

XIAO(ERIC) HUANG

PH.D.

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EDUCATION

University of California, Irvine, CA

Ph.D. in Environmental Engineering, 2015

Dissertation topic: Microbial Pathogen Detection and Removal in Water Reuse Practices

Advisor: Dr. Sunny Jiang

Zhejiang University, Hangzhou

M.S. in Environmental Engineering, 2010

Dissertation topic: Efficacy of Sludge and Manure Compost Amendments against *Fusarium* Wilt of Cucumber

Advisor: Dr. Weixiang Wu

Sichuan Agricultural University, Ya'an

B.S. in Environmental Engineering (Minor Biotechnology), 2007

PROFESSIONAL EXPERIENCE

Graduate Research Assistant (PhD) – University of California, Irvine (2010 – 2015)

Visiting Research Student – Monash University (8.2013 – 11. 2013)

Graduate Research Assistant (Masters) – Zhejiang University (2007 – 2010)

RESEARCH INTERESTS

Lab-on-a-chip

Wastewater Treatment and Reuse

Environmental Microbiology

Water Quality Analysis

Stormwater Management

Microbial Pathogen Detection

Microbial Ecology

PUBLICATIONS

- [8] **Huang, X.**, Zhao, Z., Hernandez, D., and Jiang, S.C., Factors Influencing Bacterial and Viral Removal in Water Reclamation Plants. (In submission).
- [7] **Huang, X.**, Cao, Y.P., Meredith, R., Jiang, S.C., Grant, S., Rippy and M., Gomez, E. N., Characterization of Microbial Pathogens and Microbial Community in Constructed Stormwater Wetlands. (In submission).
- [6] **Huang, X.**, Qu, Y., Cid, C., Finke, C., Hoffmann, R., Lim, K.-Y and Jiang, S.C., Electrochemical Disinfection of Toilet Wastewater using Solar-Powered Wastewater Electrolysis Cell. *Water Research*, In press.
- [5] Jiang, S.C., Lim, K.-Y., **Huang, X.**, McCarthy, D. and Hamilton, A.J., 2015 Human and Environmental Health Risks Associated with Urban Stormwater Harvesting. *Wiley Interdisciplinary Reviews: Water* 2(6), 683-699.
- [4] **Huang, X.**, Min, J.H., Lu, W., Jaktar, K., Yu, C. and Jiang, S.C., 2015. Evaluation of methods for reverse osmosis membrane integrity monitoring for wastewater reuse. *Journal of Water Process Engineering* 7(0), 161-168.
- [3] **Huang, X.**, Shi, D., Sun, F., Lu, H., Liu, J. and Wu, W., 2012. Efficacy of sludge and manure compost amendments against Fusarium wilt of cucumber. *Environmental Science and Pollution Research* 19(9), 3895-3905.
- [2] Chen, Y.X., Huang, X.D., Han, Z.Y., **Huang, X.**, Hu, B., Shi, D.Z. and Wu, W.X., 2010. Effects of bamboo charcoal and bamboo vinegar on nitrogen conservation and heavy metals immobility during pig manure composting. *Chemosphere* 78(9), 1177-1181.
- [1] Huang, X.D., Han, Z., Shi, D., **Huang, X.**, Wu, W. and Liu, Y., 2010. Nitrogen loss and its control during livestock manure composting. *The Journal of Applied Ecology* 21(1), 247-254

PRESENTATIONS

- [5] Inactivation of microbial pathogens and indicators with solar-powered electrochemical reactor. *California Institute of Technology*, Dec. 2014, Pasadena, CA, USA. (Invited talk)
- [4] Urban stormwater management with BMPs – microbial pathogen removal with constructed wetlands and biofilters. *OC Watersheds*, Aug., 2014, Orange, CA, USA. (Invited talk)
- [3] Comprehensive solution for reverse osmosis membrane integrity monitoring. *Orange County Water District*, July, 2014, Fountain Valley, CA, USA. (Invited talk)

- [2] Evaluation of Methods for Reverse Osmosis Membrane Integrity Monitoring. *18th Annual Water Reuse & Desalination Research Conference*. May 2014, Las Vegas, NV, USA (Oral).
- [1] Rapid Assessment of Viral Removal by Membrane Separation Process for Water Reuse. *2nd Water Research Conference*. Jan. 2013, Singapore (Poster).

PEER REVIEWER

Water Research; Scientific Reports; Water and Environment Journal; Journal of Coastal Research, Great Lakes Research.

UNDERGRADUATE STUDENT MENTOR

Kenneth Chow (Los Angeles County Department of Public Works)

Dana Hernandez (PhD student at UC-Berkeley)

SCHOLARSHIPS AND AWARDS

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| 2010 – 2012 | WaterReuse Foundation Student Research Scholarship |
| 2010 | EPA P3 Phase One Grant Recipient, Microbial Desalination Fuel Cell as a Sustainable Technology for Renewable Water and Power, US-EPA |
| 2010 – 2012 | Summer Research Fellowship, Department of Civil and Environmental Engineering, UC-Irvine |
| 2013 | Graduate Travel Grants, Henry Samueli School of Engineering, UC-Irvine |
| 2013 – 2015 | National Science Foundation – Partnerships for International Research and Education Scholarship |
| 2014 | Best Student Research Award, S. Calif. Chin. Amer. Environ. Protec. Assoc. (SCCAEPA) |