

# Xuejing Kang

PhD student, Czech University of Life Sciences Prague



## EDUCATION BACKGROUND

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- September 2019 – now PhD, Faculty of Environmental Sciences, Czech University of Life Sciences Prague
- September 2009 – July 2012 Master, Material Science, Zhengzhou University of Light Industry,
- September 2005 – July 2009 Bachelor, Environmental Engineering, Zhengzhou University of Light Industry

## WORK EXPERIENCE

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- September 2018 – September 2019 Henan Tianqian intellectual property agency service co.ltd  
Work as a patent attorney for patent writing and application Zhengzhou
- April 2013 – March 2017 Foxconn Technology Group (Fortune Global 500 group)  
Worked as an Environmental manager Langfang
- June 2012 – March 2013 Senlan Environmental Protection co.ltd  
Worked as an assistant of environmental engineer Zhengzhou

## PUBLICATIONS

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- Xuejing Kang<sup>†</sup>, BoHu, Mayang Christy Perdana, Yongsheng Zhao\*, Zhongbing Chen\*. Extreme learning machine models for predicting the *n*-octanol/water partition coefficient (*K*<sub>ow</sub>) data of organic compounds [J]. *Journal of Environmental Chemical Engineering*, 2022, 108552
- Xuejing Kang<sup>†</sup>, Yongsheng Zhao\*, Hongzhong Zhang, Zhongbing Chen\*. Application of atomic electrostatic potential descriptors for predicting the eco-toxicity of ionic liquids towards leukemia rat cell line [J]. *Chemical Engineering Science*, 2022, 260: 117941
- Xuejing Kang<sup>†</sup>, Yongsheng Zhao<sup>†</sup>, \*, and Zhongbing Chen\*. "Atom surface fragment contribution method for predicting the toxicity of ionic liquids." *Journal of Hazardous Materials*, 2022, 421: 126705.
- Xuejing Kang<sup>†</sup>, Zuopeng Lv<sup>†</sup>, Zhongbing Chen\*, Yongsheng Zhao\*. Assessing the ecotoxicity of ionic liquids on *Vibrio fischeri* using electrostatic potential descriptors[J]. *Journal of Hazardous Materials*, 2020, 397: 122761.
- Xuejing Kang<sup>†</sup>, Zuopeng Lv<sup>†</sup>, Zhongbing Chen\*, Yongsheng Zhao\*. A QSPR model for estimating Henry's law constant of H<sub>2</sub>S in ionic liquids by ELM algorithm[J]. *Chemosphere*, 2021, 269: 128743.
- Xuejing Kang<sup>†</sup>, Zuopeng Lv<sup>†</sup>, Zhongbing Chen\*, Yongsheng Zhao\*. Prediction of ammonia absorption in ionic liquids based on extreme learning machine modelling and a novel molecular descriptor SEP[J]. *Environmental Research*, 2020, 189: 109951.
- Xuejing Kang, Xinyan Liu, Jianqing Li, Yongsheng Zhao\*, Hongzhong Zhang\* Heat capacity prediction of ionic liquids based on quantum chemistry descriptors. [J]. *Industrial & Engineering Chemistry Research*, 2018, 57(49): 16989-16994.
- Xuejing Kang, Zhijun Zhao\*, Jianguo Qian\*, Raja Muhammad Afzal. Prediction viscosity of ionic liquids by the ELM intelligence algorithm. *Industrial & Engineering Chemistry Research*, 2017, 56(39): 11344-11351.
- Xuejing Kang, Yongsheng Zhao\*, Jinjin Li\*. Predicting refractive index of ionic liquids

based on the extreme learning machine (ELM) intelligence algorithm. *Journal of Molecular Liquids*, 2018, 250: 44-49.

- J- **Xuejing Kang**, Chunjiang Liu, Shaojuan Zeng, et al. Prediction of Henry's law constant of CO<sub>2</sub> in ionic liquids based on SEP and S<sub>1</sub>-rofit molecular descriptors [J]. *Journal of Molecular Liquids*, 2018, 262: 139-147.
- J- **Xuejing Kang**, Jing Deng, Yongsheng Zhao\*. New molecular descriptors for the prediction of H<sub>2</sub>S solubility in ionic liquids [J], *Journal of Molecular Liquids*, 2018, 265: 756-764
- 4- Peng Zhuf, **Xuejing Kangf**, Ullah Latif, Maoming Gong, Yongsheng Zhao\*. A Reliable Database for Ionic Volume and Surface: Its Application to Predict Molar Volume and Density of Ionic Liquid [J]. *Industrial & Engineering Chemistry Research*, 2019, 58(23): 10073-10083.
- 4- Peng Zhuf, **Xuejing Kangt**, Yongsheng Zhao\*, Ullah Latif, Hongzhong Zhang\* et al. Predicting the toxicity of ionic liquids toward acetylcholinesterase enzymes using novel QSAR models [J]. *International journal of molecular sciences*, 2019, 20(9): 2186.
- 4- Yongsheng Zhao\*, Mingguang Pan, **Xuejing Kang**, et al. Gas separation by ionic liquids: A theoretical study [J]. *Chemical Engineering Science*, 2018, 189: 43-55.

#### PROJECT EXPERIENCE

- 4- IGA of the Faculty of Environmental Sciences (No. 2020B0032), CULS, Czech Republic
- 4- IGA of the Faculty of Environmental Sciences (No. 2022B0036), CULS, Czech Republic
- 4- University Grant Competition (UGC No. 52/2021), CULS, Czech Republic

#### CONFERENCE

- J- 2021 AIChE Annual Meeting, poster
- J- 2021 12th International Conference on Environmental Science and Development (ICESD2021), oral presentation
- 4- Kostecké Inspirování 2020, oral presentation;
- J- Kostecké Inspirování 2019, poster.

#### SKILLS

- 4- Master the test skills of X-ray diffraction (XRD), Atom force microscopy (AFM), UV spectroscopy, Total organic carbon (TOC), photoelectrochemistry measurement and so on.
- 4- Master MS office (Word, Excel, PowerPoint, Visio...), SPSS, Matlab, Origin, AutoCAD, Python, Gaussian (including Linux version), COSMOtherm, Multiwfn, Libsvm and so on
- J- Master the following research methods: group contribution (GC), quantitative structure-property relationships (QSPR), Artificial Intelligence algorithms: extreme learning machine (ELM), support vector machine (SVM), multiple linear regression (MLR), conductor-like screening model for real solvents (COSMO-RS), quantum chemistry (QC), and so on.

#### HONORS AND AWARDS

- 4- Rector's Prize for PhD students with outstanding research and publication results in academic year 2019-2020, 3<sup>rd</sup> place & 18<sup>th</sup> place
- 4- Rector's Prize for PhD students with outstanding research and publication results in academic year 2020-2021, 8<sup>th</sup> place