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【概述】 现任南方科技大学校长办公会成员、国际合作部部长、环境科学与工程学院讲席教授。2015 年 3 月加入南方科技大学，创建环境科学与工程学院并担任院长。曾任北京大学讲席教授、水科学研究中心主任，及美国阿拉巴马大学地质科学系助理教授至 Lindahl 终身讲席教授。发表了专著 5 部，包括 *Applied Contaminant Transport Modeling*，及 SCI 论文 250 余篇，内容涉及地下水污染机理与修复技术、生态水文过程集成研究、以及新型污染物健康风险分析等等。开发了地下水污染模拟标准软件 MT3D 和 MT3DMS，在 100 多个国家得到广泛使用。现任或已经担任过国际水资源领域权威刊物 (*Water Resources Research, Journal of Hydrology, Groundwater, Hydrogeology Journal, and Vadose Zone Journal*) 副主编、美国国家研究理事会 (National Research Council) 水文科学核心小组成员、国际水文科协 (IAHS) 国际地下水委员会主席。2006 年获得国家自然科学基金委海外青年合作基金 (海外杰青)、2010 年入选中组部“国家特聘专家”。荣誉包括美国地下水协会 John Hem 杰出贡献奖 (1998)、美国地质学会会士 (1999)、美国地质学会 Birdsall-Dreiss 杰出讲席奖 (2009)、美国地质学会 O.E. Meinzer 奖 (国际水文地质界最高荣誉) (2013)、美国地下水协会 M. King Hubbert 奖 (该协会最高科学奖) (2013)、美国威斯康星 (麦迪逊) 大学地学系杰出校友奖 (2014)、美国地球物理联合会 (AGU) 会士 (2019)。

教育背景:

1984-1988: 博士 (主修水文地质、辅修环境工程)，美国威斯康星 (麦德逊) 大学

1983-1984: 教育部出国代培研究生，成都理工大学 (原成都地质学院)

1979-1983: 学士 (水文地质)，成都理工大学 (原成都地质学院)

工作经历:

2018-至今: 南方科技大学 校长办公会成员、国际合作部部长、讲席教授

2015-2018: 南方科技大学环境科学与工程学院 讲席教授、创院院长

2010-2015: 北京大学水科学研究中心 (原北京大学水资源研究中心) 讲席教授、主任

2010-2013: 美国阿拉巴马大学地质科学系 George Lindahl 讲席教授 (2013 年之后为停薪留职)

2002-2009: 美国阿拉巴马大学地质科学系 教授

1997-2002: 美国阿拉巴马大学地球科学系 副教授 (终身职)

1993-1997: 美国阿拉巴马大学地球科学系 助理教授

1988-1993: 美国 S.S. Papadopoulos & Associates, Inc. 环境与水资源咨询公司水文地质专家

学术经历:

2018-至今: 美国阿拉巴马大学地质科学系 客座教授

2001: 英国谢菲尔德大学土木工程系 访问学者

2000: 美国斯坦福大学地质与环境科学系 访问副教授

1995: 澳大利亚国家原子能科学技术机构 访问学者

获奖及荣誉:

2019: 美国地球物理联合会会士 (AGU Fellow)

2014: 威斯康星大学 (麦德逊) 地学系杰出校友奖 (Distinguished Alumni Award)

2013: 美国地质学会迈因策尔奖 (O.E. Meinzer Award)

2013: 美国地下水协会金·哈博奖 (M. King Hubbert Award)

2010: 中组部“国家特聘专家”
2009: 美国地质学会水文地质杰出讲席奖 (Birdsall-Dreiss Distinguished Lecturer)
2008: 美国特拉华大学 DuPont Lecturer
2007: 《纽约时报》中国水问题专家
2006: 中国国家自然科学基金委海外青年合作基金 (海外杰青)
2005: 美国德克萨斯大学 Oliver Lecturer
1999: 美国地质学会 会士 (GSA Fellow)
1998: 美国地下水协会 John Hem 杰出贡献奖

学术兼职 (部分):

2018-至今: 国家自然科学基金委环境地球科学学科总体专家组成员
2018-至今: 国家生态环境部“水专项”后续战略研究编制专家组成员
2016-至今: 国际学术期刊《Vadose Zone Journal》副主编
2015-至今: 国家基金委重大研究计划“西南河源区径流变化与适应性利用”指导专家组副组长
2013-至今: 地质学报 (英文版) (Acta Geologica Sinica) 副主编
2010-2014: 国际学术期刊《Water Resources Research》副主编
2009-2018: 国家基金委重大研究计划“黑河流域生态水文过程集成研究”专家组成员
2007-2014: 国际学术期刊《Journal of Hydrology》副主编
2007-2013: 国际水文科协 (IAHS) 国际地下水委员会当选主席、主席
2005-至今: 美国国家科研委员会 (National Research Council) 水文科学核心小组成员
2005-2008: 美国大学水文科学联合会 (CUAHSI) 行政负责人之一 (Treasurer)
2004-2007: 国际学术期刊《Hydrogeology Journal》副主编
2004-2005: 国际中国地球科学促进会 (IPACES) 2004-05 年度主席
1998-至今: 国际地下水模拟学术会议系列“MODFLOW and MORE”组织人
1998-2010: 国际学术刊物《Ground Water》副主编及软件版主编
1996-2005: 美国地球物理联合会 (AGU) 地下水专业委员会委员

研究领域:

全球变化及新型污染物对地下水可持续利用的影响
流域尺度生态-水文过程的集成研究
地下水污染物迁移过程与生物地球化学反应的理论与试验研究
地表水-地下水耦合机理及数值模拟

10 篇代表作 (*表示通讯作者)

Ben, Y., C. Fu, M. Hu, L. Liu, M. H. Wong, **C. Zheng***, 2019, Human health risk assessment of antibiotic resistance associated with antibiotic residues in the environment: A review, *Environmental Research*, 169, 483-493.
Qiu, W., J. Sun, M. Fang, S. Luo, Y. Tian, P. Dong, B. Xu, **C. Zheng***, 2019, Occurrence of antibiotics in the main rivers of Shenzhen, China: Association with antibiotic resistance genes and microbial community, *Science of the Total Environment*, 653, 334-341.
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Gorelick, S.M., **C. Zheng**, 2015, Global change and the groundwater management challenges, *Water Resour. Res.* (50th anniversary edition), v.51, doi:10.1002/2014WR016825.
Cao, G. **C. Zheng***, B.R. Scanlon, J. Liu, and W. Li, 2013, Use of flow modeling to assess sustainability of groundwater resources in the North China Plain, *Water Resour. Res.*, 49, 159-175, doi:10.1029/2012WR011899.
Zheng, C.*, J. Liu, 2013, China's "Love Canal" moment? *Science*, v. 340, p. 810.

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论文专著 (*表示通讯作者; Google Scholar 总引用数 9948, 2019. 10. 3 检索) :

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- Qiu, W., M. Zheng, J. Sun, Y. Tian, M. Fang, Y. Zheng, T. Zhang, **C. Zheng***, 2019, Photolysis of enrofloxacin, pefloxacin and sulfaquinolaxine in aqueous solution by UV/H₂O₂, UV/Fe (II), and UV/H₂O₂/Fe (II) and the toxicity of the final reaction solutions on zebrafish embryos, *Science of The Total Environment*, 651: 1457-1468, DOI: 10.1016/j.scitotenv.2018.09.315.
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- Mao, G., J. Liu, F. Han, Y. Meng, Y. Tian, Y. Zheng, **C. Zheng**, 2018, Assessing Green and Blue Water: Understanding Interactions and Making Balance between Human and Nature, *Hydrology and Earth System Sciences Discussion*, doi: 10.5194/hess-2018-193.
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- Lu, B., Y. Zhang, H. Sun, **C. Zheng**, 2018, Lagrangian simulation of multi-step and rate-limited chemical reactions in multi-dimensional porous media, *Water Science and Engineering*, 11(2), 101-113.
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获得资助的科研项目（除非注明，2010年之前项目依托单位为阿拉巴马大学）：

1. Roles of anomalous diffusion in groundwater contaminant source identification, in situ remediation and risk assessment: A theoretical and experimental study, National Natural Science Foundation of China, 2020-2024, PI (through Southern University of Science and Technology).
2. Migration and transformation of nutrients across the land-sea interface in the Guangdong-Hong Kong-Macao Greater Bay Area, National Natural Science Foundation of China, 2019-2023, PI (through Southern University of Science and Technology).
3. INFEWS (U.S.-China): Sustainability in the Food-Energy-Water nexus; integrated hydrologic modeling of tradeoffs between food and hydropower in large scale Chinese and US basins, a joint program of National Natural Science Foundation of China and U.S. National Science Foundation, 2018-2022, PI (through Southern University of Science and Technology).
4. Guangdong Provincial Key Laboratory of Soil and Groundwater Pollution Control and Remediation, Government of Guangdong Province, 2017-2020, PI (through Southern University of Science and Technology).

5. Development and application of integrated technologies for groundwater remediation, Leading Talents Program of Guangdong Province, Government of Guangdong Province, 2017-2021, PI (through Southern University of Science and Technology).
6. Seawater intrusion along the eastern coastlines of China and associated environmental impacts, National Key R&D Program of China, 2016-2020, PI (through Southern University of Science and Technology).
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9. Key Laboratory for Soil and Groundwater Pollution Control of Shenzhen City, Shenzhen Municipal Government, 2015-2017, PI (through Southern University of Science and Technology).
10. Integrated modeling and prediction of the water-ecosystem-economics system in the Heihe River Basin, National Natural Science Foundation of China, 2015-2018, co-PI (through Peking University).
11. Effects of small-scale preferential flow paths on contaminant transport and remediation, National Natural Science Foundation of China, 2014-2018, PI (through Peking University).
12. System behaviors and regulation of ecohydrological processes in the middle and lower Heihe River Basin, National Natural Science Foundation of China, 2013-2016, PI (through Peking University).
13. Risk assessment of groundwater contamination from a REE mining site in Baotou, Inner Mongolia, China Ministry of Environmental Protection, 2013-2016, PI (through Peking University).
14. Development of technical guidelines for comprehensive assessment of groundwater contamination, China Ministry of Environmental Protection, 2011-2016, PI (through Peking University).
15. Field study of contaminant transport processes and numerical model development, China Geological Survey, 2011-2013, PI (through Peking University).
16. Collaborative Research: High-resolution dynamic characterization of transport pathways: providing new insights into subsurface processes, National Science Foundation, 2008-12, PI (through University of Alabama).
17. Optimal management of coastal aquifers against seawater intrusion, Baldwin County, Alabama, NOAA through the state of Alabama, 2008-2009, PI (through University of Alabama).
18. With John Zachara (PI) and 17 co-PIs, Multi-scale mass transfer processes controlling natural attenuation and engineered remediation: An Integrated Field Challenge (IFC) focused on Hanford's 300 Area uranium plume, Department of Energy, 2007-2012, co-PI (through University of Alabama).
19. Accurate determination of groundwater recharge on the North China Plain through environmental tracers and 3D numerical modeling, Sino-German International Collaborative Research Program, National Natural Science Foundation of China, 2010-2012, PI (through Peking University).
20. A Coupled surface water-groundwater model for understanding hydrologic processes and water quality evolution in the North China Plain (NCP), Ministry of Science and Technology of China, 2007-2011, PI (through Peking University).
21. Spatial distribution of groundwater ages in a large sedimentary basin: Numerical simulation and application, National Natural Science Foundation of China, 2007-2009, PI (through Peking University).
22. Collaborative Research: Solute transport in aquifers containing connected high-conductivity networks: theory founded on laboratory and field data, National Science Foundation, 2006-2009, PI.
23. Development of modeling methods and tools for predicting coupled reactive transport processes in porous media at multiple scales, Department of Energy, 2006-2009, PI of subaward to Alabama.
24. Discrete fracture network models for risk assessment of carbon sequestration in coal, Department of Energy, 2005-2008, PI of subaward to Alabama.
25. Sustainable groundwater management of coastal aquifers in Baldwin County, Alabama, NOAA through the state of Alabama, 2005-2007, PI.

26. Reliability considerations in groundwater remediation system and monitoring network design, DuPont Company, 2005-2006, PI.
27. Development of information infrastructure for hydrological sciences, National Science Foundation, 2004-2005, PI of subaward to Alabama.
28. Groundwater study of Ft. Morgan Peninsula, Baldwin County, NOAA through the state of Alabama, 2004-2005, PI.
29. Further development of the MT3DMS contaminant transport model for linkage with the Army Risk Assessment Modeling System, Army Engineer Research and Development Center, 2003-2004, PI.
30. Further development of the ModGA code for contaminant source identification, DuPont Company, 2003-2004. PI.
31. Acquisition of geophysical field equipment for earth science research and teaching at the University of Alabama, NSF, 2002-2004, Co-PI.
32. With Jimmy Jiao (University of Hong Kong), Modification of regional groundwater regimes by large-scale land reclamation, Research Grants Council of Hong Kong, 2002-2005, Co-PI.
33. Collaborative Research: A systematic study of solute transport influenced by preferential flow paths at the decimeter and smaller scales, NSF, 2001-2005, PI. Field demonstration of transport optimization modeling for reducing the costs of groundwater pump-and-treat systems, Department of Defense Environmental Security Technology Certification Program (ESTCP), 2000-2003, PI.
35. Further development of the ModGA code for monitoring network design optimization, DuPont Company, 2002-2003. PI.
36. With Amy Ward (Project Director, University of Alabama) and 17 others at University of Alabama and University of New Mexico, Integrated Graduate Education Research Training (IGERT) Program in Freshwater Sciences, NSF, 1999-2004, co-investigator and leader of the solute transport research theme.
37. With Jimmy Jiao (University of Hong Kong), Origin and evolution of abnormal fluid pressures in the Shiwu area in northeastern China, Research Grants Council of Hong Kong, 1999-2002, Co-PI.
38. Multi-fractal scaling of hydraulic conductivity distributions and the effect on plume-scale contaminant transport, National Science Foundation, 1997-2000, PI of subaward to Alabama.
39. Subsurface site characterization via a computer-aided tool, Gulf Coast Hazardous Substance Research Center, US EPA, 1998-2000, Co-PI.
40. Development and application of a multicomponent solute transport simulator for the Department of Defense Groundwater Modeling System (GMS), US Army Engineer Research and Development Center, 1996-2000, PI.
41. Incorporation of variably saturated flow and contaminant transport in the groundwater flow and transport optimization model ModGA, DuPont Chemical, 1998-1999, PI.
42. Modeling biologically reactive contaminant transport and natural attenuation, Pacific Northwest National Laboratory, Department of Energy, 1997-1998, PI.
43. A global optimization approach for parameter identification in contaminant transport modeling, U.S. Environmental Protection Agency, 1995-1997, PI.
44. Development of a simulation-optimization model for groundwater management and remediation designs, DuPont Company, 1995-1998, PI.
45. Parameter identification using genetic algorithms, DuPont Company, 1995-1996, PI.
46. Simulation of reactive tracer transport in a strongly heterogeneous aquifer, Cray Research, Inc., 1995-1996, PI.
47. Augmentation of optimal policy selections to groundwater contaminant transport model MT3D (Phases I and II), USGS through Alabama Water Resources Research Institute, 1994-1995, Co-PI.
48. Development of an advanced contaminant fate and transport simulator for Cray supercomputers, Cray Research, Inc., 1994-1995, PI.
49. An investigation of underpressured geological formations for disposal of hazardous wastes, State of Alabama through UA School of Mines and Energy Development, 1994-95, PI.

50. A graduate fellowship to support Ph.D. research in hydrogeology, S.S. Papadopulos & Associates, Inc., 1994-1995, PI.