王钰轲简介

<table>
<tr><td>姓名</td><td>王钰轲</td><td>性别</td><td>男</td><td>出生年月</td><td>1989.02</td><td rowspan="4">  </td></tr>
<tr><td>职称</td><td>教授</td><td>民族</td><td>汉</td><td>籍　贯</td><td>河南新乡</td></tr>
<tr><td>电子邮箱</td><td colspan="2">wangyuke@zzu.edu.cn</td><td>最终学位</td><td colspan="2">工学博士</td></tr>
<tr><td>学术头衔</td><td colspan="5">中国土木工程学会土力学及岩土工程分会理事
中国土木工程学会土力学及岩土工程分会青年委员会委员
国际土力学及岩土工程学会会员
中国岩石力学与工程学会会员
中国公路学会会员</td></tr>
<tr><td>研究方向</td><td colspan="6">土的基本特性与地基处理、交通岩土工程、基础设施检测与生态修复</td></tr>
<tr><td>主要学习、科研和工作经历</td><td colspan="6">2023.01-现在　郑州大学水利与土木工程学院，教授，博士生导师
2020.01-2022.12 郑州大学水利科学与工程学院，副教授（直聘），硕士生导师
2018.07-2019.12 郑州大学水利科学与工程学院，讲师，硕士生导师
2016.06-2018.06 郑州大学水利工程博士后流动站，合作导师：王复明 院士
2011.09-2016.06 河海大学，工学博士（硕博连读），导师：高玉峰 教授
2007.09-2011.07 内蒙古工业大学，土木工程，工学学士</td></tr>
<tr><td>代表性教学成果与荣誉</td><td colspan="6">1. 郑州大学水利科学与工程学院“三育人”先进个人（2020 年）
2. 主持 2020 年度郑州大学研究生课程思政教育教学改革重点项目
3. 指导本科生及研究生获得“华数杯”全国大学生数学建模竞赛一等奖等
4. 指导研究生获得中国高校大数据挑战赛二等奖等</td></tr>
<tr><td>代表性科研成果</td><td colspan="6">一、在研与完成科研项目
1、主持 国家自然科学基金面上项目《大豆脲酶固化黄河泥沙用作路基填料的宏微观效果与机理研究》（52178369）（2022.01-2025.12）
2、主持 国家自然科学基金青年项目《考虑初始状态变化的黄泛区粉土路基灾变机理与沉降计算方法研究》（52109140）（2022.01-2024.12）
3、主持 国家重点研发计划子课题《土石堤坝渗漏险情抢险关键技术与装备研究》（2019YFC1510803-2）（2020.01-2022.12）
4、主持 河南省优秀青年基金《高聚物微型桩加固边坡的地震破坏机理及稳定性分析方法》(232300421069)（2023.01-2024.12）
5、主持 河南省青年人才托举工程项目《交通荷载作用下黄泛区路基长期累积变形特性研究》(2021HYTP016)（2021.01-2022.12）</td></tr>
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6、**主持** 河南省自然科学基金青年项目《多维度耦合下饱和软黏土的变形及软化特性试验研究》(202300410424)（2020.01-2021.12）

7、**主持** 河南省重点研发与推广专项（科技攻关）《交通荷载作用下各向异性固结软黏土的非共轴变形特性研究》(212102310977)（2021.01-2022.12）

8、**主持** 河南省高等学校重点科研项目《非水反应类高聚物注浆技术在隧道突涌水及渗漏处治中的应用》(20A560021)（2019.01-2022.12）

9、**主持** 中国博士后面上基金二等资助《考虑主应力轴旋转的饱和软黏土长期循环软化特性研究》(2019M662533)（2019.12-2022.12）

10、**主持** 中国博士后面上基金一等资助《主应力轴旋转下软黏土的非共轴变形特性及本构理论研究》(2017M610461)（2017.05-2018.06）

11、**主持** 河南省博士后基金《高聚物注浆技术在隧道及地下工程渗漏处治中的应用研究》（2017.05-2018.06）

12、**主持** 岩土力学与工程国家重点实验室开放基金项目 《主应力轴旋转下饱和软黏土累积变形特性试验研究》（2017.01-2020.12）

13、**主持** 岩土力学与堤坝工程教育部重点实验室开放基金项目《天然软黏土在主应力轴旋转下静动力特性试验研究》（2017.01-2019.12）

14、参与 国家自然科学基金重点项目《海洋土软化特性及海床和基础失稳与灾变机理研究》(51639002)（2017.01-2021.12）

15、参与 国家重点研发计划《膨胀土岸坡和堤坝渗透滑动柔性修复加固技术》（2018.01-2021.12）

二、论文发表情况

1. **Wang, Y.**, Jiang, R., Jiao, M.*, Cao, T., Yu, X. Macro and micro experimental study on solidification of Yellow River silt based on different biomineralization technologies. *Environmental Earth Science*. 2023, 82 (3): 86
2. **Wang, Y.**, Jiang, R., Gan, Wang., Jiao, M.* Study on mechanical properties of Yellow River silt solidified by MICP technology. *Geomechanics and Engineering*. 2023, 32, (3) : 347-359
3. **Wang, Y.**, Jiang, R., Gao, Y.*, Shao, J. Resilient strain and stiffness degradation of Yellow River silt under long-term cyclic loads. *Proceedings of ICE – Geotechnical Engineering*. 2023:1-10
4. **Wang, Y.**, Cao, T., Shao, J., Song, Y.*, Wan, Y. Experimental study on static characteristics of the Yellow River silt under (triaxial) consolidated undrained

conditions. *Marine Georesources & Geotechnology*. 2023, 41(3) :285-294

5. **Wang, Y.**, Wang, G., Zhong, Y.*, Shao, J., Zhao, J., Li, D. Comparison of different treatment methods on macro-micro characteristics of Yellow River silt solidified by MICP technology. *Marine Georesources & Geotechnology*. 2023, 41(4) :425-435
6. Chen, Y., **Wang, Y.***, Hazarika, H., Wan, Y. Strength and deformation behavior of Yellow River silt under triaxial drained condition with considering characteristic states. *Journal of Mountain Science*. 2023, 20(1) : 273-284
7. Wan, Y., Fu, H., **Wang Y*.** Study on the influence of spatial variability of soil strength parameters on reliability and slip surfaces of cofferdam slope reinforced by geosynthetic reinforcement. *Marine Georesources & Geotechnology*. 2023.
8. **Wang, Y.**, Cao, T., Gao, Y.*, Shao, J. Experimental study on liquefaction characteristics of saturated Yellow River silt under cycles loading. *Soil Dynamic and Earthquake Engineering*. 2022, 163(10):107457
9. **Wang, Y.**, Wang, G., Wan, Y.*, Yu, X., Shao, J., Zhao, J. Recycling of dredged river silt reinforced by an eco-friendly technology as microbial induced calcium carbonate precipitation (MICP). *Soils and Foundations.* 2022, 62 (6): 10216
10. **Wang, Y.**, Fu, H., Wan Y., Yu, X. Reliability and parameter sensitivity analysis on geosynthetic-reinforced slope with considering spatially variability of soil properties. *Construction and Building Materials*. 2022, 350: 128806
11. **Wang, Y.**, Han, M., Li, B.*, Wan, Y. Stability evaluation of earth-rock dam reinforcement with new permeable polymer based on reliability method. *Construction and Building Materials*. 2022, 320: 126294
12. **Wang, Y.***, Han, M. Optimal design of slope reinforcement by a new developed polymer micro anti-slide pile in case of emergency and disaster relief. *Natural Hazards*. 2022, 112: 899-917
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14. **Wang, Y.**, Li, J., Yu, X., Lin, X.*, Shao, J., Zhao, J. Study on fractional-order elastic-plastic constitutive model of river silt based on critical state theory. *Marine Georesources & Geotechnology*. 2022.
15. **Wang, Y.**, Fu, H., Cai, Y., Yu, X., Zhao, J. Seismic subsidence of soft subgrade with considering principal stress rotation. *International Journal of Civil Engineering*. 2022, 20: 827-837

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31. **Wang, Y.**, Gao, Y.*, Li, B., Guo, L., Cai, Y., & Mahfouz, A. H. Influence of initial state and intermediate principal stress on undrained behavior of soft clay during pure principal stress rotation. *Acta Geotechnica*. 2019, 14(5):1379-1401.
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四、其它科研成果

1、用于处治土石坝渗漏的可视化高聚物注浆施工工艺

王钰轲, 万永帅, 郭成超, 石明生, 曹天才, 韩沐森

发明专利, 授权, 2022.04.05, CN202110473574.0

2、一种基于高聚物材料的防液化刚柔复合挡土墙及其施工方法

王钰轲, 邵琳岚, 韩沐森, 余翔, 钟燕辉, 郭成超

发明专利, 公开, 2021.07.09, CN202110473601.4

3、用于封堵土石坝渗漏通道的可视化高聚物注浆装置

王钰轲, 万永帅, 郭成超, 石明生, 余翔, 黄文清, 付宏松

发明专利, 公开, 2021.07.09, CN202110473601.4

4、一种双组份注浆浆液智能化注浆设备

王钰轲, 邵琳岚, 于博文, 陈浩, 冯爽, 张辽, 尚海威

发明专利, 公开, 2023.01.03, CN202211241659.7

5、一种微生物固化无粘性土的批量制样装置及批量制样方法

王钰轲, 蒋睿, 邵景干, 钟燕辉, 余翔

发明专利, 公开, 2022.08.05, CN202210487583.X

6、一种利用大豆脲酶诱导碳酸钙处理黄河泥沙的方法

王钰轲, 曹天才, 宋迎宾, 王淦, 韩沐森, 于博文

发明专利, 公开, 2022.03.01, CN202111482360.6

7、抢险救灾情况下的高聚物微型桩快速成型装置及方法

王钰轲, 韩沐森, 钟燕辉, 郭成超, 余翔, 万永帅, 曹天才

发明专利, 公开, 2021.07.23, CN202110507288.1

8、抢险救灾情况下的高聚物微型桩快速成型装置

王钰轲, 韩沐森, 钟燕辉, 郭成超, 余翔, 王淦, 于博文

实用新型, 授权, 2021.11.23, CN202120986035.2

9、用于封堵土石坝渗漏通道的可视化高聚物注浆装置

王钰轲, 万永帅, 郭成超, 石明生, 于博文, 王淦

实用新型, 授权, 2021.11.26, CN202120911760.3

10、一种用于路基边坡加固的装配式微型桩

王钰轲, 蒋睿, 韩沐森

实用新型, 授权, 2022.05.13, CN202122918003.1

11、一种基于大豆脲酶固化泥沙的空心圆柱试样制样装置

王钰轲, 曹天才, 蒋睿, 王淦

实用新型, 授权, 2022.10.21, CN202221390806.2