FINAL CONFERENCE PROGRAM

Sunday, 9 September

14:30 REGISTRATION AND POSTER SET-UP – LEVEL 2

18:00 WELCOME DRINKS – LEVEL 2, CLUB PAVILION

Monday, 10 September

8:45 CONFERENCE WELCOME – CONFERENCE HALL, LEVEL 17
Welcome to Country
Welcome Speech
A/Prof. Jega V. Jegatheesan
Conference Chair, Deakin University

8:55 **Welcome Speech**
Prof. K. Baskaran
Associate Dean (International), Faculty of Science & Technology, Deakin University

9:00 **Prof. Trevor Day**
Two key social challenges facing science and engineering: credibility and recruitment

9:20 **Mr. Ben Furmage**
Enhancing life and livability - Future opportunities and challenges in meeting Melbourne's water supply needs

9:40 **Prof. Ashok Pandey**
Non-conventional agricultural wastes as potential feedstocks for the production of bioethanol

10:00 **Prof. Roji Sarmidi**
Biotechnology of Natural and Waste Resources: the perspective of a developing nation, special emphasis on water management

10:20 **Dr. Dharma Dharmabalan**
Climate change and new challenges to manage water systems

10:40 MORNING TEA

11:10 **Prof. Stephen Gray**
Water – Research and Future Needs

11:30 **Prof. Yeong-Kwan Kim**
A Comprehensive Approach for Intelligent Water Network Management in Korea

11:50 **Prof. Huanting Wang**
Polymer Hydrogel composite Materials for Energy-Efficient Water Desalination

12:10 **Prof. Seungkwan Hong**
Osmosis membrane processes for water and energy: prospects and challenges

12:30 LUNCH

13:30 POSTER SESSION

14:45 AFTERNOON TEA

FINAL CONFERENCE PROGRAM

Monday, 10 September (continued)

	WATER TREATMENT (Theme 1) Room: Room: Bourke 1 (Level 2) Chairs: A/Prof. Huu Hao Ngo & Prof. Baoyu Gao	WASTEWATER TREATMENT (Theme 1) Room :Bourke 2 (Level 2) Chairs: Prof. Kuo-Lun Tung & Prof. Jih Gaw Lin	MEMBRANES (Theme 2) Room: Bourke 3 (Level 2) Chairs: Dr. Jurate Virkutyte & Prof. Kanagaratnam Baskaran	ENERGY (Theme 3) Room: Bayside 5 (Level 2) Chairs: Prof.Ramraj Boopathy & A/Prof. Binxia Xue	ALGAL BIOMASS / BIOFUEL (Theme 3) Room: Bayside 6 (Level 2) Chairs: A/Prof. Pascale Champagne & Prof. Seok Dockko
15:00	**B025** Influence of using Enteromorpha extract as a coagulant aid on floc characteristics of aluminum sulfate in Yellow River water treatment **Baoyu Gao**	Geomimetic Membranes: A New Route to Develop Novel Inorganic Membranes for Solving the Environmental Challenges **Kuo-Lun Tung**	**B081** Catalytic dechlorination of tetrachloroethylene in aqueous solutions by supported Fe-Pd nanoparticles **Jurate Virkutyte**	**C001** Use of White Rot and Brown Rot Fungi in Lignin Removal from Agricultural Residues for Ethanol Production **Ramraj Boopathy**	The use of Waste Streams to Enhance Bio-oil Production from Algal Biomass **Pascale Champagne**
15:20	**A148** Role of Biological Activated Carbon in Improving Chlorine Stability in Recycled Water Distribution Systems Using a Novel Approach **Arumugam Sathasivan**	**A085** A pilot study of wastewater treatment by partial nitrification and anammox process **Jih Gaw Lin**	**B004** Organic and Nutrient Reduction in a Fish Processing Facility – A case study **Kanagaratnam Baskaran**	**C019** Renewable energy and energy efficiency for the small and decentralized water supply system **Gang-Wook Shin**	**A015** Nutrient removal of nursery and municipal wastewater using Chlorella vulgaris microalgae for biofuel production **Vasantha Aravinthan**
15:40	**A038** Wasted Rubber Tire Chips as Potential Bio-filter for Pollutant Removal in Constructed Wetland **Jih Ming Chyan**	**A155** Utilizing immobilized ZnO for visible light photo-catalytic degradation of azo dye acid orange G wastewater **Hung-Yee Shu**	**B046** Nitrification Performance and Microbial Community of Nitrifying Bacteria in a Full-Scale Membrane Bioreactor Treating TFT-LCD Wastewater **Liang-Ming Whang**	**C053** Prediction of Biomethane Potential and Two-Stage Anaerobic Digestion of Star-Fish Waste **Mi-Sun Kim**	**C051** Renewable energy: Bioconversion of organic wastes using anaerobic co-digestion for biofuel production **Mohd Razman Salim**
16:00	**A019** Application of Unified Clarifier packed with Filter Media (UC-FM) as Preliminary Step of Water Treatment **Dae-Young Kwon**	**A105** Solar Light Photocatalytic Activity of Pollutant-Specific Titania produced from Ti-salt flocculated bioresourced sludge **Ho Kyong Shon**	**B043** Developing an advanced cleaning method using ozone for microfiltration coupled with anaerobic membrane bioreactor **Ji Hyang Kweon**	**C060** Biomass Energy Flow Assessment Using The Material Flow Analysis (MFA) Method **Nora'aini Ali**	**C040** Anaerobic digestion of microalgal biomass with ultrasonic disintegration **Ki Young Park**
16:20	**A060** Occurrence and Removal of Selected Micro-Pollutants in Water Treatment Plant **Kyung-Duk Zoh**	**B073** Effect of F/M (food to microorganism) ratios on cassava wastewater treatment using a single-chamber microbial fuel cell **Chavalit Ratanatamskul**	**B040** Preparation of a novel Ethylene vinyl alcohol copolymer (EVAL) membrane adsorptive chromatography for protein separations using photo-induced graft polymerization **Yuzhong Zhang**	**A023** Study on the Double Subsurface Snow-Melting System based on the Utilization of Waste Heat Generated from the Urban Underground Network of Pipes **Binxia Xue**	**C045** Algae and nutrient removal using a ferry boat installed with DAF system in the lake **Seok Dockko**
16:40	**B076** Improving Urban Runoff Quality Using Iron Oxide Nano Particles with Magnetic Field **Mehdi Khiadani**	**A147** Understanding the Effect of Temperature on Microorganisms Treating Acetate in Microbial Electrolysis Cell (MEC) **Arumugam Sathasivan**	**B003** The use of ceramic microfiltration and ultrafiltration membranes for the reclamation and reuse of secondary effluent **Shobha Muthukumaran**	**A064** Effective Biochemical Decomposition of Chlorinated Aromatic Hydrocarbon Contaminants Using the Biocatalyst Immobilized on Natural Enzyme Supports **Han S. Kim**	**B112** Nutrient removal and P recovery from landfill leachate in an A/O MBR **Chia-Yuan Chang**

FINAL CONFERENCE PROGRAM

Tuesday, 11 September

	ADSORPTION (Theme 1) Room: Bourke 1 (Level 2) Chairs: A/Prof. Chart Chiemchaisri & Prof. Seok Dockko	ANTIBIOTICS / NUTRIENTS / OTHER CHEMICALS (Theme 1) Room: Bourke 2 (Level 2) Chairs: Dr. Blonda Massimo & Dr. Vasantha Aravinthan	MEMBRANE BIOREACTORS (Theme 2) Room: Bourke 3 (Level 2) Chairs: Dr. Jurate Virkutyte & Prof. Chia-Yuan Chang	MEMBRANES / SBR (Theme 2) Room: Bayside 5 (Level 2) Chairs: Dr. Faisal Hai & Prof. Gih-Gaw Lin	BIOFUELS (Theme 3) Room: Bayside 6 (Level 2) Chairs: A/Prof. Pascale Champagne & Wan Azlina Ahmad	SOLIDS / SLUDGE MANAGEMENT (Theme 3) Room: Club Pavilion (Level 2) Chairs: Prof. Taku Fujiwara & Prof. Chi-Mei Lee
9:00	**A011S** Effects of dissolved humic acid on adsorption of Cr(VI) by food-grade tannic acid immobilized PAC from micro-polluted water **Xujin Gong**	**A126S** Occurrence of quinolone and imidazole antibiotics in Central Taiwan river systems **Wan-Ning Lee**	**B026S** Study on optimum operational of aerobic submerged membrane bioreactor in treating spent caustic wastewater **Noor Sabrina**	**B093S** Removal of N-nitrosamines by an aerobic membrane bioreactor **Kaushalya Wijekoon**	**C008S** Application of a novel enzymatic pretreatment on microalgal biomass for bio-hydrogen production **Yeo-Myeong Yun**	**C007S** Nitrogen loss and bio-availability of organic carbon during composting of sewage sludge with different extra carbon sources **Yunbei Li**
9:15	**A033S** Comparison study on the performance of cabbage and cauliflower for heavy metals removal **Md. Anwar Hossain**	**A091S** Salinity affect photocatalyst degradation of sulfonamide antibiotics and their toxicities in water **Chun-Chen Yang**	**B028S** A simplified approach for modellingthe formation and degradation of soluble microbial products (SMP) in an integrated mathematical model of MBR **Mst Farzana Rahman Zuthi**	**B092S** Factors governing the rejection of trace organic contaminants by nanofiltration and reverse osmosis membranes **Hai Dang Quang**	**C037S** Effects of OLRs and HRTs on hydrogen production from high salinity substrate by HHPB(Halophilic Hydrogen Producing Bacteria) in CSTR **Shan Zhang**	**C014S** Continuous high-solids anaerobic digestion of food waste under mesophilic conditions: performance and microbial community analysis **Si-Kyung Cho**
9:30	**A047S** Novel Effective Waste Iron Oxide Coated Magnetic Absorbent for Phosphate Absorption **Chia-Hsun Liu**	**A054S** Nitrogen and phosphorus removals of Chlorella sorokiniana by heterotrophic culture in various nitrogen concentrations and sources **Sunjin Kim**	**B038S** Removal of diclofenac and bisphenol-A by a novel fungal membrane bioreactor **Shufan Yang**	**B099S** Functionalised filtration membrane with cashmere guard hair powder coating for removal of toxic heavy metal ions **Kiran Patil**	**C044S** Bioethanol production from the macroalgae Sargassum spp. **Myra Borines**	**C068S** Efficacy of Heated Dry Sludge in Alum Coagulation to Remove Methylene Blue **Daniel Ng Chee Wei, Guan Zhi Hua and Handojo Djati Utomo**
9:45	**A014S** A critical review on the application of agricultural wastes for heavy metals removal from wastewater **Thi An Hang Nguyen**	**A073S** Electrochemical Reduction of Trichloroethylene using Zero-Valent Iron Bipolar Packed-bed Electrodes **Ja-Won Shin**	**B105S** Effect of different temperatures on performance and membrane fouling of high concentraiton PAC-MBR treating slightly polluted surface water **Cong Ma**	**B095S** Removal of organic acids from co-produced water by forward osmosis **Rajab Abousnina**	**C033S** Green processing of dedicated energy crops for biofuel and biobased products **Devin Takara**	**C034S** Unit mass estimation and characteristics of litter generated in broiler house and slaughter house **Yong-Woo Jeon**
10:00	**A002S** Thermally Processed Sewage Sludge for Methylene Blue Uptake **Ong Xi Chun, Lim Suet Min Sophia, Ong Geok Chuan Brenda and Handojo Djati Utomo**	**A076S** Water Resource Management for Sustainable Industrial City **Andriati Cahyaningsih**	**B067S** Flux Behavior and Membrane Fouling in Pressure-Assisted Forward Osmosis **Taekgeun Yun**	**B013S** Study on nitrous oxide emissions for a full-scale sequencing batch reactor (SBR) wastewater treatment plant **Shi-chang Sun**	**C023S** Investigation of methane production from residue of marine algal ethanol fermentation **Jeong-Hoon Park**	**C012S** Spectral study of dissolved organic matter in biosolids during the composting process using inorganic bulking agent: UV-Vis, GPC, FTIR and EEM **Yunbei Li**
10:15	MORNING TEA					

FINAL CONFERENCE PROGRAM

Tuesday, 11 September (continued)

	BIODEGRADATION (Theme 1) Room: Bourke 1 (Level 2) Chairs: A/Prof. Chart Chiemchaisri & Prof. Baoyu Gao	DEGRADATION (Theme 1) Room: Bourke 2 (Level 2) Chairs: Prof. Hung-Yee Shu & Prof. Weiguang Li	NUTRIENT REMOVAL (Theme 2) Room: Bourke 3 (Level 2) Chairs: A/Prof. Takuya Tsuzuki & Prof. Chia-Yuan Chang	MBR/WETLANDS (Theme 2) Room: Bayside 5 (Level 2) Chairs: A/Prof. Huu Hao Ngo & Prof. Seungkwan Hong	ENERGY / CO_2 REDUCTION / METHODS (Theme 3) Room: Bayside 6 (Level 2) Chairs: A/Prof. Liang-Ming Whang & Prof. Ashok Pandey	BIOFUEL/FERMENTATION (Theme 3) Room: Club Pavilion (Level 2) Chairs: Prof. Hang-sik Shin & A/Prof. Ming-Chin Chang
10:45	**A062S** Biodegradation combined with UV irradiation of decabromodiphenyl ether by aerobic mixed cultures in the clay/water environment **Hsi Ling Chou**	**B047S** Photocatalytic degradation of the antineoplastic agent in aqueous environment **Wei-Po Lai**	**B058S** Reduction kinetics of nitrate using the packed bed bipolar electrode reactor **Sojeong Na**	**B089Y** Study on the optimization of the denitrifying phosphorus accumulating removal process in the parallel A^2O-MBR system **Liang Wang**	**C024S** Optimal integrated energy system and planning for the commercial sector **Wai Shin Ho**	**C055Y** Alternative fuel different options: progression from first generation to fourth generation **Kasturi Dutta**
11:00	**A095S** Removal of estrogens in nitrifying activated sludge **Yu-Jen Huang**	**A093S** Performance evaluation of an up-flow roughing filter for pre-treatment of high turbidity water **Ghalib Hasnain**	**B021S** Simultaneous removal of nitrate, phosphate and fluoride using bipolar ZVI packed bed electrolytic cell **Joo-Young Jeong**	**B075Y** Fouling characterization and nitrogen removal in batch granulation membrane bioreactor **Bui Xuan Thanh**	**C031S** Research on Energy-saving Design of Gymnasium in Cold Region of China Northeast Based on Climatic Adaptation **Naihua Yue**	**C063Y** Innovation process for recovery organic sludge as derived fuel **Fang-Chih Chang**
11:15	**A045S** Anaerobic treatment of thermal-hydrolyzed sewage sludge contaning high concentration of ammonia **Kyung Mo**	**B059S** Reactivity of pure and impure α-hematite/Fe (II) system in reduction of trichloroethylene **Praveen Ashok Ghorpade**	**B030S** N2O production during denitrifying phosphorus removal process: Main causes and control method **Cong Li**	**B094Y** Removal of emerging trace organic contaminants by MBR-based hybrid treatment processes **Nghiem Long**	**C022S** Ultrasonication as a means to enhance the methanogenic activity **Si-Kyung Cho**	**C038Y** Metabolic flux network analysis of fermentative hydrogen production: using Clostridium tyrobutyricumas an example **Hai-Hsuan Cheng**
11:30	**A096S** Bioremediation of Diesel-Contaminated Seawater using Immobilized Oil-Degarding Consortia **Chih-Hung Chen**	**B035S** An Analysis of the Influence by Using Osmotic Backwashing on the SWRO Process **Jun Young Park**	**B033S** Aerobic granulation and the emission of nitrous oxide in a sequencing batch airlift reactor at ambient temperatures **Qiang Kong**	**A027Y** Wetland roof with Melampodium Paludosum for domestic wastewater treatment **Bui Xuan Thanh**	**C039S** Fixation of CO2 by carbonating municipal solid waste incinerator (MSWI) bottom ash in a slurry reactor **Shu-Yuan Pan**	**C049Y** Development of effective biocatalytic systems through the immobilization of enzymes on functionalized nanomaterials: preparation, characterization and application in biofuel production **Madan Verma**
11:45	**A046S** Estimation of influencing factors for efficient anaerobic digestion of thermally-hydrolyzed sewage sludge **Seyong Park**	**B057S** Titania aerogel for photocatalytic decomposition of water pollutants **Mohammad Shahid**	**C059S** Effect of influent phosphorus concentration on N2O emission in lab-scale SBR performing simultaneous nitrification and denitrification under low oxygenation **Wenlin Jia**	**A092Y** Organics and nitrogen removal enhanced by sand infiltration system and intermittently aerated subsurface constructed wetlands in northern China **Jian Zhang**	**A017S** Development of Formaldehyde Detection Method using Onion Juice as Chromogenic Agent **Rozidaini Mohd Ghazi**	**A057Y** Investigation on methanogenic community treating TMAH-containing TFT-LCD wastewater using molecular methods **Hai-Hsuan Cheng**
12:00	**LUNCH AND POSTER SESSION**					

FINAL CONFERENCE PROGRAM

Tuesday, 11 September (continued)

	TREATMENT (Theme 1) Room: Bourke 1 (Level 2) Chairs: Prof. Yeong-Kwan Kim & Dr. Shobha Muthukumaran	MODELLING (Theme 1) Room: Bourke 2 (Level 2) Chairs: Prof. Hung-Yee Shu & A/Prof. Jega Jegatheesan	MEMBRANES / BIOLOGICAL PROCESSES (Theme 2) Room: Bourke 3 (Level 2) Chairs: Dr. Jurate Virkutyte & Dr. Ho Kyong Shon	MEMBRANE BIOREACTORS (Theme 2) Room: Bayside 5 (Level 2) Chairs: A/Prof. Huu Hao Ngo & Dr. Vasantha Aravinthan	BIOLOGICAL PROCESSES (Theme 3) Room: Bayside 6 (Level 2) Chairs: A/Prof. Pascale Champagne & Prof. Sangho Lee	ENERGY/BIOFUELS (Theme 3) Room: Club Pavilion (Level 2) Chairs: Prof. Taku Fujiwara & Dr. Zainul Akmar Zakaria
13:45	**A078Y** Treatment of anaerobically digested liquor of swine wastewater by simultaneous partial nitrification, anaerobic ammonium oxidation and denitrification (SNAD) process under ambient temperature **Achlesh Daverey**	**B066S** Molecular detection of the microbial community composition of a nitrifying-denitifying activated sludge system **Hira Waheed**	**B023S** Development of a new Poly Silicate Ferric coagulant and its application to coagulation-membrane filtration hybrid system in wastewater treatment **Firoozeh Nateghi**	**B006Y** Performance Evaluation and Bacterial Characterization of Membrane Bioreactors **Sher Jamal Khan**	**C002S** Enhancement of pH and conductivity in Malaysian Ultisols by Rhodopseudomonas palustris adhered to dried pineapple leaves **Aidee Kamal Khamis**	**C056S** Energy from solid waste –Case study of Iskandar Malaysia **Zarina Ab Muis**
14:00	**A110Y** Treatment of arsenic-containing wastewater with co-precipitation and mineralization processes **Fang-Chih Chang**	**A028S** An Innovative Risk Based Cost-Benefit Assessment Model for Evaluating Building Project Economics **Jane Lai**	**B091Y** Effects of organic and colloidal fouling on the rejection of two pharmaceutically active compounds (PhACs) by nanofiltration processes: Role of membrane foulants **Nghiem Long**	**B039Y** Morphology of Coriolus versicolor in a membrane bioreactor as key bioprocess parameter governing degradation of azo dye Acid Orange 7 **Faisal Hai**	**A087S** Transformation of β-lactam antibiotics by laccase-mediator systems **Yi-Pei Dan**	**A131Y** Improvement of lime softening treatment of secondary effluent by addition of fly ash **Lihua Cheng**
14:15	**B090Y** Degradation of dibutyl phthalate in aqueous solution by the O_3/UV process **Liang Wang**	**B063S** Fertilizer Drawn Forward Osmosis (FDFO) for Fertigation: Application to Tomato **Tahir Majeed**	**C071Y** Nitrous oxide emission mechanisms during intermittently aerated composting of cattle manure **Hirofumi Tsutsui**	**B086S** Submerged Membrane Ion-exchange Hybrid System as a Tertiary Wastewater Treatment **S. Shanmuganathan**	**C035Y** Development of technology for the production of second generation bio fuel bio ethanol from bagasse **Jagdish Singh**	**C021S** Evaluation and analytical modeling of carbon monoxide mass transfer using a composite hollow fiber (CHF) membrane bioreactor in syngas fermentation **Pradeep Munasinghe**
14:30	**A169S** Degradation of phenolic syntan used in leather industry by Fenton's oxidation - activated carbon adsorption **Rema Thankappan**	**A030Y** Numerical Simulation of Saltwater Intrusion in Panglao Island, Bohol **Dolores Cleofas**	**B044Y** Effect of high salinity on biomass characteristics and membrane filtration of membrane bioreactors **Wontae Lee**	**B108S** Fouling prevention by sponge and PAC addition in membrane bioreactor for septic tank effluent treatment **Nawaporn Temdee**	**A066Y** Application of Condition Assessment Methodology in Reinforced Concrete Sewer Pipes **Sangjong Han**	**C025S** Biofuel residues conversion into aquatic feed via fungal fermentation **Saoharit Nitayavardhana**
14:45	**A163Y** The influence of water treatment processes on biofilm formation in water distribution system: focusing on organic carbon and pipe material **Mijeong Jang**	**A069S** Modeling Evaluation for the Level of Sewer Service in Customers' View **Byongjun Kang**	**A051Y** Research on the Multi-Objective Guiding Comprehensive Treatment Technology on the Saline-Alkali Land of Daqing **Shengjun Liu**	**B070S** The effect of powder activated carbon age on submerged membrane adsorption bioreactor in seawater desalination **Sanghyun Jeong**	**A059** Analysis of Financial Effects and Drivers for Improving Efficiency by Adopting Asset Management Strategy of Sewage Facilities **Kyoung-Ju Kim**	**B037Y** Removal of trace organic contaminants using white-rot fungi and their lignin modifying enzymes-factors, potential and practical limitations **Faisal I. Hai**
15:00	**AFTERNOON TEA**					

FINAL CONFERENCE PROGRAM

Tuesday, 11 September (continued)

	WATER TREATMENT (Theme 1) Room: Bourke 1 (Level 2) Chairs: Prof. Ahmad Jusoh & Prof. Nguen Phuoc Dan	SOIL REMEDIATION (Theme 1) Room: Bourke 2 (Level 2) Chairs: Prof. Seoktae Kang & Dr. Suhan Kim	NANOPARTICLES (Theme 2) Room: Bourke 3 (Level 2) Chairs: A/Prof. Long Nghiem & Dr. Sher Jamal Khan	OXIDATION / REDUCTION (Theme 2) Room: Bayside 5 (Level 2) Chairs: A/Prof. Chavalit Ratanatamskul & A/Prof. Dae Young Kwon	BIOTECHNOLOGY (Theme 3) Room: Bayside 6 (Level 2) Chairs: Prof. Ramaraj Boopathy & Prof. Chia-Yuan Chang	FUEL/TREATMENT (Theme 3) Room: Club Pavilion (Level 2) Chairs: Prof. Jian Zhang & Dr. Bui Xuan Thanh
15:20	**A008S** Kinetics and Mechanisms of Antipyrine Chlorination in Water with Free Chlorine **Cai Meiquan**	**A161S** Efficiency evaluation for leakage management using data envelopment analysis in water distribution systems **Taeho Choi**	**B065** Adhesion and Bacterial Toxicity of Silver Nanoparticles in Various Aquatic Chemistries **Seoktae Kang**	**B042S** Study on coupling with catalytic wet air oxidation and membrane separation in treatment of cationic red GTL **Li Xiaoyi**	**B046S** Biodegradation of dichlorvos using indigenous soil microorganism **Rizwana Naureen**	**A107S** Effect of solution conditions on the physicochemical properties of stratification components of extracellular polymeric substances in anaerobic digested sludge **Yuan Dongqin**
15:40	**A031** Evaluation of long term stability of seeded bacteria in a bio-enhanced activated carbon filter used for drinking water treatment **Duoying Zhang**	**A162S** T-P removal by coagulation considering phosphorus fraction properties of wastewater **Sanghyuk Park**	**B080** Catalytic sorption of (chloro)benzene, napthalene and selected heavy metals in aqueous solutions by granular activated carbon supported bimetallic iron and palladium nanoparticles **Jurate Virkutyte**	**B104S** Removal of taste and odor substances in water by attapulgite adsorption and enhanced coagulation **Cong Ma**	**C036Y** Evaluation of the Potential of ten microalgal Strains for Biodiesel Production **Mingming Song**	**A130Y** Effect of ferric salt on microbial activity of activated sludge in BNR system **Lihua Cheng**
16:00	**B060** Development of a Novel Process for Arsenic(V) Removal from Water using Fe-ettringite **Won-Ho Choi**	**A102** Proposal of procedure to determine metals and metalloids background values in contaminated soils. Case study of a national interest site in South Italy **Blonda Massimo**	**B084** Solvothermal synthesis of Au/TiO_2 nanostructured photocatalysts for water treatment under UV light **Xingdong Wang**	**A156** Evaluating ozonation and UV/H2O2 processes for degradation and detoxification of landfill leachate **Hung-Yee Shu**	**A022** Production of prodigiosin by Serratia marcescens UTM1 in stirred-batch bioreactor system using brown sugar as growth medium **Wan Azlina Ahmad**	**C027** Adsorption of dibenzothiophene sulfone from fuel using chitosan immobilized on bentonite (CIB) as biosorbent **Meng-Wei Wan**
16:20	**A044** Assessment of Water Contamination in Storage Tanks in the City of Makkah, Saudi Arabia **Turki Mesfer Al-aboud**	**A024** Study on the Saline-Alkaline Land Treatment and its Landscaping based on the Network of the Grading Trapezoidal Terrace Ditches **Binxia Xue**	**B053** Hierarchically porous carbon materials using sugarcane bagasse as the scaffold for capacitive deionization applications **Ruey-an Doong**	**A104** The enhancement of reductive dechlorination of 234-trichlorobiphenyl and 2345-tetrachlorobiphenyl by using halogenated primers **I-Ming Chen**	**C062** Molecular dynamics simulation for understanding enzymatic deconstruction of cellulose **Weimin Gao**	**A016** Coal seam gas water as a medium to grow Dunalliella Tertiolecta for biofuel production **Vasantha Aravinthan**
16:40	**B077** Removal of Turbidity From Water by Dissolved Air Floatation (DAF) and Conventional Sedimentation Systems Using Poly Aluminum Chloride as Coagulant **Mehdi Khiadani**	**B041** Study on the Comprehensive Biological Treatment of the Land pollution in Daqing and Sustainable Development and Utilization of its Industrial Wasteland **Zhiqing Zhao**	**B110** Utilizing three iron based metallic/bimetallic nanoparticles for reductive decolorization of acid blue 113 azo dye wastewater **Ming-Chin Chang**	**C016** Utilization of stabilized wastes for reducing methane emission from municipal solid waste disposal **Chart Chiemchaisri**	**A001** Pilot scale biological treatment of combined industrial and municipal effluents in Paharang Drain, Faisalabad **Zahiruddin Khan**	**B061** Anaerobic Treatment of Palm Oil Mill Effluent using Combined High–Rate Anaerobic Reactors **Won-Ho Choi**
18:30	**GALA DINNER – CONFERENCE HALL, LEVEL 17**					

FINAL CONFERENCE PROGRAM

Wednesday, 12 September

	ADSORPTION (Theme 1) Room: Bourke 1 (Level 2) Chairs: A/Prof. Chart Chiemchaisri & Dr. Jurate Virkutyte	OXIDATION (Theme 1) Room: Bourke 2 (Level 2) Chairs: Prof. Zhang Jian & A/Prof.Huu Hao Ngo	FO/MEMBRANE (Theme 2) Room: Bourke 3 (Level 2) Chairs: Dr. Jing Guan & A/Prof. Liang Ming Whang
9:00	**A152** Isotherm and Thermodynamic Studies of Zinc (II) Adsorption onto Lignite and Coconut Shell-based Activated Carbon Fiber **Seunghwan Lee**	**A058** Simultaneous Removal of Odorous and Organic Compounds in Septic Tanks Using an Electrolytic Oxidation System **Ji Hyeon Song**	**B083** Fertiliser Drawn Forward Osmosis Desalination: Concept, Performance and Limitations **Ho Kyong Shon**
9:20	**A018** Adsorption property of direct red brown on acid-thermal modified sepiolite and optimization of adsorption conditions using Box-Behnken Response Surface Methodology **Weiguang Li**	**B048** Photo-degradation kinetics and mechanism of bisphenol-A in water **Kyung-Duk Zoh**	**B049** Osmotic pressure-driven backwash in a pilot-scale reverse osmosis plant **Suhan Kim**
9:40	**A077** Role of Surface Macromolecules During The Adhesion of Cryptosporidium parvum Oocysts onto Single Glass Bead **Seoktae Kang**	**A127** Pilot study on the removal of TOC, THMs and HAAs in drinking water using ozone/UV-BAC **Nguen Phuoc Dan**	**B068** Application of Isopore Cycloaliphatic Polyurethane Membrane for Water Treatment **Sangho Lee**
10:00	**C005** Biosorption of Cadmium on spent tea: Green Chemistry approach **Uzaira Rafique**	**A012** Cr(VI) reduction by Acinetobacter haemolyticus in rich and agricultural waste medium **Zainul Akmar Zakaria**	**B054** Properties of chlorine bulk decay for waters from conventional treatment and microfiltration on various wall materials used in a distribution system **Ji Hyang Kweon**
10:20	**MORNING TEA**		
	CATCHMENT (Theme 1) **Room: Bourke 1 (Level 2)** **Chairs: Prof.Seunghwan Lee & Prof. Seotae Kang**	**WASTEWATER (Theme 1)** **Room: Bourke 2 (Level 2)** **Chairs: A/Prof. Azizah Endut & A/Prof. Long Nghiem**	**MEMBRANE BIOREACTORS (Theme 2)** **Room: Bourke 3 (Level 2)** **Chairs: Prof. Nora'aini Ali & Dr. Li Shu**
10:50	**A164** Assessment of hydrological responses to land use change in sustainable watershed management **Ranjan Sarukkalige**	**A086S** Role of Community in Creating Eco Industrial Park in Bekasi , Indonesia **Aviasti**	**B109** The effect of the main components in mixed liquor on membrane fouling and its cleaning in MBR progress **Jing Guan**
11:10	**A061** The investigation of bacterial indicators and point source pollution in the Nanshi River in Northern Taiwan **Yi-Tang Chang**	**A042** Capacitive deionization (CDI) for Removal of Phosphate from Aqueous Solution **Gaw-Hao Huang**	**B024** Low flux operation of submerged membrane bioreactor treating high strength leachate from solidwaste transfer station **Nguyen Phuoc Dan**
11:30	**A145** Removal of Algae & Turbidity by Floating-Media & Sand Filtration **Dae Young Kwon**	**A029** A Study on the Economic Analysis in Case of Reclaimed Wastewater as Industrial Water **SoonyuYu**	**B113** Feasibility study of a laboratory scale MBR with cotreatment of septic tank effluent and landfill leachate **Chia-Yuan Chang**
11:50	**C018** Introduction of Decentralized Water Supply System in Korea **Gang-Wook Shin**	**A151** Optimal Operational Condition of Submerged Plasma Irradiation Process for the Treatment of Wastewater **Seunghwan Lee**	**B056** Biological removal of 17α-Ethinylestradiol in submerged membrane bioreactor: Effect of varying HRT, kinetic parameters and thermodynamic properties **Liza Patacsil**
12:10	**A134** Performance variations of two water quality models on a river with high ammonia and organic matters **Yi-Chu Huang**	**A154** Application of EBI-ACF Hybrid Processes for Phenol Removal in Industrial Wastewater **Joung-Eun Gu**	**B072** A Prototype IT/OD-MBR (Inclined-Tube/Oxidation-Ditch Membrane Bioreactor) system for High-rise Building Wastewater Recycling **Chavalit Ratanatamskul**
12:30	**LUNCH**		

FINAL CONFERENCE PROGRAM

Wednesday, 12 September (continued)

	PESTICIDES / HEAVY METALS / OTHER CHEMICALS (Theme 1) Room: Bourke 1 (Level 2) Chairs: Prof.Baoyu Gao & A/Prof. Pascale Champagne	TREATMENT (Theme 1) Room: Bourke 2 (Level 2) Chairs: Prof. Uzaira Rafique & Dr. Zainul Akmar Zakaria	MEMBRANE BIOREACTORS (Theme 2) Room: Bourke 3 (Level 2) Chairs: Dr. Subrat Das & A/Prof. Jega V Jegatheesan
13:40	**B010** Synthesis and application of polyferric chloride-poly (epichlorohydrin-dimethylamine) composites using different crosslinkers **Baoyu Gao**	**A056** Linking DMSO/DMS removal efficiency, Hyphomicrobium and Thiobacillus spp.population dynamics, and nitrification performance in full-scale TFT-LCD wastewater treatment processes **Liang-Ming Whang**	**B106** Development of Nanofiltration Membrane Separation Prediction System for Binary Salt Solutions **Nora'aini Ali**
14:00	**B074** Preparation and Characterization of Chitosan/Carbon Nanotubes Composite Sorbent for the Removal of Copper(II) Ions **Srinivasa R. Popuri**	**A109** Nitrogen budget as water quality management tool in aquaponics recirculation system **Azizah Endut**	**B062** The effects of flux variation and enhancing chemicals on biofouling of MBR treating palm oil mill effluent **Salmiati**
14:20	**A099** Removal of pesticide in agricultural run off using granular activated carbon: A simulation study using a fixed bed column approach **Ahmad Jusoh**	**A063** Effects of photoperiod and feeding strategies on nitrogen and phosphorous budget in a tilapia-cum-water spinach production system **Jung-Yuan Liang**	**B085** Water transport behaviour and permeability of polyamide thin composite membranes **Weimin Gao**
14:40	**A149** The Study of Soil Washing by Surfactants for PAH Remediation **Ming-Chin Chang**	**A125** Health care effectiveness of Taiwan's overall environmental assessment by organic fruits and vegetables, Chinese food raw food decontamination **Roey-Shwu Lin**	**A146** Risk management of land subsidence in Shanghai **Han-mei Wang**
15:00	**A132** Effects of Conway and f/2 media on the growth of six genera of South China Sea marine microalgae **Azizah Endut**	**A035** Effect of co-substrate on biodegradation in nitrobenzene wastewater by nitrobenzene-acclimation bacteria **Yingzi Lin**	
15:20	AFTERNOON TEA		
	CATCHMENT(Theme 1) Room: Bourke 1 (Level 2) Chairs: Dr. Ranjan Sarukkalige & Dr. Suhan Kim	OXIDATION (Theme 1) Room: Bourke 2 (Level 2) Chairs: A/Prof. Wan Azlina Ahmad & A/Prof. Chavalit Ratanatamskul	MEMBRANES / COPOLYMERS (Theme 2) Room: Bourke 3 (Level 2) Chairs: Dr. Ho Kyong Shon & Dr. Srinivasa Popuri
15:40	**A084** Development and Application of a 2 Dimensional Urban Inundation Model based on Catchment Delineation **In-Hyeok Park**	**A020** Comparison of solid waste stabilization and methane emission from anaerobic and semi-aerobic landfill operated in the tropics **Chart Chiemchaisri**	**B116** Application of Hybrid Nanofiltration for Separation of Concentrated PFOS in Aqueous Solution **Romchat Rattanaoudom**
16:00	**A128** Fate of cephalosporin antibiotics in Jingmei River in Taiwan **Xiao-Huan Wang**	**A004** Effect of operating parameters on the removal of endocrine disruptor in type of triclosan by Fenton's reagents combined with electrochemical system **Thanakorn Methatham**	**B011** Application of Synthesised Nano-materials for Treatment of Aqueous Pollutants: A Challenge to Environment **Abida Kalsoom Khan**
16:20	**A083** A Stochastic Estimation of the Combined Sewer Overflows under Insufficient Observation **In-Hyeok Park**	**C032Y** Influence of palm oil mill effluent as an inoculums on the anaerobic digestion of cattle manure for biogas production **Muhamad Ali Mohamed Yuzir**	**C057** Novel Green Copolymers Synthesis for Antibacterial Applications **Srinivasa R Popuri**
16:40	**C072** Characteristics of greenhouse gas emission in the Yellow River Delta wetland **Qingfeng Chen**	**A082** Promotion of sanitation and hygiene in less developed countries **Allan Toole**	**C004S** Trace pollutants removal in a catalytic gasification of rice straw by an integration of hot gas cleaning system **Chen-Han Lu**

FINAL CONFERENCE PROGRAM

Poster Presentations

1 **A003P** Potential Use of Sand- Coffee Column Filtration System for Trace Copper Removal from Rooftop Runoff **Lim Chin Haow, Fu Jia Jun, Saw Kay Heng and Handojo Djati Utomo**
2 **A005P** Solvent extraction of palladium(II) from acidic chloride solutions using tri-octyl/decyl ammonium chloride (Aliquat 336) **Chen-Yu Peng**
3 **A007P** Decontamination, Extraction, Speciation, and Residue Analysis of Imidacloprid: A Sustainable Resource Management Model for Cotton Crop **Uzaira Rafique**
4 **A009P** Effects of Soil Organic Matter and Bacterial Community Shift on Bioremediation of Diesel-Contaminated Soil **Chih-Hung Chen**
5 **A010P** Ammonia nitrogen removal from wastewater using modified zeolites column **Hongbin Wang**
6 **A013P** Household water treatment and reuse technologies in rural and peri-urban areas: A Review **Huu Hao Ngo**
7 **A025P** Effects of nitrate on advanced H2O2 oxidation for bisphenol A (BPA) degradation in aqueous solution and brine **Chan Gyu Park**
8 **A032P** Effects of pH, dissolved organic matters, and salinity on ibuprofen sorption onto sediment **Sanghwa Oh**
9 **A034P** Effects of nitrobenzene- domestication on archaea community structure in Hybrid Anaerobic Baffled Reactors **Yingzi Lin**
10 **A037P** Effects of Porosity on the Flow of Free Water Surface Constructed Wetland **Jih Ming Chyan**
11 **A039P** Nitrogen Fertilization Promotes the Phytoremediation of Cadmium in Pentas lanceolat **Yu-Jie Chang**
12 **A040P** Variations of Microbial Communities and Biocorrosion Rates by Adding Peroxides **Yu-Jie Chang**
13 **A048** Di-n-butyl phthalate removal by mixed culture in the batch reactor **Chun-Chin Wang**
14 **A049P** Methylamine removal by mixed strains in a continuous stirred tank reactor (CSTR) system **Chun-Chin Wang**
15 **A065P** Selective and partial biodegradation of ethoxylated nonionic surfactants **Han S. Kim**
16 **A074P** Development of Appropriate Water Treatment Packages for developing countries **Hyun Je Oh**
17 **A075P** Development of a Process Simulator Using Neural Network Multilayer Perceptron Algorithm **Hyun Je Oh**
18 **A079P** Simultaneous anaerobic removal of sulfate and ammonium from the synthetic wastewater **Achlesh Daverey**
19 **A088P** Application parameters of laccase-mediator systems to oxide sulfonamide antibiotics **Shin-Sian Weng**
20 **A094P** Immobilization of heavy metals in tannery sludge char **Won Sik Shin**
21 **A097P** Characterization of electrocoagulation sludge in the removal of heavy metals from soil washing solution **Seok-Oh Ko**
22 **A098P** Heavy metal adsorption with biogenic Manganese oxides generated by Pseudomonas putida strain MnB1 **Seok-Oh Ko**
23 **A100P** A study on the optimal tank design and feed type to reduce aquaculture waste in a water recirculating aquaponic system **Ahmad Jusoh**
24 **A103P** Hexachlorobenzene dechlorination by indegenous microorganisms from river sediments in Taiwan and Thailand **I-Ming Chen**
25 **A106P** Water reclamation by photocatalytic optical fibres coated with TiO2: A review **Ho Kyong Shon**
26 **A122P** Foodwaste leachate treatment using a New Anaerobic Digestion System (NDS) **Yeong-Kwan Kim**
27 **A133P** Ferrous ion enhanced persulfate oxidation of trichloroethylene solubilized by Triton-100 in a sandbox **Yi-Chu Huang**
28 **A142P** Transport in electro-treated anaerobic granular sludge: effect of drying, temperature and glutaraldehyde addition **Jurate Virkutyte**
29 **A150P** Kinetic Parameters and Mechanism of Batch Sorption of Zinc (II) onto Lignite and Coconut Shell-based Activated Carbon Fiber **Taegwan Lee**
30 **A153P** Application of Submerged Plasma Irradiation Process for the Inactivation of Coliforms in River Water **Taegwan Lee**
31 **A159P** Resource of spent pickle acid by mineralization process **Jun-Yi Wu**
32 **A160P** Treatment of high copper containing wastewater by producing magnetic material **Fang-Chih Chang**
33 **A170P** Modelling of phosphorus removal by ion exchange resin (purolite FerrIXA33E) in fixed bed column experiments **T. Nur**
34 **B002P** Effects of nitrogen loading rates on treatment performance and fouling propensity in submerged membrane bioreactor (MBR) **Sher Jamal Khan**
35 **B007P** Synthesis, Characterization and Application of Nanomaterials for the Removal of Emerging Pollutants from Industrial waste water, Kinetics and Equilibrium Model **Abida Kalsoom Khan**

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Poster Presentations (continued)

36 **B012P** Influence of different anaerobic-aerobic combinations and aeration rates on N2O emissions in a pilot-scale sequencing batch reactor (SBR) **Shi-chang Sun**
37 **B014P** Pilot - scale study on a new membrane bioreactor hybrid system in municipal wastewater treatment **Huu Hao Ngo**
38 **B022P** Investigation of fouling in low-pressure membrane (MF/UF) filtration of secondary effluent **Shobha Muthukumaran**
39 **B031P** Influence of organic shock loads on the production of N2O in denitrifying phosphorus removal process **Cong Li**
40 **B045P** Application of coagulation and ceramic membrane filtration for water reclamation **Wontae Lee**
41 **B050P** Effect of flux fluctuation on the fouling in a real-scale membrane water treatment system for smart water grid **Suhan Kim**
42 **B052P** Dechlorination of chlorinated hydrocarbon by Geobacter sulfurreducens in the presence of quinine moiety as electron mediator **Ruey-an Doong**
43 **B079P** Eco-friendly surfactant loaded and "green" magnetic iron oxide pillared montmorillonite for advanced catalytic degradation of organic contaminants **Raj Varma**
44 **B082P** An emerging method for the separation and characterisation of manufactured nanoparticles in complex environmental samples **Ho Kyong Shon**
45 **B096P** Performance improvement of carbon nanotubes based ultrafiltration membranes by cap opening **Seung Hyun Kim**
46 **B097P** Fouling of membrane distillation **Seung Hyun Kim**
47 **B098P** Performance improvement of carbon nanotubes based high pressure membranes by cap opening **Seung Hyun Kim**
48 **B100P** Characteristics of the carbonated aggregate manufactured using sewage treatment sludge and its surface treatment with activation/zeolite/TiO2 **Yeongseok Yoo**
49 **B101P** Characteristics of zeolite synthesis for zeolite coating on the porous media under atmospheric pressure **Yeongseok Yoo**
50 **B102P** Decolorization of C.I. Reactive Red 2 by UV/TiO2/PAC and visible-light//TiO2/PAC systems **Chung-Hsin Wu**
51 **B103P** Water treatment using the submersible fiber filter combined UV lamp **Chan Gyu Park**
52 **B117P** Removal of concentrated PFOS and PFOA in synthetic industrial wastewater by powder activated carbon and hydrotalcite **Romchat Rattanaoudom**
53 **B118P** Seawater desalination: Potentials and Problems - A review **Susanthi Liyanaarachchi**
54 **B119P** A preliminary study on pre-treated sludge volume reduction in desalination by Forward Osmosis **Susanthi Liyanaarachchi**
55 **B120P** Removal of Lower Molecular Weight Persistent Organic Pollutants through Nano-Filtration and Reverse Osmosis **Thomas Shurvell**
56 **B121P** Effect of shock and gradual loading of salt on the performance of bioreactor: batch study **T. Nur**
57 **B122P** Performance of RO for water recovery from permeate of Membrane bio-reactor (MBR) treating agricultural wastewater **Santosh Raj Pandey**
58 **C006P** Feasibility of Fe/Mn sludge used as a catalyst in gasification of rice straw **Chen-Han Lu**
59 **C009P** Optimization of Dark Fermentative Hydrogen Production with Combined (acid+ultrasonic) Pretreatment from Microalgal Biomass **Hang-sik Shin**
60 **C010P** Multivariate regression models to evaluate temperature sensitivity on air quality in Taiwan **Jiun-Horng Tsai**
61 **C011P** The modelling of combined strategies to achieve thermophilic composting of biosolid with inorganic bulking agent in cold region **Xujin Gong**
62 **C017P** Analysis and application of Specific power of BLCD motor with AC motor **Sung-Taek Hong**
63 **C028P** Effect of nitrogen sources and temperature on cell growth and lipid accumulation of microalgae **Pei-Chung Chen**
64 **C043P** Nano-Fe_3O_4 microwave catalytic process for the transesterification of soybean oil **Ching Hsing Lin**
65 **C046P** Scaling potential and corrosion index characteristics in water produced by the Sungnam water treatmentplant **Seok Dockko**
66 **C048P** Removal of oxidized sulfur compounds in diesel using different adsorbents **Meng-Wei Wan**
67 **C052P** Physicochemical characterization of fatty acid methyl esters from sunflower oil **Rizwana Naureen**
68 **C054P** The Tolerance and Uptake of Ozone/Nitrogen Dioxide by Common Turfgrasse in Taiwan **Ching Hsing Lin**
69 **C058P** Development of effective biocatalytic systems through the immobilization of enzymes on functionalized nanomaterials: preparation, characterizationand application in biofuel production **Madan Verma**
70 **C061P** Adsorption behavior of copper ions onto surface-modified milled pine barks from aqueous solution **Yeong-Kwan Kim**