Lei Zhou

Department: School of Resources and Environmental Engineering

Professional field: Environmental Engineering

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Profile

2014 – 2017: Université Claude Bernard Lyon 1, IRCELYON, Environmental Chemistry, Ph. D degree

2016 – 2017: Université Clermont Auvergne, ICCF, Environmental Chemistry, Exchange student

2011–2014：Nanjing University, Environmental Science, Master degree

2007–2011：Nanjing University, Environmental Science, Bachelor degree

Research Field

1) Environmental photochemistry in aquatic and atmospheric systems

2) Sulfate radical based advanced oxidation process (AOPs)

Research results and selected published papers

(1) Xuerui Yang, Xi Ding, Lei Zhou*, Huan-huan Fan, Xingbao Wang, Corinne Ferronato, Jean-marc Chovelon, Guangli Xiu*.New insights into clopyralid degradation by sulfate radical: Pyridine ring cleavage pathways. Water Research, 171 (2020), 115378.

(2) Lei Zhou, Chenzhi Yan, Mohamad Sleiman, Corinne Ferronato, Jean-Marc Chovelon*, Xingbao Wang, Claire Richard*, Sulfate Radical Induced Degradation of β2-adrenoceptor Agonists Salbutamol and Terbutaline: Implication of Halides, Bicarbonate, and Natural Organic Matter. Chemical Engineering Journal, 368 (2019) 252-260.

(3) Rui Zhang*, Xiaoxiang Wang, Lei Zhou*, Doug Crump. Quantum chemical investigations of the decomposition of the peroxydisulfate ion to sulfate radicals. Chemical Engineering Journal, 361 (2019) 960-967.

(4) Lei Zhou, Claire Richard, Corinne Ferronato, Jean-Marc Chovelon, Mohamad Sleiman*. Investigating the performance of biomass-derived biochars for the removalof gaseous ozone, adsorbed nitrate and aqueous bisphenol A. Chemical Engineering Journal, 334 (2018) 2098–2104.

(5) Lei Zhou, Chenzhi Yan, Mohamad Sleiman, Corinne Ferronato, Jean-Marc Chovelon*, Xingbao Wang, Claire Richard*, Sulfate Radical Induced Degradation of β2-adrenoceptor Agonists Salbutamol and Terbutaline: Implication of Halides, Bicarbonate, and Natural Organic Matter. Chemical Engineering Journal, 368 (2019) 252-260.

(6) Rui Zhang*, Xiaoxiang Wang, Lei Zhou*, Zhu Liu, Doug Crump. The impact of dissolved oxygen on sulfate radical-induced oxidation of organic micro-pollutants: A theoretical study. Water Research, 135 (2018) 144-154.

(7) Yuefei Ji, Junhe Lu*, Lu Wang, Mengdi Jiang, Yan Yang, Peizeng Yang, Lei Zhou*, Corinne Ferronato, Jean-Marc Chovelon. Non-activated peroxymonosulfate oxidation of sulfonamide antibiotics in water: Kinetics, mechanisms, and implications for water treatment. Water Research, 147 (2018) 82-90.

(8) Lei Zhou, Corinne Ferronato, Jean-Marc Chovelon*, Mohamad Sleiman, Claire Richard*. Investigations of diatrizoate degradation by photo-activated persulfate, Chemical Engineering Journal, 2017,311, 28-36.

(9) Lei Zhou, Yuefei Ji, Chao Zeng, Ya Zhang, Zunyao Wang, Xi Yang*. Aquatic photodegradation of sunscreen agent p-aminobenzoic acid in the presence of dissolved organic matter, Water Research, 2013, 47, 153-162.

(10) Lei Zhou, Wei Zheng, Yuefei Ji, Jinfeng Zhang, Chao Zeng, Ya Zhang, Qi Wang, Xi Yang*. Ferrous-activated persulfate oxidation of arsenic (III) and diuron in aquatic system, Journal of Hazardous Materials, 2013, 263, 422-430.