Xuejing Kang

PhD student, Czech University of Life Sciences Prague

EDUCATION BACKGROUND

- 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

- 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

- **Xuejing Kang**†, BoHu, Mayang Christy Perdana, Yongsheng Zhao*, Zhongbing Chen*. Extreme learning machine models for predicting the *n*-octanol/water partition coefficient (*K*ow) data of organic compounds [J]. ***Journal of Environmental Chemical Engineering***, 2022, 108552

- **Xuejing Kang**†, 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**†, Yongsheng Zhao†, *, and Zhongbing Chen*. "Atom surface fragment contribution method for predicting the toxicity of ionic liquids." ***Journal of Hazardous Materials***, 2022, 421: 126705.

- **Xuejing Kang**†, Zuopeng Lv†, 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**†, Zuopeng Lv†, Zhongbing Chen*, Yongsheng Zhao*. A QSPR model for estimating Henry's law constant of H2S in ionic liquids by ELM algorithm[J]. ***Chemosphere***, 2021, 269: 128743.

- **Xuejing Kang**†, Zuopeng Lv†, 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.

- **Xuejing Kang**, Chunjiang Liu, Shaojuan Zeng, et al. Prediction of Henry's law constant of CO_2 in ionic liquids based on S_{EP} and $S_{\sigma\text{-profile}}$ molecular descriptors [J]. *Journal of Molecular Liquids*, 2018, 262: 139-147.
- **Xuejing Kang**, Jing Deng, Yongsheng Zhao*. New molecular descriptors for the prediction of H_2S solubility in ionic liquids[J], *Journal of Molecular Liquids,* 2018, 265:756-764
- Peng Zhu†, **Xuejing Kang**†, 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.
- Peng Zhu†, **Xuejing Kang**†, 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.
- 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

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

CONFERENCE

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

SKILLS

- Master the test skills of X-ray diffraction (XRD), Atom force microscopy (AFM), UV spectrophotography, Total organic carbon (TOC), photoelectrochemistry measurement and so on.
- Master MS office (Word, Excel, PowerPoint, Visio…), SPSS, Matlab, Origin, AutoCAD, Python, Gaussian (including Linux version), COSMOtherm, Multiwfn, Libsvm and so on
- 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 ADWARDS

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