**Yanyan Zhang, Ph.D., P. Eng.**

Assistant Professor

New Mexico State University, Department of Civil Engineering,

Las Cruces, NM 88003

Phone: 575-646-5246 E-mail: zhangy@nmsu.edu

**(1) Professional Preparation**

Beijing Normal University, China Environmental Engineering B.S. 2005

Beijing Normal University, China Environmental Engineering M.S. 2008

University of Missouri-Columbia Environmental Engineering Ph.D. 2012

University of Alberta, Canada Environmental Engineering Postdoc 2013-16

**(2) Appointments**

2016- present Assistant Professor, Department of Civil Engineering,

New Mexico State University

2015 Lecturer, Department of Civil and Environmental Engineering,

University of Alberta, Canada

**(3) Publications**

**(i) 5 publications most closely related to the proposed project**

Zhang, L., **Zhang, Y.,** Gamal El-Din, M. (2018) Degradation of recalcitrant naphthenic acids from raw and ozonated oil sands process-affected waters by a semi-passive biofiltration process. Water Research 133, 310-318

**Zhang, Y**., Xue, J., Liu, Y., Gamal El-Din, M. (2018) The Role of Ozone Pretreatment on Membrane Bioreactor Optimization for Treatment of Oil Sands Process-Affected Water: Impact of Ammonia Concentration and Hydraulic Retention Time. Journal of Hazardous Materials 347, 470-477

**Zhang, Y**., Islam, M. S., McPhedran, K. N., Dong, S., Rashed, E., El-Shafei, M., Noureldin, A., Gamal El-Din, M. A (2017) Comparative Study of Microbial Dynamics and Phosphorus Removal for two Innovative Side-Stream Wastewater Treatment Processes. RSC advances 7, 45938-45948

Xue, J., **Zhang, Y.,** Liu, Y., Gamal El-Din, M. (2016). Effects of ozone pretreatment and operating conditions on membrane fouling behaviors of an anoxic-aerobic membrane bioreactor for oil sands process-affected water (OSPW) treatment, Water Research, 105, 444-455.

Xue, J., **Zhang, Y.**, Liu, Y., Gamal El-Din, M. (2016). Treatment of raw and ozonated oil sands process-affected water under decoupled denitrifying anoxic and nitrifying aerobic conditions: a comparative study, Biodegradation 27, 247-264.

**(ii) 5 other significant publications**

**Zhang, Y.**, Xue, J., Liu, Y., Gamal El-Din, M. (2016). Treatment of oil sands process-affected water using membrane bioreactor coupled with ozonation. Chemical Engineering Journal, 302 (10):485-497

Xue, J., **Zhang, Y.**, Liu, Y., Gamal El-Din, M. (2016). Treatment of oil sands process-affected water (OSPW) using a membrane bioreactor with a submerged flat-sheet ceramic microfiltration membrane. Water Research, 88 (1), 1-11.

Islam, M.S., **Zhang, Y.**, McPhedran, K.N., Liu, Y., Gamal El-Din, M. (2016). Mechanistic investigation of industrial wastewater naphthenic acids removal using granular activated carbon (GAC) biofilm based processes. Science of the Total Environment, 541: 238-246.

**Zhang, Y.,** McPhedran, K.N., Gamal El-Din, M. (2015) Pseudomonads biodegradation of aromatic compounds in oil sands process-affected water. Science of the Total Environment, 521, 59-67.

Islam, M.S., **Zhang, Y.,** McPhedran, K.N., Liu, Y., Gamal El-Din, M. (2015). Analysis of oil sands microbial biofilm communities developed on granular activated carbon using next-generation pyrosequencing. Applied and Environmental Microbiology. 81, 12, 4037-4048.

**(4) Synergistic Activities**

* Invited reviewer for more than 15 scientific journals such as *Bioresource Technology, Chemosphere, Environmental Pollution, Environmental Science and Technology, International Journal of Environmental Research and Public Health, RSC Advances, Water Research, Sustainability,* etc.
* Served as a reviewer for NSF SBIR program, Canada NSERC Collaborative Research and Development Grant and Elsevier Book Proposal
* Organizer for the events of science demonstrations to introduce water treatment processes to K-12 students
* Served as faculty advisor of undergraduate students for ReNUWIt and CBBG’s Research Experience for Undergraduates (REU) Program
* Served a faculty advisor of a high-school student for ReNUWIt’s Young scholar program
* Served as an instructor in a Wastewater Mathematics course offered by New Mexico Rural Water Association
* Active member of Association of Environmental Engineering and Science Professors (AEESP) and Association of Professional Engineers and Geoscientists of Alberta (APEGA)