparation	
	J. Kabaya, K. Ueda, R. Sakamoto, M. Tokuo, T. Suzuki, S. Sano, T. Sekito, Y. Dote	M. Kuroda, Y. Higuchi, M. Yoshioka, S. Soda, M. Ike	S. Miyazu, H. Tsuji, N. Yoshikawa, T. Yasutaka	Poster and Exhibition
14:45-15:15		Coffee Break		EXINDICION
	Session 7-1	Session 1-5	Session 9-2	
	Sludge stabilization, utilization and disposal Chair	Biological treatment of wastewaters and wastes Chair	Run-off and control of pollutants from agricultural areas Chair	
	Dr. Xiaoqiang Chen	Prof. Alessandra Carucci	Dr. Shohei Riya	
15:15-15:30	Anaerobic digestion of sewage sludge with high solid content and its use as fertilizer	Gaseous emissions and modification of organic fractions in cattle slurry during anaerobic storage: Effect of acidification and biological additives	Effects of pH and oxygen on phosphorus release from agricultural drainage ditch sediment in Kasaoka bay reclaimed land, Japan	
	T. Hidaka, H. Sawahara, T. Togari, J. Tsumori	M. Y. Owusu-Twum, A. Polastre, L. M. M. Ferreira, J. Coutinho, <u>H. Trindade</u>	H. V. Nguyen, T. Q. Tran, T. T. K. Ha, M. Maeda	
15:30-15:45	Performance of sludge settling property under nitrite existing conditions	Nitrogen removal performance and bacterial community in mixed- culture with freshwater- and marine- anammox bacteria	Effect of physical and morphometric factors on nutrient removal in agricultural ponds	
	X. Yang, Y. Z. Peng, J. C. Song, S. Y. Wang, J. Wang, Q. Yang	Y. Yamashita, L. H. V. Khanh, D. V. Luong, Q. Wei, X. Huang, N. Hong, T. Hama, Y. Kawagoshi	M. Saito, K. Okubo, S. Onodera, S. Takagi, Y. Maruyama, Y. Shimizu, G. Jin, D. Aritomi	
	Performance comparison of	Evaluation of chronic impact of	Point and non-point source nutrient loading simulation for the	
15:45-16:00	primary sludge anaerobic digestion in two-stage with recycle and single-stage semi-continuous process	sulfamethoxazole in acetate biodegradation and microbial composition at different culture histories	Takasaki River basin, Chiba - Japan	
15:45-16:00	primary sludge anaerobic digestion in two-stage with recycle and single-stage semi-continuous	biodegradation and microbial composition at different culture	Takasaki River basin, Chiba -	





Time		Wednesday, 26 No	ovember	
	Room A	Room B	Room C	Room D
	Keynote Speech 7			
9:00-9:30	Vitalization of rural area by converting waste of agro-industries to regional biomass resources <i>Prof. Dr. Y. Yuyama</i>			
	Session 7-2	Session 1-6	Session 9-3	
	Sludge stabilization, utilization and	Biological treatment of	Run-off and control of pollutants	
	disposal	wastewaters and wastes	from agricultural areas	
	Chair	Chair	Chair	
	Prof. Masaki Takaoka	Dr. Satoshi Akao	Prof. Amadou Hama Maiga	
9:30-9:45	Function of wood chips for composting of sewage sludge by the thermophilic and aerobic digestion <i>K. Hashimoto, T. Doi, T. Okuda,</i>	Full-scale anaerobic treatment of kraft pulp mill wastewater K. Kamachi, Y. Tsukamoto	Transportation of water and inorganic nitrogen components in the soil column of grain sorghum <i>R. Abukmeil, T. Fujii.</i>	
	W. Nishijima, S. Nakai, K. Nishimura	N. Namachi, T. TSukamolo	N. Funamizu	
9:45-10:00	Effect of ionic materials on microwave-assisted hydrolysis of waste activated sludge	Characterization of wastewater treatment by two microbial fuel cells in continuous flow operation	Improvement of a catch crop system for reducing nitrate leaching and removing salts in greenhouses by pre-harvest flood irrigation	Poster and Exhibition
	J. H. Lee, J. M. Lee, S. H. Lee, J. S. Lim, T. J. Park, I. G. Byun	K. Kubota, T. Watanabe, T. Yamaguchi, K. Syutsubo	K. Kondo, T. Fujiwara, S. Yamane, D. Yasutake, M. Maeda, H. Nagare, S. Akao, M. Matsuoka	
0:00-10:15	Environmental impact and decomposition stability in soil of waste based biogas digestates as influenced by post-treatment methods	Development of BR-UASB-DHS system for natural rubber processing wastewater	Determination of TOC based swine manure pollutant loads and reduction rate via resource recovery processing	
0:15-10:45	V. Wragge, K. Nielsen, CL. Ross, K. Sensel-Gunke	T. Watari, N. T. Thanh, N. Tsuruoka, D. Tanikawa, K. Kuroda, N. L. Huong, N. M. Tan, H. T. Ha, M. Hatamoto, K. Syutsubo, M. Fukuda, T. Yamaguchi Coffee Break	Y. Lee, S. W. Oa	





Time	Wednesday, 26 November			
	Room A	Room B	Room C	Room D
	Session 7-3 Sludge stabilization, utilization and disposal Chair Dr. Satoshi Soda	Session 11-1 The climate change mitigation and adaptation in agro-industries Chair Prof. Naoyuki Kishimoto	Session 9-4 Run-off and control of pollutants from agricultural areas Chair Prof. Kazunari Sei	
10:45-11:00	Biomass power system with sewage sludge incineration T. Mizuno, T. Hoshi, S. Funaki, M. Shimada, T. Fujii, K. Oshita, M. Takaoka	Environmental impact assessment of a sewage treatment plant under different operating conditions <i>I. Mishima, N. Yoshikawa,</i> Y. Yoshida,K. Amano	Erosion and nutrient enrichment under different tillage and weed control systems <i>I. S. Banuwa, Andhi,</i> <i>U. Hasanudin, K. Fujie</i>	
11:00-11:15	Enhancing toxic metal removal and methane production from sewage sludge by acidification with nitrite addition <i>F. Du, I. Pikaar, S. Freguia,</i> <i>Z. Yuan, J. Keller</i>	Effect of carbon sources on nitrous oxide emission in a Modified Ludzak Ettinger Process <i>K. Song, S. Riya, A. Terada,</i> <i>M. Hosomi</i>	Effect on red soil erosion control of cultivating buckwheat and sweet potato in the Southwest Islands of Japan <i>T. Kubota, T. Hara, H. Ikoma,</i> <i>N. Yamaguchi, I. Yoshinaga</i>	Poster and
11:15-11:30	Effective methane conversion in combined hyperthermophilic and thermophilic anaerobic digestion of coffee grounds	Effects of rice husk amendment and moisture content on $N_2O$ and $CO_2$ productions in paddy soil	The effect of redox status on the bacterial community structure and biodegradation rate of organic fractions of agri-industrial effluent in sand bioreactors	Exhibition
	F. Nishimura, T. Oishi, T. Hidaka, Y. Takabe, T. Mizuno, H. Tsuno	T. K. T. Ha, M. Maeda, Q. T. Tran, T. Fujiwara, H. Nagare, S. Akao	P. J. Welz, Z. Palmer, S. Isaacs, B. Kirby, M. Le Roes-Hill	
11:30-11:45	Degradation characteristics of polylactide in thermophilic anaerobic digestion with hyperthermophilic solubilization <i>R. Suzuki, F. Nishimura, T. Oishi,</i> <i>F. Wang, T. Hidaka, Y. Takabe,</i> <i>H. Tsuno</i>	<b>y</b> , <i>i</i> ,		
11:45-13:30		Lunch		





Time	Wednesday, 26 November			
	Room A	Room B	Room C	Room D
	Keynote Speech 8			
3:30-14:00	Advanced wastewater treatment using microalgae: Effect of temperature on removal of nutrients and organic carbon			
	Fares A. Al Momani and Prof. Dr. B. Örmeci			
	Session 3-1 Nutrient removal and recovery	Session 11-2 The climate change mitigation and adaptation in agro-industries	Session 10-1 Innovative water and waste management system for agricultural area	
	Chair	Chair	Chair	
	Prof. Koichi Fujie	Dr. Taira Hidaka	Prof. Seong-Wook Oa	
14:00-14:15	Effects of common reed ( <i>Phragmites australis</i> ) on nitrogen removal and abundance of ammonia-oxidizing and denitrifying microorganisms in freshwater sediment	Nitrous oxide emissions during biological soil disinfestation with different organic matters and plastic mulch films in laboratory- scale tests	Comparison of bacterial communities harboring alkane hydroxylase genes among petroleum-contaminated soils and roots of planted grasses	Poster
	T. Toyama, Y. Nishimura,	M. Maeda, E. Kayano,	S. Tsuboi, S. Yamamura,	and
	Y. Ogata, K. Sei, K. Mori, M. Ike	T. Fujiwara, H. Nagare, S. Akao	T. Nakajima-Kambe, K. Iwasaki	Exhibition
4:15-14:30	Effect of formaldehyde/urea ratio on production rate of methylene urea	Nitrous oxide emission with submarine groundwater discharge in an agricultural watershed affected by significant fertilizer application	Salt removal from urine fertilized agricultural fields by rainfall and plant uptake	
	S. Kabore, R. Ito, N. Funamizu	S. Onodera, K. Onishi, M. Saito, D. Aritomi, K. Onodera, Y. Maruyama, G. Jin, Y. Shimizu	T. Fujii, N. Hijikata, K. Ushijima, R. Ito, N. Funamizu	
4:30-14:45	Performance of hybrid constructed wetland system for piggery wastewater treatment		Effects of greywater irrigation treated by high rate algal ponds on soil chemical properties and vegetable production in dry season of Soudano-Sahelian climate conditions	
	X. Zhang, T. Inoue, K. Kato,		D. Sangare, B. Sawadogo,	
	J. Harada, H. Izumoto, D. Wu,		M. Sou/Dakoure, N. Hijikata,	
	H. Sakuragi, H. letsugu, Y. Sugawara		D. M. Ouedraogo, H. Yacouba, M. Takahashi, N. Funamizu	
4:45-15:15		Coffee Break		





Time	Wednesday, 26 November			
	Room A	Room B	Room C	Room D
	Session 3-2 Nutrient removal and recovery	Session 11-3 The climate change mitigation and adaptation in agro-industries	Session 10-2 Innovative water and waste management system for agricultural area	
	Chair	Chair	Chair	
	Dr. Hideaki Nagare	Dr. Morihiro Maeda	Prof. Hung-Yee Shu	
15:15-15:30	High efficiency phosphorus recovery from digested sewage sludge	Sustainable wastewater treatment in small scale tapioca factory	Establishment of RNA recovery method suitable for analyzing active microbial populations in cattle manure composting samples	
	T. Hagino, M. Ogoshi, Y. Okazaki, T. Matsubayashi	U. Hasanudin, T. P. Utomo, E. Suroso, B. R. Shivakoti, K. Fujie	D. Inoue, K. Sawada, S. Shikama, K. Sei, T. Fujiwara	Poster and Exhibition
15:30-15:45	Evaluation of phosphorus removal by iron electrolysis using X-ray absorption fine structure measurement	Zero emission system for sustainable agriculture in Asia	Development of a waste water site strategy	LXINDUUGH
	I. Mishima, K. Ikeda, Y. Yokoyama, J. Nakajima	O. Higashi, Y. Shiratori, T. Kitaoka, H. Shirakawa	J. Leonhäuser, U. Birkenbeul, H-T. Heideker	
15:45-16:00			Palm oil mill effluent treatment and utilization to ensure the sustainability of palm oil industries	
			U. Hasanudin, R. Sugiharto, A. Haryanto, T. Setiadi, K. Fujie	
16:15-17:00	Closing ceremony			





## **Poster Presentations Programme**

	Poster Presentation
P-1	Operation Characteristics of biological aerated filter using walnut shell as the media
	L. Dong, S. Ding, L. Xie, L. Cai, L. Jia
P-2	A study on characteristics of influent loading and treatment performance of rural sewerage facilities
• =	Y. Li, T. Nakano, J. Yasumoto, M. Abe, K. Hata
	Degradation of polyvinyl alcohol (PVA) in textile wastewater by <i>Microbacterium barkeri</i> KCCM 10507 and
P-3	Paenibacillus amylolyticus KCCM 10508
	J. Chung, S. Kim, H. Lim, J. Kim
	A comparison of microbial community dynamics in the mesophilic and thermophilic methane fermentation of chicken
P-4	manure
	Q. Niu, K. Kubota, Y. Li
P-5	UASB treatment for hard wastewater from corrugated paper industry
	A. Kumami, S. Osumi, M. Takaoka
P-6	Development of high-rate treatment system of palm oil mill effluent (POME)
	D. Tanikawa, A. A. Roaf, K. Kubota, T. Yamaguchi, K. Syutsubo, Y. Sekiguchi, M. F. M. Yunus, S. S. Chen,
	H. Harada
P-7	Effect of return compost inoculation on initial phase of composting
	S. Ochiai, T. Ishigaki, M. Yamada, H. Kaneko
P-8	Elution of P, Cu, Zn and color from swine wastewater activated sludge under various pH conditions
	M. Waki, T. Yasuda, Y. Fukumoto, K. Suzuki
P-9	Effect of ammonium concentration on nitrogen removal and power generation in a microbial fuel cell with nitrifying
P-9	biofilm on the air cathode
	T. Watanabe, K. Kubota, K. Sato
P-10	Grey water treatment by slanted soil system under real conditions in rural area
	H. Amadou, Y. Maiga, M. Sou/Dakoure, A. Abdou, A. H. Maiga
P-11	Decolorization and degradation of dyes in wastewater by ligninase of white rot fungi
	H. Komatsu, K. Katou, S. Horisawa
P-12	Improvement of polysaccharide degradation in thermophilic L-lactic acid fermentation with kitchen garbage and
1 12	high-yielding rice
	Y. Kusuda, F. Nishimura, C. Shinomoto, Y. Takabe, T. Mizuno, T. Hidaka, H. Tsuno
P-13	Solar photo-Fenton degradation of dye wastewater: Saliency analysis of process factors
	W. S. Kuo, J. S. Jou, M. T. Li
P-14	Treatability of textile dyebath effluents by thermally-activated persulfate and peroxymonosulfate processes
	T. Olmez-Hanci, I. Arslan-Alaton, O. Tünay, C. Ecer
P-15	Cs sorption and retention by four types of minerals in leachate from landfill sites
	N. Ishikawa, M. Kuwata, A. Ito, T. Umita
P-16	Microwave-assisted thermo-chemical hydrolysis of cattle manure with the addition of food waste water
	J. M. Lee, I. G. Byun, J. H. Lee, J. S. Lim, S. H. Lee, T. J. Park
P-17	Decomposition kinetics of aqueous sulfamethazine by the ozonation process
5.40	L. C. Chuang, C. H. Luo, S. Yang
P-18	Decomposition of PFCs in $N_2$ atmosphere enhanced by activated carbon and alkali addition
	M. Takata, S. Takemine, K. Yamamoto, N. Watanabe
P-19	Adsorptive removal and photocatalytic degradation of sulfamonomethoxine in porcine urine using rotating advanced
	oxidation contactor with composite TiO <sub>2</sub> -Zeolite sheet
	M. Hyodo, S. Fukahori, T. Fujiwara
P-20	Study of photodegradation of tetracycline in aqueous solution by UVC and UVA irradiation: kinetics and
. 20	mechanisms
	Y. H. Wang, K. C. Chen
P-21	Recycling type of water purification system with hydroponic culture to apply the floating aquatic plants of water
	spinach in Kochi, Japan
	M. Fujimaki, A. Chikami, T. Mouri, S. Nishimura, M. Murakami
P-22	Struvite crystallization for the removal of nitrogen and phosphorus in supernatant from anaerobic fermentation
	J. Chung, S. Kim, S. P. Kim, J. O. Kim
P-23	Removal of ammonium-nitrogen from rural sewage effluent by biogeofilter channel vegetated with Sesbania
. 20	cannabina
	K. Okano, Y. Shida, T. Shibata, K. Susa, N. Miyata, Y. Ozaki





	Poster Presentation
P-24	Phosphorus recovery from highly-concentrated phosphate-ion groundwater by calcium-carrying chaff charcoal
	M. Noormazni, J. H. Kim, S. Harada, S. Narita, K. Takahashi
P-25	Recovery of phosphorus and potassium from corn biomass as a magnesium salt
	H. Nagare, T. Iwata, A. Ebi, T. Fujiwara, S. Akao, M. Maeda, D. Yasutake, S. Yamane
P-26	Extraction optimization of a mucilage extract from the processing waste of Citrus grandis Osbeck using response
P-20	surface methodology
	L. S. Lai, M. T. Tsai
P-27	Feasibility of microalgal biomass production in wastewater using Aphanothece clathrata and Microcystis
1-21	wesenbergii
	J. Yamamoto, N. Kishimoto, S. Ichise, S. Furuta
P-28	Effects of feedstock and pyrolysis temperatures on nitrate adsorption of biochar as soil amendment
	K. Kameyama, T. Miyamoto, Y. Iwata, T. Shiono
P-29	Evaluation of heavy metals in the residue of paper sludge after recovery of pulp components using an ionic liquid
	J. H. Jeong, M. Takaoka, H. Ichiura, K. Oshita, T. Fujimori
P-30	Application method of digested liquid using perforated hoses for sugarcane cultivation
	A. Tanaka, N. Yamaguchi, K. Kuroda, T. Hikosaka, M. Inokuchi, K. Ujihara
P-31	Chemical analysis of organic waste as potential resource for local sustainable management
	T. Ishigaki, M. Nakagawa, M. Ito, K. Tachio, T. Fujiwara, M. Yamada
P-32	Enhancement of removal rate constant (K <sub>20</sub> ) by recycling wastewater from Hybrid Catfish aquaculture
	J. Yimrattanabovorn, S. Sudsaen
P-33	Raw and treated coal fly ash amendment aiming for water holding capacity adjustment of natural soils
	S. Lin, F. Takahashi
P-34	Application of magnetic activated sludge process for a milking parlor wastewater treatment and nitrogen/phosphate
-	recycle
<b>-</b>	T. Onodera, Y. Sakai, M. Kashiwazaki, I. Ihara, M. L. Saha
P-35	Ultrafiltration by a super-hydrophilic regenerated cellulose membrane M. M. Naim, A. A. El-Shafei, A. A. Moneer, M. M. Elewa
P-36	Gene expression analysis of Sphingobium fuliginis OMI, isolated from the rhizosphere of Spirodela polyrrhiza, for
P-30	the elucidation of symbiotic mechanism
	K. Sei, M. Fukasawa, K. Kubo, S. Akaike, R. Saitoh, D. Inoue, M. Morikawa
P-37	A comparative study of Ar/O <sub>2</sub> gas-liquid electrical discharge plasma in treating synthetic dyeing wastewater
	Y. Xin, L. Zhou, Hafiz. I. A. Qazi, H. Li, Q. Nie, C. Bao
P-38	The effect of sludge particle size on the uptake of Cs-137 by a leaf vegetable, Brassica rapa var. perviridis
	N. Ishii, K. Tagami, S. Uchida
P-39	Effect of organic loading rate on alkaline pretreatment combined with thermophilic anaerobic sludge digestion
	B. Wichitsathian, W. Wonglertarak
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