

## CURRICULUM VITAE

### **Shiao-Shing (Simon) Chen**

Phone: +886-2-27712171 # 4142

Fax: +886-2-27214142

E-mail: f10919@ntut.edu.tw

<http://www.cc.ntut.edu.tw/~f10919>

Address: 1, Sec. 3, Zhongxiao E. Rd., Taipei 10608, Taiwan.

### **Qualifications**

- Ph.D. (1998) in Environmental Engineering, University of Central Florida
- M.S. (1994) in Environmental Engineering, University of Maryland, College Park
- B.S. (1989) in Environmental Engineering, National Cheng Kung University

### **Professional Experiences**

- 2015.2~ Current, Dean, Office of International Affairs, National Taipei University of Technology
- 2015.5~2015.8, Honorary Visiting Professor, University of Technology, Sydney, Australia.
- 2014~ Current, Distinguished Professor, Institute of Environmental Engineering and Management, National Taipei University of Technology
- 2009~ 2014, Professor, Institute of Environmental Engineering and Management, National Taipei University of Technology
- 2007~2009, Director, Institute of Environmental Engineering and Management, National Taipei University of Technology
- 2005-2007 Associate Professor, Institute of Environmental Engineering and Management, National Taipei University of Technology
- 1999~2005 Assistant Professor, Institute of Environmental Planning and Management, National Taipei University of Technology
- 1998~1999. Senior Engineer, Conklin, Porter and Holmes Engineers, INC., USA.

### **Research Interest**

Dr. Chen is a distinguished professor and has received outstanding research award in National Taipei University of Technology, and his interest is mainly on physicochemical process on water and wastewater treatment by incorporation of membrane. Currently, his projects have primarily dealt with membrane, oxidation-reduction, and catalysis processes for micropollutant removal.

### **Awards and Activities:**

- Distinguished Professor Award of Taipei Tech.
- Outstanding research award of Taipei Tech Twice (2009, 2016)
- Keynote Speakers for 2015 International Environmental Engineering Conference (IEEC 2015)
- Outstanding research award of College of Engineering, Taipei Tech twice (2007, 2016)

- Best paper award in wastewater conference of the Chinese Institute of Environmental Engineering
- Best paper award of the Chinese Institute of Environmental Engineering.
- Editor Board for Journal of Environmental Forensics (SCI) (2003-2017)
- Editor Board for Journal of Civil Engineering and Environmental Sciences (2014-2017)
- Honorary Consulting Editors for PSU Research Review: An International Journal. (2016-2017)
- QS-MAPLE International Academic Advisory Committee, 2016
- QS-AAPLE International Academic Advisory Committee, 2016
- Scientific Committee, International Water Industry Conference 2016
- International Scientific Committee for 2015 International Environmental Engineering Conference (IEEC 2015)
- Organizing Committee for the 9<sup>th</sup> International Symposium on Advances in Technology Education 2015 (ISATE2015)
- Programme Committee for International Water Association, Nutrient Removal and Recovery conference, 2012
- Academic committee for the 3<sup>rd</sup> International Water Association -ASPIRE Conference, 2010
- Distinguished associate member, Membrane bioreactor center (MBRC)
- Member of International Water Association
- Member of Chinese Institute of Environmental Engineering

#### **Funded Research Projects (last five years):**

- 2015-2018 Forward osmosis using complexed multivalent species as draw solutions, supported by Ministry of Science and Technology (MOST), Taiwan.
- 2015-2018 Development of novel osmotic membrane bioreactor, supported by Ministry of Science and Technology (MOST), Taiwan.
- 2015-2016 Treatment of high concentration cutting oil wastewater by ceramic membrane bioreactor, supported by Ministry of Science and Technology (MOST), Taiwan.
- 2014-2015 Purification of Potassium Iodide by Forward Osmosis, supported by Southern Taiwan Science Park Bureau.
- 2012-2015 Separation and purification of chromate from spent plating solution by micellar-enhanced ultrafiltration coupled with electrodialysis, supported by National Science Council of ROC.
- 2013-2014 Development of water quality control and image application technology for the 3 phase microalgae-cultivation reactor, supported by National Science Council of ROC.
- 2009-2012 Simultaneous removals of Cr(VI) and chelating agent using photocatalyst with ion exchange membrane process, supported by National Science Council of ROC.
- 2009-2012 Degradation of organic contaminants using liquid-phase non-thermal plasma prepared N-doped TiO<sub>2</sub> with catalyst recovering system by ceramic membranes, supported by National Science Council of ROC.

### Journal Publications (last Five years)

1. Saikat Sinha Ray, Shiao-Shing Chen\*, Nguyen Cong Nguyen, Hung-Te Hsu, Hau Thi Nguyen, Chang-Tang Chang, Poly(vinyl alcohol) incorporated with surfactant based electrospun nanofibrous layer onto polypropylene mat for improved desalination by using membrane distillation, *Desalination*, 328, Pages 51-57 (2017).
2. Zelong Zhao, Jing Wang, Ying Han, Jingwen Chen, Guangfei Liu, Hong Lu, Bin Yan, Shiao-Shing Chen, Nutrients, heavy metals and microbial communities co-driven distribution of antibiotic resistance genes in adjacent environment of mariculture, *Environmental Pollution*, 220, Part B, 909–918(2017)
3. Hsu-Hui Cheng, Shiao-Shing Chen\*, Yi-Wen Cheng, Sih-Yin Yang, Shih-Jie Chou, Hung-Te Hsu Photodegradation and Durability of LPNTP Promoted N-Doped TiO<sub>2</sub> in a Continuous-Flow Photocatalysis/Membrane Separation System, *Desalination and Water Treatment*, 61, 113–119(2017)
4. Nguyen Cong Nguyen, Shiao-Shing Chen\*, Hau Thi Nguyen, Ying-Hsuan Chen, Huu Hao Ngo, Wenshan Guo, Saikat Sinha Ray, Hau-Ming Chang, Quang Huy Le, Applicability of an integrated moving sponge biocarrier-osmotic membrane bioreactor MD system for saline wastewater treatment using highly salt-tolerant microorganisms, *Separation and Purification Technology*, (2017) (accepted)
5. Nguyen Cong Nguyen, Shiao-Shing Chen\*, Su-Thing Ho, Hau Thi Nguyen, Saikat Sinha, Ray, Nhat Thien Nguyen, Hung-Te Hsu, Ngoc Chung Le, Thi Tinh Tran, Optimizing the recovery of EDTA-2Na Draw Solution in Forward Osmosis through Direct Contact Membrane Distillation, *Separation and Purification Technology*, (2017) (accepted)
6. Yi-Hsuan Chou, Kwang-Ho Choo, Shiao-Shing Chen, Jui-Hsuan Yu, Ching-Yu Peng, Chi-Wang Li, Copper recovery via polyelectrolyte enhanced ultrafiltration followed by dithionite based chemical reduction: Effects of solution pH and polyelectrolyte type, *Separation and Purification Technology*, (2017) (accepted)
7. Nguyen Cong Nguyen, Shiao-Shing Chen\*, Shubham Jain, Hau Thi Nguyen, Saikat Sinha Ray, Huu Hao Ngo, Wenshan Guo, Ngoc Tuan Lam, Hung Cong Duong, Exploration of an innovative draw solution for a forward osmosis-membrane distillation desalination process, *Environmental Science and Pollution Research*, (2017)(accepted)
8. Nguyen Cong Nguyen, Shiao-Shing Chen, Yu-TingWeng, Hau Thi Nguyen, Saikat Sinha Ray, Chi-Wang Li, Bin Yan, Jing Wang, Iodide recovery from thin film transistor liquid crystal display plants by using potassium hydroxide-driven forward osmosis, *Journal of Membrane Science*, 520, 214–220 (2016).
9. Saikat Sinha Ray, Shiao-Shing Chen\*, Nguyen Cong Nguyen , Hau Thi Nguyen, Chi- Wang Li, A Comprehensive Review: Fabricating Electrospun Membranes for Water Treatment Technology, *RSC Advances*, 6, 85495-85514 (2016)
10. Saikat Sinha Ray, Shiao-Shing Chen\*, Nguyen Cong Nguyen , Hau Thi Nguyen , Chi-Wang Li , Jing Wang, Bin Yan, Forward osmosis desalination by utilizing chlorhexidine gluconate based mouthwash as a reusable draw solute, *Chemical Engineering Journal*, 304, 962–969 (2016).

11. Nguyen Cong Nguyen, Shiao-Shing Chen\*, Hau Thi Nguyen, Saikat Sinha Ray, Huu Hao Ngo, Wenshan Guo, Po-Hsun Lin, Innovative Sponge-Based Moving Bed-Osmotic Membrane Bioreactor Hybrid System Using A New Class Of Draw Solution For Municipal Wastewater Treatment, *Water Research*, 91, 305-313 (2016)
12. Atefeh Abdolali, Huu Hao Ngo, Wenshan Guo, Shaoyong Lu, Shiao-Shing Chen, Nguyen Cong Nguyen, Xinbo Zhang, Jie Wang, Yun Wu, breakthrough biosorbent in removing heavy metals: Equilibrium, kinetic, thermodynamic and mechanism analyses in a lab-scale study, *Science of the Total Environment*, 542, 603–611(2016)
13. Nguyen Cong Nguyen, Hau Thi Nguyen, Shiao-Shing Chen\*, Huu Hao Ngo, Wenshan Guo, Wen Hao Chan, Saikat Sinha Ray, Chi-Wang Li, Hung-Te Hsu, A Novel Osmosis Membrane Bioreactor-Membrane Distillation Hybrid System For Wastewater Treatment And Reuse, *Bioresource Technology*, 209, 8–15 (2016)
14. Nguyen Cong Nguyen, Hau Thi Nguyen, Su-Thing Ho, Shiao-Shing Chen\*, Huu Hao Ngo, Wenshan Guo, Saikat Sinha Ray, Hung-Te Hsu, Exploring high charge of phosphate as new draw solute in a forward osmosis-membrane distillation hybrid system for concentrating high-nutrient sludge, *Science of the Total Environment*, 557–558, 44–50 (2016)
15. Chi-Wang Li, Jui-Hsuan Yu, Yang-Min Liang, Yi-Hsuan Chou, Hyung-June Park, Kwang-Ho Choo, Shiao-Shing Chen, Ni removal from aqueous solutions by chemical reduction: Impact of pH and pE in the presence of citrate, *Journal of Hazardous Materials*, 320, 521–528 (2016)
16. Chi-Wang Li, Li-Wei Chang, Yang-Min Liang, Yi-Hsuan Chou & Shiao-Shing Chen, Evaluating treatment options for wastewater generated from production of metal complex dyes, *Desalination and Water Treatment*, 57, 14044–14050 (2016)
17. Lijuan Deng, Wenshan Guo, Huu Hao Ngo, Bing Du, Qin Wei, Ngoc Han Tran, Nguyen Cong Nguyen, Shiao Shing Chen, Jianxin Li, Effects of hydraulic retention time and biofloculant addition on membrane fouling in a sponge-submerged membrane bioreactor, *Bioresource Technology*, 210, 11–17 (2016)
18. Chia-Yu Wu, Hinano Mouri, Shiao-Shing Chen, Dai-Zhou Zhang, Minoru Koga, Jun Kobayashi, Removal of trace-amount mercury from wastewater by forward osmosis, *Journal of Water Process Engineering*, 14, 108–116 (2016)
19. Nhat Thien Nguyen, Shiao-Shing Chen\*, Nguyen Cong Nguyen, Hau Thi Nguyen, Hsiao Hsin Tsai, and Chang Tang Chang, Adsorption of Methyl Blue on Mesoporous Materials Using Rice Husk Ash as Silica Source, *Journal of Nanoscience and Nanotechnology*, 16(4), 4108-4114, (2016)
20. Hau Thi Nguyen, Nguyen Cong Nguyen, Shiao-Shing Chen\*, Chi-Wang Li, Hung-Te Hsu, and Shu-Ying Wu, Innovation in draw solute for practical zero salt reverse in forward osmosis desalination, *Industrial & Engineering Chemistry Research*, 54(23), 6067-6074 (2015).
21. Nguyen Thi Hau, Shiao-Shing Chen\*, Nguyen Cong Nguyen, Huu Hao Ngo, Wenshan Guo. Chi-Wang Li, Exploring an innovative surfactant and phosphate-based draw solution for forward osmosis desalination. *Journal of Membrane Science*, 489, 212–219 (2015).

22. Nguyen Cong Nguyen, Shiao-Shing Chen\*, Hau Thi Nguyen, Huu Hao Ngo, Wenshan Guo, Chan Wen Hao, Po-Hsun Lin, Applicability of a novel osmotic membrane bioreactor using a specific draw solution in wastewater treatment, *Science of the Total Environment*, 518–519, 586–594(2015)
23. Hau Thi Nguyen, Nguyen Cong Nguyen, Shiao-Shing Chen\*, Huu Hao Ngo, Wenshan Guo, Chi-Wang Li, A New Class of Draw Solutions for Minimizing Reverse Salt Flux to Improve Forward Osmosis Desalination, *Science of the Total Environment*, Vol. 538, 129–136 (2015)
24. Wen-Shing Chang, Shiao-Shing Chen\*, Cheng-Hang Sie, Nguyen Cong Nguyen, Hsu-Hui Cheng & Hung-Te Hsu. Recovery of chromium from plastic plating wastewater by cetyltrimethylammonium bromide MEUF and electrodialysis. *Desalination and Water Treatment*. 55, 2408–2415 (2015).
25. Wen-Shing Chang, Shiao-Shing Chen\*, Tzi-Chin Chang, Nhat-Thien Nguyen, Hsu-Hui Cheng & Hung-Te Hsu. Fouling potential and reclamation feasibility for a closed landfill leachate treated by various pretreatment processes on membrane system. *Desalination and Water Treatment*, 55, 3568–3575 (2015).
26. Wen-Shing Chang, Shiao-Shing Chen\*, Jhong-Wei Yu, Nguyen Thi Hau, Hung-Te Hsu & Hsu-Hui Cheng. Effects of co-existed anions on retention characteristics of chromate by MEUF. *Desalination and Water Treatment*. 55, 2829–2835 (2015).
27. Yi-Hsuan Chou, Jui-Hsuan Yu, Yang-Min Liang, Pin-Jan Wang, Chi-Wang Li, Shiao-Shing Chen, Recovery of Cu(II) by chemical reduction using sodium dithionite, *Chemosphere* 141, 183–188 (2015)
28. Hau Thi Nguyen, Nguyen Cong Nguyen, Shiao-Shing Chen\*, Shu-Ying Wu, Concentrate of surfactant-based draw solutions in forward osmosis by ultrafiltration and nanofiltration, *Water Science and Technology: Water Supply*, 15(5), 1133-1139, (2015).
29. Chun-Hsiang Chiu, Hong-Ping Lin, Tien-Ho Kuo, Shiao-Shing Chen, Tien-Chin Chang, Kai-Han Su, Hsi, H.C., Simultaneous control of elemental mercury/sulfur dioxide/nitrogen monoxide from coal-fired flue gases with metal oxide-impregnated activated carbon. *Aerosol and Air Quality Research*, 15, 2094–2103 (2015)
30. Nguyen Cong Nguyen, Hau Thi Nguyen, Shiao-Shing Chen\*, Nhat Thien Nguyena, Chi-Wang Li, Application of forward osmosis (FO) under ultrasonication on sludge thickening of waste activated sludge, *Water Science and Technology* 72(8), 1301-1307 (2015)
31. Jui-Hsuan Yu, Yi-Hsuan Chou, Yang-Min Liang, Pin-Jan Wang, Chi-Wang Li, and Shiao-Shing Chen, Recovery of Cu(II) by chemical reduction using sodium dithionite: Effect of pH and Ligands, *Water Science and Technology*, 72(11), 2089-2094 (2015)
32. Hau Thi Nguyen, Wen-Shing Chang, Nguyen Cong Nguyen, Shiao-Shing Chen\*, Hau-Ming Chang, Influence of Micelle Properties on Micellar-Enhanced Ultrafiltration for Chromium Recovery, *Water Science and Technology*, 72(11), 2045-2051 (2015).
33. Shiao-Shing Chen, Hsing-Cheng Hsi, Sheng-Hung Nian, Chun-Hsiang Chiu. Synthesis of N-doped TiO<sub>2</sub> photocatalyst for low-concentration elemental mercury removal under various gas conditions. *Applied Catalysis B: Environmental*, 160–161, 558–565(2014).

34. Jie-Yuan Chen, Chih-Wei Lin, Po-Han Lin, Chi-Wang Li, Yang-Min Liang, Jhy-Chern Liu, Shiao-Shing Chen. Fluoride recovery from spent fluoride etching solution through crystallization of Na<sub>3</sub>AlF<sub>6</sub> (synthetic cryolite). *Separation and Purification Technology*, 137, 53–58. (2014).
35. Hsuhui Cheng, Shihjie Chou, Shiao-Shing Chen\*, Chiajen Yu. Photoassisted Fenton degradation of PCS dyes from wastewater of printing industry using Fe(II)<sub>γ</sub>-Al<sub>2</sub>O<sub>3</sub> catalyst in up-flow fluidized-bed. *Journal of Environmental Sciences*, 26(6), 1307–1312 (2014).
36. Nguyen Thi Hau, Shiao-Shing Chen\*, Nguyen Cong Nguyen, Kuo Zue Huang, Huu Hao Ngo, Wenshan Guo. Exploration of EDTA sodium salt as novel draw solution in forward osmosis process for dewatering of high nutrient sludge. *Journal of Membrane Science*. *Journal of Membrane Science*, 455(1), 305–311 (2014).
37. Atefeh Abdolali, Wenshan Guo, Huu Hao Ngo, Shiao-Shing Chen, Nguyen Cong Nguyen, Kuo Lun Tung. Typical Lignocellulosic Wastes and Byproducts for Biosorption Processes in Water and Wastewater Treatment: A Critical Review. *Bioresource Technology*, 160, 57–66 (2014).
38. T.A.H. Nguyen, H.H. Ngo, W.S. Guo, T.V. Nguyen, J. Zhang, S. Liang, S.S. Chen, N.C. Nguyen. A comparative study on different metal loaded soybean milk by-product Okara' for biosorption of phosphorus from aqueous solution. *Bioresource Technology*, 169, 291–298 (2014).
39. M. F. R. Zuthi, H. H. Ngo, W. S. Guo, S. S. Chen, N. C. Nguyen, L. J. Deng, T. D. C. Tran, An Assessment of the Effects of Microbial Products on the Specific Oxygen Uptake in Submerged Membrane Bioreactor, *International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering*, 8(2), 90-94 (2014).
40. Nguyen Cong Nguyen, Shiao-Shing Chen\*, Hung-Te Hsu and Chi-Wang Li, Separation of three divalent cations (Cu<sup>2+</sup>, Co<sup>2+</sup> and Ni<sup>2+</sup>) by NF membranes from pH 3-5. *Desalination*, 328, Pages 51-57 (2013).
41. Yang-Min Liang, You-Lan Yang, Yuan-Wei Chang, Jie-Yuan Chen, Chi-Wang Li, Jui-Hsuan Yu, Shiao-Shing Chen. Comparison of high pressure and ambient pressure aerobic granulation sequential batch reactor processes. *Bioresource Technology*, 140, 28-35(2013).
42. Liang, Yang-Min; Chen, Jie-Yuan; Marchesini Gaëtan; Li, Chi-wang, Shiao-Shing Chen, Granulation of biological flocs under elevated pressure: characteristics of granules, *Water Science and Technology* 67(12), 2850-2855 (2013)
43. Hung-Te Hsu, Shiao-Shing Chen\*, Yi-Fang Tang, Hsing-Cheng Hsi. Enhanced photocatalytic activity of chromium(VI) reduction and EDTA oxidization by photoelectrocatalysis combining cationic exchange membrane processes. *Journal of Hazardous Materials*, 248–249, 97–106(2013).
44. Nguyen Cong Nguyen, Shiao-Shing Chen\*, Hung-Yin Yang, Nguyen Thi Hau, Application of Forward Osmosis on Dewatering of High Nutrient Sludge. *Bioresource Technology*, 132, 224–229(2013).

45. S.-S. Chen\*, H.-T. Hsu, H.-R. Tsui and Y.-M. Chang, Removal of Nonionic Surfactant from Electroplating Wastewater by Fluidized Zero Valent Iron with Two Oxidants (H<sub>2</sub>O<sub>2</sub>/Na<sub>2</sub>S<sub>2</sub>O<sub>8</sub>). *Desalination and water treatment*, 51, 1678-1684(2013).
46. S.-S. Chen\*, N. C. Nguyen, Y.-M. Chen & C.-W. Li, Coagulation enhancement of nonylphenol ethoxylate by partial oxidation using zero-valent iron/hydrogen peroxide. *Desalination and water treatment*, 51, 1590-1595 (2013).
47. Hung-Te Hsu, Shiao-Shing Chen\*, Wen-Shing Chang & Chi-Wang Li. Synergistic effects of chromium(VI) reduction/EDTA oxidization for PCB wastewater by photocatalysis combining ionic exchange membrane processes. *Desalination and Water Treatment*, 51, 495-502 (2013).
48. Yu-Min Chang, Wen-Chien Dai, Kao-Shen Tsai, Shiao-Shing Chen, Jyh-Herng Chen, Jimmy C.M. Kao. Reduction of PCDDs/PCDFs in MSWI fly ash using microwave peroxide oxidation in H<sub>2</sub>SO<sub>4</sub>/HNO<sub>3</sub> solution. *Chemosphere*, 91(6):864-868 (2013).
49. H. H. Cheng, Chen, S.-S.\*, K. Yoshizuka and Y. C. Chen. Degradation of phenolic compounds in water by non-thermal plasma treatment. *Journal of water chemistry and technology*, 34(4), 179–189 (2012).
50. Y.-M. Liang, C.-W. Li, P.-C. Lee, T.-W. Tzeng & S.-S. Chen, Intermittent high pressure sequential bioreactor (IHPSB) with integration of sand filtration system for synthetic wastewater treatment, *Environmental Technology Vol.33* (8), 937-42 (2012).
51. H.-T. Hsu, S.-S. Chen\* and Y.-S. Chen, Removal of Chromium (VI) and Naphthalenesulfonate from Textile Wastewater by Photocatalysis Combining Ionic Exchange Membrane Processes, *Separation and Purification Technology*, Vol. 80, 663–669(2011)
52. P.-C. Lee, C.-W. Li, J.-Y. Chen, Y.-S. Li, S.-S. Chen, Dissolution of D2EHPA in liquid-liquid extraction process Implication on metal removal and organic content of the treated water, *Water Research*, Volume 45, 5953-5958 (2011)
53. Y.-M. Chang, W.-H. H., W.-B. Fang, S.-S. Chen, A study on dynamic VOC emission characterization of water-based paints, *Journal of the Air & Waste Management Association*, Volume 61, 35-45 (2011)

#### **Conference Papers (last Five years)**

1. Hung-Te Hsu, Shu-Ying Wu, Shiao-Shing Chen, Hau Thi Nguyen, Nguyen Cong Nguyen, Recovery of diluted draw solutions in forward osmosis process by using micellar-enhanced membrane filtration system” 2016 IWA World Water Congress & Exhibition, Brisbane Queensland, Australia, 9-14 October 2016.
2. Shin-Yun Hsu, Hung-Te Hsu, Shiao-Shing Chen, Applications of Forward Osmosis in TMAH Wastewater, *Desalination for the Environment: Clean Water and Energy*, Roman, 2016/5/23
3. Li-Wen Chang, Shiao-Shing Chen, Nguyen Cong Nguyen, Studies on heavy metals absorption of rice husk ash, *The 7th International Conference on Water Resources and Environment Research (ICWRER 2016)*, 2016/6/7, Kyoto, Japan.

4. Ying-Hsuan Chen, Nguyen Cong Nguyen, Shiao-Shing Chen, The Effect of Salinity on Sponge Based Moving Bed-OMBR Bybrid Systems for Wastewater Treatment, The 7th International Conference on Water Resources and Environment Research (ICWRER 2016), 2016/6/7, Kyoto, Japan.
5. Nguyen Cong Nguyen\*, Shiao-Shing Chen, Hau, Thi Nguyen, Huu Hao Ngo, Wenshan Guo, Wen Hao Chan, Quang Le, Application of an Intergrated Sponge Based Moving Bed-Osmbr Hybrid System for Municipal Wastewatr Reclamation and Reuse, , The 12th World Filtration Congress (WFC 12), April 11-15, 2016, Taipei.
6. Hau Thi Nguyen, Su-Thing Ho, Saikat Sinha Ray, Shiao-Shing Chen\*, Nguyen Cong Nguyen, Hung-Te Hsu, Chi-Wang Li, Recovery of EDTA Draw Solution in Forward Osmosis Using Membrane Distillation Process, The 12th World Filtration Congress (WFC 12), April 11-15, 2016, Taipei.
7. Hau-Ming Chang, Shiao-Shing Chen, Nguyen Cong Nguyen, Application of novel OsMBR-MD hybrid system for for municipal wastewater reclamation, reuse and phosphorus recovery, IWIC 2016 (Industrial Water International Conference), Daegu, South Korea.
8. Saikat Sinha Ray , Shiao-Shing Chen, Nguyen Cong Nguyen, Hau Thi Nguyen, Chi-Wang Li, Surface modifications of polypropylene mat by PVA-TX for improved water flux in membrane distillation process, IWIC 2016 (Industrial Water International Conference), Daegu, South Korea.
9. Su-Thing Ho, Shiao-Shing Chen, Nguyen Cong Nguyen, Hau Thi Nguyen, Recovery of Draw Solution in Forward Osmosis by Direct Contact Membrane Distillation, IWIC 2016 (Industrial Water International Conference), Daegu, South Korea.
10. Su-Thing Ho, Nguyen Cong Nguyen, Hau Thi Nguyen , Shiao-Shing Chen, Recovery of Highly Charged Phosphate Salt as a Draw Solution in Forward Osmosis by Direct Contact Membrane Distillation, The 2016 International Conference on the "Challenges in Environmental Science and Engineering" (CESE-2016) Kaohsiung, Taiwan.
11. Hao Ming Chang , Nguyen Cong Nguyen , Nguyen Thi Hau , Shiao-Shing Chen, A novel osmotic membrane bioreactor–membrane distillation (OsMBR-MD) hybrid system for wastewater treatment and nutrient recovery, The 2016 International Conference on the "Challenges in Environmental Science and Engineering" (CESE-2016) Kaohsiung, Taiwan.
12. Saikat Sinha Ray , Shiao Shing Chen , Nguyen Cong Nguyen , Thi Hau Nguyen, A forward osmosis-membrane distillation (FO-MD) hybrid process by utilizing poly(propylene oxide) as a biodegradable draw agent, IWA-RMTC 2016 (International Water Association- Regional Membrane Technology Conference), Kunming, China.
13. Chia-Yu Wu, Hinano Mouri, Shiao–Shing Chen, Jun Kobayashi, Performance of Forward Osmosis in removal of heavy metals from polluted water, IWA-RMTC 2016 (International Water Association- Regional Membrane Technology Conference), Kunming, China.
14. Chia-Yu Wu, Hinano Mouri, Jun Kobayashi, Zhang Daizhou, Shiao-Shing Chen. Trace Amounts of Mercury Remove From Contaminated Wastewater by Forward Osmosis, the 10th IWA International Conference on Water Reclamation and Reuse, Harbin, China. July 5-9, 2015
15. Shiao-Shing Chen, Nguyen Cong Nguyen, Exploring an Innovative Surfactant based Draw Solution for Forward Osmosis, The 2015 International Environmental Engineering Conference (IEEC 2015), October 28 - 30, 2015, Busan, South Korea.
16. Li-wen Chang, Shiao-Shing Chen, Nguyen Thi Nguyen, Nguyen Cong Nguyen, Studies on heavy metals absorption of rice husk ash. , Asian Institute for Environmental Research & energy



symposium 2015, 2015/10/23

17. Nguyen Cong Nguyen, Hau Thi Nguyen, Shiao-Shing Chen, Application of Osmotic Membrane Bioreactor using a Specific Draw Solution in Wastewater Treatment, The 2015 International Environmental Engineering Conference(IEEC 2015), October 28 - 30, 2015, Busan, South Korea.
18. Hung-Te Hsu\*, Nguyen Cong Nguyen, Shiao-Shing Chen, Hsu-Hui Cheng, Treatment of Reactive Dye wastewaters by recycled waste iron at low pH. The 6th IWA-ASPIRE Conference & Exhibition, Beijing, China, 20- 24 September, 2015.
19. Hung-Te Hsu\*, Nguyen Cong Nguyen, Shiao-Shing Chen, Hsu-Hui Cheng, Photocatalytic nitrate reduction over TiO<sub>2</sub> catalysts with formic acid as hole scavenger. The 6th IWA-ASPIRE Conference & Exhibition, Beijing, China, 20- 24 September, 2015.
20. Hsu-Hui Cheng , Shiao-Shing Chen, Yi-Wen Cheng, Sih-Yin Yang, Shih-Jie Chou, Hung-Te Hsu Photodegradation and Durability of LPNTP Promoted N-Doped TiO<sub>2</sub> in a Continuous-Flow Photocatalysis/Membrane Separation System, The 6th IWA-ASPIRE Conference & Exhibition, Beijing, China, 20- 24 September, 2015.
21. Chia-Yu Wu, Hinano Mouri, Jun Kobayashi, Zhang Daizhou, Shiao-Shing Chen. Trace Amounts of Mercury Remove From Contaminated Wastewater by Forward Osmosis, the 10th IWA International Conference on Water Reclamation and Reuse, Harbin, China. July 5-9, 2015
22. Hung-Te Hsu, Shiao-Shing Chen, Nguyen Cong Nguyen, Hsu-Hui Cheng, Influence of carboxylic acid on the photocatalytic reduction of Cr(VI) by photoelectrocatalysis combining ionic exchange membrane processes, Desalination for Clean Water and Energy, Palermo, Italy, 10–14 May 2015 .
23. Hung-Te Hsu, Shiao-Shing Chen, Huan-Jong Tsui, Hsu-Hui Cheng, Heterogeneous photoelectrocatalysis of nitrate in drinking water in the presence of titania and formic acid, Desalination for Clean Water and Energy, Palermo, Italy, 10–14 May 2015.
24. Hung-Te Hsu, Shiao-Shing Chen, Wen-Shing Chang, Hsu-Hui Cheng, On-site electrochemical regeneration of iron for reactive dye decolorization from textile wastewater, Desalination for Clean Water and Energy, Palermo, Italy, 10–14 May 2015.
25. Shiao-Shing Chen, Nguyen Cong Nguyen,, Hau Thi Nguyen, A Surfactant-Based Novel Draw Solution For Forward Osmosis Process, AMTA/AWWA 2015 Membrane Technology Conference & Exposition, Orlando, Florida, March 2-5, 2015.
26. Shiao-Shing Chen\*, Nguyen Cong Nguyen, Nguyen Thi Hau, Application of Forward Osmosis under Ultrasonication on Dewatering of Waste Activated Sludge, IWA Regional conference on Membrane Technology, Ho Chi Minh City, Vietnam, 2014.
27. Hau Thi Nguyen, Shiao-Shing Chen, Nguyen Cong Nguyen, A new class of draw solution – minimizing reverse salt flux to enhance forward osmosis desalination processes, IWA Regional conference on Membrane Technology, Ho Chi Minh City, Vietnam, 2014.
28. Wen-Shing Chang, Shiao-Shing Chen, Nguyen Cong Nguyen, Hau-Ming Chang, Huahn-Tyng Weng, Influence of Micelle Properties on Micellar-Enhanced Ultrafiltration for Chromium Recovery, IWA Regional conference on Membrane Technology, Ho Chi Minh City, Vietnam, 2014.
29. Nguyen Cong Nguyen, Shiao-Shing Chen, Hau Thi Nguyen, Application of a novel moving bed biofim/OsMBR hybrid system for municipal wastewater reclamation and reuse, IWA Regional conference on Membrane Technology, Ho Chi Minh City, Vietnam, 2014.

30. Nguyen Cong Nguyen, Shiao-Shing Chen , Shu-Ying Wu, Nguyen Thi Hau. Recovery of diluted draw solutions in forward osmosis by ultrafiltration and nanofiltration. IWA Regional Conference on Water Reuse and Energy, Daegu, Korea, 2014.
31. Nguyen Cong Nguyen, Shiao-Shing Chen, Hau Thi Nguyen, Chan Wen Hao, Huu Hao Ngo, Wenshan Guo, Chi-Wang Li, A Step Forward to the Improvement of Osmosis Membrane Bioreactor for Sustainable Water reuse. IWA Regional Conference on Water Reuse and Energy, Daegu, Korea, 2014.
32. Nguyen Thi Hau, Shiao-Shing Chen, Nguyen Cong Nguyen, Huu Hao Ngo, Wenshan Guo. A new class of draw solution to promote forward osmosis processes. IWA Regional Conference on Water Reuse and Energy, Daegu, Korea, 2014.
33. Jui-Hsuan Yu, Yi-Hsuan Chou, Yang-Min Liang, Pin-Jan Wang, Chi-Wang Li, and Shiao-Shing Chen “Recovery of Cu(II) by chemical reduction using sodium dithionite: Effect of pH and Ligands” IWA Regional Conference on Water Reuse and Energy 2014, Daegu, Korea (October 21-24, 2014)
34. Wen-Shing Chang, Shiao-Shing Chen, Cheng-Hang Sie, Nguyen Cong Nguyen, Hsu-Hui Cheng & Hung-Te Hsu. Recovery of chromium from plastic plating wastewater by cetyltrimethylammonium bromide MEUF and electro dialysis. Conference and Exhibition on DESALINATION FOR THE ENVIRONMENT: CLEAN WATER AND ENERGY, limassol, Cyprus, 2014.
35. Wen-Shing Chang, Shiao-Shing Chen, Jhong-Wei Yu, Nguyen Thi Hau, Hung-Te Hsu & Hsu-Hui Cheng. Effects of co-existed anions on retention characteristics of chromate by MEUF. Conference and Exhibition on DESALINATION FOR THE ENVIRONMENT: CLEAN WATER AND ENERGY, limassol, Cyprus, 2014.
36. Wen-Shing Chang, Shiao-Shing Chen, Tzi-Chin Chang, Nhat-Thien Nguyen, Hsu-Hui Cheng & Hung-Te Hsu. Fouling Potential and Reclamation Feasibility for a Closed Landfill Leachate Treated by Various Pretreatment processes on Membrane System. Conference and Exhibition on DESALINATION FOR THE ENVIRONMENT: CLEAN WATER AND ENERGY, limassol, Cyprus, 2014.
37. M. F. R. Zuthi, H. H. Ngo, W. S. Guo, S. S. Chen, N. C. Nguyen, L. J. Deng and T. D. C Tran (2014, Feb). An Assessment of the Effects of Microbial Products on the Specific Oxygen Uptake in Submerged Membrane Bioreactor. ICEBESE 2014: International Conference on Environmental, Biological and Ecological Sciences and Engineering, Kuala Lumpur, Malaysia, 2014.
38. Cong Nguyen Nguyen, Shiao-Shing Chen, Thi Hau Nguyen, Kuo Zue Huang, Quang Huy Le, Exploration of Ethylenediaminetetraacetic Acid Disodium (EDTA-2Na) Salt as Novel Draw Solution for Forward Osmosis Process on Dewatering of High Nutrient Sludge, International Engineering and Technology Education Conference (IETEC) 2013”, Ho Chi Minh, Vietnam, November 3 to 6, 2013
39. Pei-Chi He, Shiao-Shing Chen and Jia-Yu Wu, Silica scaling control for reverse osmosis-a case study for a TFT-LCD plant, 5<sup>th</sup> IWA-ASPIRE 2013 in Daejeon, September 12 to 18, 2013.
40. Shiao-Shing Chen, Exploration of ethylenediaminetetraacetic acid (EDTA) as novel draw solution for forward osmosis process on dewatering of high nutrient sludge, International Membrane Conference in Taiwan, August 8, 2013

41. Hsu-Hui Cheng, Shih-Jie Chou, Shiao-Shing Chen\*, Photoassisted Fenton degradation of PCS dyes from wastewater of printing industry using Fe(II)/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub> catalyst in up-flow fluidized-bed, 5<sup>th</sup> IWA-ASPIRE 2013 in Daejeon, September 12 to 18, 2013.
42. W.-S. Chang, S.-S. Chen and Sie C.-H., Recovery of Chromium from Electroplating Solution by Cetyltrimethylammonium Bromide MEUF and Electrodialysis, The 8th IWA World Water Congress & Exhibition, International Water Association (IWA), Busan, Korea, 16-21 September, 2012.
43. N. C. Nguyen, H.-Y. Yang, N. T. Hau and S.-S. Chen, Application Of Forward Osmosis On Dewatering Of Sludge With Various Biomass And Nutrient Loadings, 3th VNU - HCM International Conference for Environment and Natural Resources, ICENR 2012, December 04 & 05, 2012 - Ho Chi Minh City, Viet Nam.
44. Nguyen Cong Nguyen, Bing Lian Lin and Shiao-Shing Chen, a novel treatment method for acetaminophen in pharmaceutical wastewater by photocatalysis with various electron accepters, The 2012 International Conference on Green Technology and Sustainable Development (GTSD2012), September 29th - 30th, 2012 in Ho Chi Minh City, Vietnam
45. W.-S. Chang, S.-S. Chen and Sie C.-H., Recovery of Chromium from Electroplating Solution by Cetyltrimethylammonium Bromide MEUF and Electrodialysis, The 8th IWA World Water Congress & Exhibition, International Water Association (IWA), Busan, Korea, 16-21 September, 2012.
46. Yang-Min Liang, Jie-Yuan Chen, Gaetan Marchesini, Chi-Wang Li, Shiao-Shing Chen "Granulation of biological flocs under elevated pressure: Characteristics of granules" IWA World Water Congress 2012, Busan, Korea (Sept. 16-21, 2012)
47. S.-S. Chen\*, N. C. Nguyen, Y.-M. Chen & C.-W. Li, Coagulation enhancement of nonylphenol ethoxylate by partial oxidation using zero-valent iron/hydrogen peroxide, Conference and Exhibition on DESALINATION FOR THE ENVIRONMENT, Barcelona, Spain, April 22–26, 2012.
48. H.-T. Hsu, S.-S. Chen\* and W.-S. Chang. and C.-W. Li, Synergistic Effects of Chromium (VI) reduction/EDTA Oxidization for PCB Wastewater by Photocatalysis Combining Ionic Exchange Membrane Processes, Conference and Exhibition on DESALINATION FOR THE ENVIRONMENT, Barcelona, Spain, April 22–26, 2012.
49. S.-S. Chen\*, H.-T. Hsu, H.-R. Tsui and Y.-M. Chang, Removal of Nonionic Surfactant from Electroplating Wastewater by Fluidized Zero Valent Iron with Two Oxidants (H<sub>2</sub>O<sub>2</sub>/Na<sub>2</sub>S<sub>2</sub>O<sub>8</sub>), Conference and Exhibition on DESALINATION FOR THE ENVIRONMENT, Barcelona, Spain, April 22–26, 2012.
50. W.-S. Chang, S.-S. Chen and J.-H. Wang, Recovery of chromium from spent plating solution by combining micellar-enhanced ultrafiltration and electrodialysis, Water and Innovation Technology Conference, Amsterdam, Netherlands, 3 - 4 November, 2011.
51. H.-H. Cheng., S.-S. Chen., K. Yoshizuka., Y.-C. Chen, Photodegradation and Durability of LPNTP-promoted N-doped TiO<sub>2</sub> in a Continuous-flow Photocatalysis/Membrane Separation System, 4th IWA-ASPIRE conference in Tokyo, October 2 to 6, 2011.
52. H.-T. Hsu, S.-S. Chen, Y.-F. Tang, Fluidized TiO<sub>2</sub> Photocatalysis Combining Electrodialysis Process for Simultaneous Chromium(VI) Reduction and Organic Chemical Oxidization, 4th IWA-ASPIRE conference in Tokyo, October 2 to 6, 2011.
53. J.-H. Wang, S.-S. Chen, W.-S. Chang, S.-H. Nian, C.-J. Hsu, Separation and Purification of Chromate from Spent Plating Solution by CTAB Micellar-enhanced Ultrafiltration and

Membrane Electrodialysis, 4th IWA-ASPIRE conference in Tokyo, October 2 to 6, 2011.

54. H.-T. Hsu, S.-S. Chen, H.-C. Lo, Effects of the Hole Scavenger on the Photocatalytic Reduction of Nitrate in UV/TiO<sub>2</sub> Process, 4th IWA-ASPIRE conference in Tokyo, October 2 to 6, 2011.
55. Y.-M. Chen, S.-S. Chen, B.-L. Lin, Removal of Non-steroidal Anti-inflammatory Drugs (NSAIDs) by Various Advanced Oxidation Processes (AOPs) and Pathway Determination by MOPAC, 4th IWA-ASPIRE conference in Tokyo, October 2 to 6, 2011.
56. S.-S. Chen and J.-H. Wang, Recovery of CTAB from ultrafiltrated CTAB/chromium micelles by electrodialysis, International Membrane Conference in Taiwan, May 26, 2011
57. S.-S. Chen and H.-T. Hsu, Separation of three divalent cations (Cu, Ni and Co) by two NF membranes from pH 3-5, American Water Work Association Membrane Conference, Long beach, California, Mar 28, 2011.