Curriculum Vitae

Personal Details:

Xudong Ye
B.Sc., M.Sc., M.Eng student
Home address: 46 Larkhall Street, St John's, NL
Canada, A1B 2C6
Phone: 709-330-6106
Email: xy0616@mun.ca
Birth date: Nov/12/1989
Status: Master
Nationality: Chinese

Academic Background

PhD. of Civil Engineering   2017 - now
Memorial University   St. John's, NL, Canada

Master of Civil Engineering   2014 - 2017
Memorial University   St. John's, NL, Canada

Master of Environmental System Engineering and Management   2013-2014
Memorial University   St. John's, NL, Canada
- Project Topic: Water quality monitoring of regional rivers

Bachelor of Environmental Science   2008-2012
Liaoning University   Shenyang, Liaoning, China
- Thesis Topic: The influence of composting sludge on the growth and physiology property of turf grass

Current Research:

1. Multi-Agent Hybrid Particle Swarm Optimization (MAHPSO) Approach for the Decision Making of Wastewater Treatment Plant Networks

2. A Simulation-based Multi-agent Particle Swarm Optimization Approach (SA-PSO) for Supporting Dynamic Decision Making in Offshore Oil Spill Response

3. Agent Based Simulation Modelling (ABM) Approach for Adsorption Process of Naphthalene by TiO2

4. Human factor and risk based approach on offshore oil spill accident response

Research Achievements

➢ **Journal paper:**

- **Ye, X.**, Chen, B., Jing, L., and Zhang, B. A novel multi-agent based hybrid particle swarm optimization (MAHPSO) approach for wastewater treatment plants network design. (Under preparation). My duty is developing the proposed MAHPSO system, building the case study model, analyzing results and writing the whole paper.

- **Ye, X.**, Chen, B., Jing, L., and Li, P. A simulation-based multi-agent particle swarm optimization approach for supporting dynamic decision making in offshore oil spill responses. (Under preparation). My duty is developing the proposed SA-PSO system, building the case study model, analyzing results and writing the whole paper.

- Li, Z., Chen, B., Wu, H., and **Ye, X.** (2016). A hybrid stochastic – design of experiment aided parameterization method for modeling aquifer NAPL contaminations. Environmental Modelling and Software. (Under review). My duty is doing the experiments, and analyzing parts of result data.

- Li, Z., Chen, B., Wu, H., Zhang, H., **Ye, X.**, and Zhang, K. (2016). A parameterization study for modeling biosurfactant enhanced aquifer remediation processes based on flow cell experiments. ASCE's Journal of Environmental Engineering. (Under review). My duty is doing the experiments, and analyzing parts of result data.

- Jing, L., Chen, B., **Ye, X.**, Zhang, B.Y. (2017). Wastewater treatment plant network design using a multi-scale two-stage mixed integer stochastic (MSTMIS) model. Environmental Engineering Science, in press.

- Jing, L., Chen, B., Zhang, B., **Ye, X**. (2017) A probabilistic agent-based approach for modeling of wastewater treatment processes. Science of the Total Environment. Under review.

- Song, X., Chen, B., Zhu, Z., Jing, L., Cai, Q., **Ye, X.**, Zhang, B., and Zheng, X. A preliminary study on droplet size distribution of chemically dispersed crude oil under high pressure conditions. (Under preparation). My duty is doing the experiments and building the experimental model.

➢ **Conference abstract:**

- **Ye, X.**, Chen, B., Jing, L., and Li P. (2016). A simulation-based multi-agent particle swarm optimization approach for supporting dynamic decision making in offshore oil spill response. Abstract submission for 39th AMOP Technical Seminar on Environmental Contamination and Response, June 7 to 9, 2016. My duty is developing the whole SA-PSO system and presenting at AMOP.

- **Ye, X**., Jing, L., Chen, B., and Zhang, B. (2016). Optimal design of municipal wastewater treatment plant networks under uncertainty. Abstract submission for The National Water and Wastewater Conference, November 13-16, 2016. My duty is developing the proposed method and making the poster for the conference.

Scholarships

Sep 2014	1st place in-program scholarship award for master of
St John's (Canada)	applied science in environmental systems and management
2008-2011	3rd place Scholarship for twice and individual scholarship
Shenyang (China)	for three times in Liaoning University

Languages:

Fluent in Chinese and English

Additional skills learnt during master study:

Programs:
Good knowledge of: Matlab, Netlogo, STOAT, UTCHEM, Bio F&T, Repast
Medium knowledge of : Photoshop, AutoCAD, Fortran, Java
Basic knowledge of : Solidworks, wordpress