

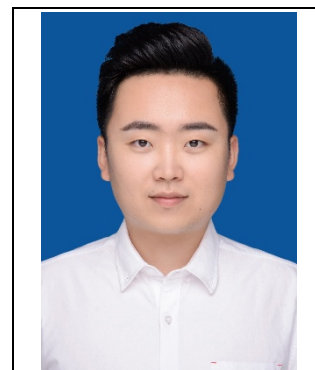
姓 名 韩永鸣

职称/职务 高级实验师，硕士生导师

出生年月 1993 年 01 月

学科方向 输电工程、结构与材料工程

联系邮箱 20192880@neepu.edu.cn



教育背景

2022 年 09 月至 2025 年 12 月	吉林大学	土木工程专业	博士
2016 年 09 月至 2019 年 06 月	东北电力大学	土木工程（输电工程）专业	硕士
2012 年 09 月至 2016 年 06 月	东北电力大学	土木工程（输电工程）专业	学士

工作经历

2025 年 12 月至今	东北电力大学建筑工程学院，高级实验师
2022 年 11 月至 2025 年 12 月	东北电力大学建筑工程学院，实验师
2019 年 09 月至 2022 年 10 月	东北电力大学建筑工程学院，助理实验师

开设课程

本科生课程《结构试验原理》、《工程结构综合性创新试验》

研究领域

1. 输电工程；2. 先进混凝土材料与结构；3. 固废资源化利用

科研项目

1. 国网福建电力公司，导线微风振动致灾机理及控制研究，2026 年 06 月至 2027 年 06 月，主持；
2. 国家自然科学基金委员会，U 形 RPC 预制梁外壳装配整体式框架结构性能与设计研究，2019 年 01 月至 2022 年 12 月，参与
3. 吉林省教育厅，基于能力提升的专科力学实验教学方法研究与资源建设，2021 年 07 月至 2023 年 11 月，主持

学术兼职

1. 教育部学位论文评审专家
2. Construction and Building Materials、Journal of Building Engineering、Case Studies in Construction Materials 等期刊杂志审稿人

奖励荣誉

1. 2023 年，吉林省科学技术进步奖一等奖，活性粉末混凝土结构理论和关键技术研究与应用；
2. 2020 年，吉林省职业院校技能大赛教学能力比赛三等奖；
3. 2021 年，东北电力大学优秀班主任

学术成果

公开发表的学术论文：

[1] Han Y, Zhou L, Wang D, et al. Mechanical force/chloride triggered microcapsules reboot geopolymer durability: Interfacial bond networks driving self-healing under salt-dry-wet cycles[J].

Construction and Building Materials, 2026.

- [2] **Han Y**, Dai W, Wang D, et al. Mechanical force/chloride triggered hybrid microcapsules: Towards synergistic self-healing of geopolymers[J]. *Construction and Building Materials*, 2025.
- [3] **Han Y**, Dai W, Ju Y, et al. The synthesis of hexamethylene diisocyanate microcapsules and mechanisms of self-healing geopolymer through an isocyanate- hydroxy system[J]. *Case Studies in Construction Materials*, 2025.
- [4] **Han Y**, Dai W, Zhou L, et al. Predicting the adsorption capacity of geopolymers for heavy metals in solution based on machine learning[J]. *Journal of Environmental Chemical Engineering*, 2025.
- [5] 薛楚凡, 韩永鸣 (通讯作者), 汤泳, et al. 1250 mm² 导线放线体系动力特性研究[J]. 东北电力大学学报, 2019.
- [6] Xue C, **Han Y** (通讯作者), Bai J, et al. Study on dynamic simulation of 1250mm² conductor stringing system[C]. *2nd International Conference on Civil, Architecture and Urban Engineering*, 2020.
- [7] Hao D, Guo Y, Chen, Zhou L, **Han Y**. Mechanical and microstructural regulation of biochar-geopolymer composites from industrial slag wastes[J]. *Developments in the Built Environment*, 2026.
- [8] Wang X, Ju Y, Wang D, Xing G, Zhang X, **Han Y**, et al. A simplified calculation model for maximum diagonal crack width of UHPC-NC composite beams[J]. *Mechanics of Advanced Materials and Structures*, 2025.
- [9] 张晓磊, 王伯昕, 鞠彦忠, 王德弘, 韩永鸣, 宋一峰. 装配整体式 UHPC-NC 组合框架抗震性能拟静力试验研究[J]. *应用基础与工程科学学报*, 2024.
- [10] Zhang X, Wang B, Ju Y, Wang D, **Han Y**, et al. Seismic performance of precast frame with UHPC composite beams and HSC columns under cyclic loadings[J]. *Engineering Structures*, 2024.
- [11] Zhou L, Xu X, Chen R, **Han Y**, et al. Assessment of Heavy Metal Pb²⁺ Adsorption and Migration in Sand with Varied Particle Gradations: Implications for Environmental Control and Remediation Strategies[J]. *Water Air and Soil Pollution*, 2024.
- [12] Zhou L, Xu X, Wang Q, Park J, **Han Y**, et al. Microscopic mechanisms and durability evaluation under freeze-thaw conditions of heavy metal solidification in red mud-slag geopolymer[J]. *Journal of Environmental Chemical Engineering*, 2024.
- [13] Zhou L, Xu X, Wang Q, **Han Y**, et al. Mechanistic insights into red mud-slag geopolymer stabilization of multi-metal contaminated soil under coupled environmental attacks: Multiscale assessment from macro-engineering performance to micro-structural evolution[J]. *Sustainable Materials and Technologies*, 2025.
- [14] Zhou L, Xu X, Wang Q, Park J, **Han Y**, et al. Stabilization/solidification of composite heavy metal

contaminated soil using a novel red mud-slag based geopolymer (RM-SGP): Performance and mechanisms[J]. *Construction and Building Materials*, 2025.

[15]Zhou L, Xu X, Wang Q, Dong X, **Han Y**, et al. Machine learning-based prediction of thermal conductivity in bentonite barriers for high-level radioactive waste repositories[J]. *Progress in Nuclear Energy*, 2026.

[16]Zhou L, Xu X, Wang Q, Zhou F, **Han Y**, et al. Quantifying the confinement: First-principles and experimentally-inversed transport parameters validate RM-SGP as a high-performance heavy metal immobilization material[J]. *Journal of Environmental Chemical Engineering*, 2026.

[17]Liu M, Dai W, Li M, Jin W, Yang X, **Han Y**, et al. Mechanism of interface performance enhancement of nano-SiO₂ modified polyvinyl alcohol fiber reinforced geopolymer concrete: Experiments, microscopic characterization, and molecular simulation[J]. *Journal of Building Engineering*, 2024.

[18]Liu M, Dai W, Jin W, Li M, Yang X, **Han Y**, et al. Mix proportion design and carbon emission assessment of high strength geopolymer concrete based on ternary solid waste[J]. *SCIENTIFIC REPORTS*, 2024.

[19]Zhou L, Xu X, Wang Q, Zhou F, **Han Y**, et al. Red mud-slag geopolymer for sustainable immobilization of heavy metals in soil: Mechanistic insights into degradation resistance under freeze-thaw and dry-wet cycles[J]. *Journal of Environmental Sciences*, 2026.