

MING YE
Professor in Hydrogeology

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EDUCATION

Ph.D. in Hydrology, Department of Hydrology and Water Resources,
College of Engineering, University of Arizona, 2002

Minor in Applied Mathematics

Dissertation: Parallel Finite Element Algorithm for Transient Flow in Bounded
Randomly Heterogeneous Domains

Advisor: Shlomo P. Neuman

Master Study in Hydrogeology, Department of Earth Sciences, Nanjing University, 1999

B. Sc. in Geology, Department of Earth Sciences, Nanjing University, China, 1997

PROFESSIONAL EXPERIENCE

Professor 8/2017-present
Department of Earth, Ocean, and Atmospheric Science, Florida State University,
Tallahassee, FL

Professor 8/2016-present
Department of Scientific Computing, Florida State University, Tallahassee, FL

Associate Professor 8/2011-7/2016
Department of Scientific Computing, Florida State University, Tallahassee, FL

Assistant Professor 8/2010-8/2011
Department of Scientific Computing, Florida State University, Tallahassee, FL

Assistant Professor 1/2007-8/2010
Department of Geological Science, Florida State University, Tallahassee, FL

Assistant Research Professor 6/2004-12/2006
Division of Hydrologic Sciences, Desert Research Institute, Las Vegas, NV

Postdoctoral Research Associate 11/2002-5/2004
Hydrology Technical Group, Energy and Environmental Directorate, Pacific Northwest
National Lab, Portland Office, Portland, OR

Graduate Research Assistant 8/1999-10/2002
Department of Hydrology and Water Resources, College of Engineering, University of
Arizona, Tucson, AZ

RESEARCH AND TEACHING INTERESTS

- Computational Bayesian analysis in Earth and environmental sciences
- Uncertainty quantification and risk assessment for hydrologic modeling
- Machine learning for groundwater flow and contaminant transport
- Karst and sinkhole hydrogeology
- Groundwater reactive transport modeling
- Geostatistical methods for site characterization and contaminant remediation
- Stochastic methods in groundwater hydrology
- Coastal geomorphology and hydrodynamic modeling
- Earth system modeling under climate changes

AWARDS AND HONORS

- 2015, Walter L. Huber Civil Engineering Research Prize, American Society of Civil Engineers
- 2014, Developing Scholar Award, Florida State University
- 2014, Outstanding Contribution in Reviewing Award, *Advances in Water Resources*
- 2013, Top 10 Cited Paper 2012-2013, *Advances in Water Resources*
- 2012, Innovator Award, Florida State University
- 2012, Fellow, Geological Society of America
- 2012, Early Career Award, Department of Energy

EDITORIAL BOARD

2020 – present, Associate Editor of *Groundwater* published by the National Ground Water Association

2019 – present, Associate Editor of *Journal of Hydrologic Engineering* published by American Society of Civil Engineers

2011 – 2021, Associate Editor of *Water Resources Research* published by the American Geophysical Union

2014 – 2019, Associate Editor of *Journal of Hydrology* published by Elsevier

PATENTED INVENTIONS

Ming Ye, Kyle A. Compare, and Daniel J. Dominguez (2023). Automated Device for In-Situ Measurements of Groundwater Fluxes to Surface Water Bodies. US 11604088, Florida State University. Tallahassee, FL.

GRANTS AND CONTRACTS (CURRENT)

(1) **A Three-Pillar Socio-Health-Environmental (TPSHE) Framework to Mitigate Cumulative Health Impacts and Environmental Health Disparities for Polluted Urban Lakes in Underserved Communities, \$1,999,834**

Principal Investigator (PI), Environmental Protection Agency, 8/1/2024 – 7/31/2027. Recommended for funding by EPA, but contract pending.

(2) **A Model-Experiment (ModEx) Framework to Advance Understanding of Fertilizer and Pesticide Reactive Transport in Rural Agricultural Areas, \$399,786**
Principal Investigator (PI), Environmental Protection Agency, 6/1/2024 – 5/31/2027.

(3) **EPA Region 4 Environmental Justice Thriving Communities Technical Assistance Centers Program, \$293,207**
Principal Investigator (PI), Environmental Protection Agency, FSU is a subcontract of Research Triangle International, 3/1/2023 – 2/29/2028.

(4) **ArcNLET Software Renovation and User Community Incubation for Estimating Nitrogen Load from Septic Tanks to Surface Waterbodies, \$223,044**
Principal Investigator (PI), Florida Department of Environmental Protection, 6/2022 – 12/2024.

(5) **The Bioecological Center for Rural Children's Health (BeRCH), \$1,900,000**
Co-Investigator (PI: Gregg Stanwood, FSU), Environmental Protection Agency, 9/2023 – 8/2027.

(6) **Forest Adaptation to Climate Change: Flood Control by Forested Wetlands, \$149,163.**
Co-Principal Investigator (PI: Gang Chen, FSU), Florida State University, 8/2023 – 8/2025.

(7) **Nature-based Infrastructure for Enhancing Climate Resiliency of Groundwater Resources in South Florida: An Integrated Modeling Approach, \$649,817**
Co-Principal Investigator (PI: Ahmed Elshall, FGCU), Environmental Protection Agency, 6/1/2024 – 5/31/2027.

(8) **Nutrient Pollution and Salinity Regimes in the St. Lucie and Caloosahatchee Estuaries: Unveiling the relative contribution of natural and anthropogenic factors, \$400,000**
Co-Principal Investigator (PI: Ebrahim Ahmadisharaf, FSU), Environmental Protection Agency, 1/1/2024 – 12/31/2027.

(9) **Developing a Scalable Tool for Water Quality Analyses across the St. Lucie River and Estuary Basin, \$357,242**
Co-Principal Investigator (PI: Ebrahim Ahmadisharaf, FSU), Environmental Protection Agency, 1/2022 – 1/2025

(10) **A Scalable Predictive Tool to Identify Vulnerable Coastal Areas to Harmful Algae Bloom across Panhandle, \$362,598**

Co-Principal Investigator (PI: Ebrahim Ahmadisharaf, FSU), Florida Department of Environmental Protection, 5/2022 – 4/2025

GRANTS AND CONTRACTS (COMPLETED)

(11) **Numerical Modeling for Investigating Onsite Sewage Treatment and Disposal Systems (OSTDS) Setback Distance, \$104,014**
Principal Investigator, Florida Department of Environmental Protection, 12/2022 – 9/2023.

(12) **CoPe EAGER: Multi-Scale Exploration of Nutrient Cycles and its Socio-Economic Impacts in Coastal Areas, \$297,900**
Principal Investigator (PI), National Science Foundation, 10/2019 – 9/2022

(13) **Multimodel Bayesian Data-Worth Analysis for Groundwater Remediation Design, \$455,361 (FSU Budget \$271,601)**
Principal Investigator (PI) (Co-PIs: Roseanna Neupauer and Joseph Kasprzyk, University of Colorado, Boulder), National Science Foundation, 8/2016 – 7/2021

(14) **RAPID: Turning a Lake Sinkhole Event into Natural/Man-Made Tracer Experiments and Data Collection Campaign for Advanced Understanding of Karst Hydrogeology and Solute Transport, \$49,773**
Principal Investigator (PI), National Science Foundation, 3/2018 – 2/2021

(15) **Synthesizing Detailed Expert Guidance on Florida Department of Environmental Protection's Septic Vulnerability Model and Pilot-Testing Recommended Improvements, \$29,999**
Principal Investigator (PI), Florida Department of Environmental Protection, 1/2022 – 6/2022

(16) **Water Resources and Environmental Sustainability of Coastal Cities under Population Growth, Economic Development, and Climate Change, \$43,509**
Principal Investigator (PI), Qingdao Geological Engineering Survey Institute, 1/2020 – 12/2021

(17) **Multi-model and Multi-scale Global Sensitivity Analysis for Identifying Controlling Processes of Complex Systems, \$180,292**
Principal Investigator (PI), Department of Energy, 8/2018 – 7/2020

(18) **Computational Bayesian Framework for Quantification and Reduction of Predictive Uncertainty in Groundwater Reactive Transport Modeling, \$761,437**
Principal Investigator (Single PI), Department of Energy Early Career Award, 7/2012 – 6/2018

(19) **Developing a GIS-Based Software for Estimating Nitrate Fate and Transport from Septic Systems in Surficial Aquifers, \$487,309**
Principal Investigator (single PI), Florida Department of Environmental Protection, 9/2011 – 8/2017

(20) **Mathematical and Experimental Investigation of Catastrophic Sinkhole Collapse, \$25,000**

Principal Investigator, FSU CRC MultiDisciplinary Support (MDS) Program, 2/2014 – 8/2015

(21) **Effect of Calibration Data on Evaluating Plausibility of Alternative Groundwater models, \$105,265**
Principal Investigator (single PI), National Science Foundation, 9/2009 – 8/2013

(22) **Mult-Scale Assessment of Prediction Uncertainty in Coupled Reactive Transport Models, \$193,634 (total \$1,195,310)**
Co-Principal Investigator (PI: Gary Curtis), Subsurface Biogeochemical Research (SBR) Program, Department of Energy, 4/2009 – 4/2013

(23) **Parallel Computing for Assessment of Predictive Uncertainty in Groundwater Reactive Transport Modeling, \$75,000**
Principal Investigator (single PI), ORAU/ORNL High Performance Computing (HPC) Grant Program, 6/2009 – 12/2012

(24) **Effect of Near-Term Sea-Level Rise on Coastal Military Infrastructure, \$186,667 (total \$1,002,000)**
Co-Principal Investigator (PI: Joseph Donoghue), Strategic Environmental Research and Development Program (SERDP), Department of Defense, 4/2009 – 4/2012

(25) **Multimodel Bayesian Analysis of Data Worth in Environmental Modeling, \$14,000**
Principal Investigator (single PI), FSU CRC Committee on Faculty Research Support (COFRS) Program, 5/2011 – 9/2011

(26) **Environmental Impacts of Energy Production Systems: Analysis, Evaluation, Training, and Outreach, \$10,737 (total \$87,417)**
Co-Principal Investigator (PI: Amy Chan-Hilton), Institute for Energy Systems, Economics, and Sustainability, Florida State University, 2/2009 – 6/2011

(27) **Plume-Scale Heterogeneity Characterization and Numerical Simulation of Contaminant Transport at the BC Cribs Site: A Preliminary Study, \$14,146**
Principal Investigator (Single PI), Fluor Hanford, 10/2008 – 5/2009

(28) **A New Method of Characterizing Heterogeneity and Uncertainty of Soil Hydraulic Parameters, \$30,259**
Principal Investigator (Single PI), Fluor Federal Services, 4/2007 – 9/2007

(29) **Uncertainty Assessment and Data Assimilation for Groundwater Reactive Transport Modeling, \$15,863**
Principal Investigator (Single PI), Florida State University, 5/2007 – 8/2007

(30) **Geostatistical and Stochastic Study of Radionuclide Transport in the Unsaturated Zone at Yucca Mountain, \$624,678**
Principal Investigator, Department of Energy, 6/2004 – 5/2007

(31) **A New Method to Estimate Soil Hydraulic Parameter Uncertainty and Heterogeneity Using Bayesian Updating and Neural Network Methods, \$357,899**

Co-Principal Investigator (PI: Julian Zhu), Department of Energy, 10/2005 – 9/2008

(32) **Uncertainty Analysis of Uranium Transport at Hanford 300 Area, \$70,000**
Principal Investigator (single PI), Nuclear Regulatory Commission, 10/2004 – 9/2006

(33) **Using Artificial Neural Networks to Predict Migration from Buried Liquid Discharges, \$35,000**
Principal Investigator (single PI), Fluor Federal Services, 6/2005 – 5/2006

COMPUTER SOFTWARE DEVELOPMENT

(1) **ArcNLET-Py, Python Version of ArcNLET for ArcGIS Pro**
This is a new version of ArcNLET written in Python programming language for ArcGIS Pro. All Python sources, user manual, and training data are available online at <https://github.com/ArcNLET-Py/ArcNLET-Py>.

(2) **ArcNLET: ArcGIS-Based Nitrate Load Estimation Toolkit**
Public-domain software available at <http://people.sc.fsu.edu/~mye/ArcNLET/>. Developed with student J. Fernando Rios under the support of Florida Department of Environmental Protection.

(3) **VZMOD: Vadose Zone MODel of Nitrogen Transformation and Transport**
Public-domain software available at <http://people.sc.fsu.edu/~mye/VZMOD/>. Developed with post-doc Liying Wang under the support of Florida Department of Environmental Protection.

TEACHING EXPERIENCE

(1) **Introduction to Remote Sensing, Air Photo Interpretation, and GIS for the Earth Sciences (GLY 4751C/GLY5757C)**
Department of Earth, Ocean, and Atmospheric Science, Florida State University

(2) **Introductory Earth Science (ESC 1000)**
Department of Earth, Ocean, and Atmospheric Science, Florida State University

(3) **Hydrogeology and Field Methods (GLY 4721/5828)**
Department of Earth, Ocean, and Atmospheric Science, Florida State University

(4) **Applied Groundwater Modeling (GLY 5896/ISC 5236)**
Department of Earth, Ocean, and Atmospheric Science and Department of Scientific Computing, Florida State University

(5) **Principles of Hydrology (GLY 4820/5827)**
Department of Earth, Ocean, and Atmospheric Science, Florida State University

(6) **Symbolic and Numerical Computing (ISC 3222)**
Department of Scientific Computing, Florida State University

(7) **Programming for Scientific Applications (ISC 4304)**
Department of Scientific Computing, Florida State University

(8) **Applied Computational Science II (ISC 5316)**
Department of Scientific Computing, Florida State University

(9) **Numerical Methods for Earth and Environmental Sciences (ISC 5226)**

Department of Scientific Computing, Florida State University

(10) **Uncertainty Analysis in Computational Science (ISC 5237)**
Department of Scientific Computing, Florida State University

(11) **Geostatistics (GEY 716)**
Department of Geosciences, University of Nevada, Las Vegas

(12) **Seminar: Groundwater Reactive Transport Modeling (ISC 5939-03)**
Department of Scientific Computing, Florida State University

(13) **Seminar: Numerical Simulation of Coastal Hydrodynamics (ISC 5939-07)**
Department of Scientific Computing, Florida State University

(14) **Seminar: Multiphase Flow and Solute Transport Modeling (ISC 5939-02)**
Department of Scientific Computing, Florida State University

MEDIA COVERAGE

- **“Sarasota County Defines Nokomis Holes as ‘Deep Geological Strata’” (2023):** Ming Ye was interviewed by ABC 7 Sarasota on a sinkhole issue in Nokomis, Sarasota. The media coverage is available at <https://www.mysuncoast.com/2023/05/28/sarasota-county-defines-nokomis-holes-deep-geological-strata/>
- **“Dyes and Isotopes Track Groundwater from Sink to Spring” (2021):** Research of Ming Ye and Dr. Nur Ahmed was reported by EOS, the newsletter of American Geophysical Union. The media coverage is available at <https://eos.org/articles/dyes-and-isotopes-track-groundwater-from-sink-to-spring>.
- **Will the White House Sinkhole Keep Growing? (2018):** Ming Ye was interviewed by mashable.com on a “sinkhole” occurred White House lawn. The media coverage is available at <https://mashable.com/article/will-white-house-sinkhole-grow>.
- **Florida Chamber of Commerce (2015):** Ming Ye was interviewed by Brian LaPointe for a program funded by the Florida Chamber of Commerce for environmental sustainability in Florida.
- **Russia Today International (2015):** Ming Ye was interviewed by Russia Today International to discuss origins of sinkholes in Russia. The interview is available at <https://www.youtube.com/watch?v=NTxE9buMVn4&feature=youtu.be>.
- **History Channel (2015):** Our laboratory study of sinkhole development and catastrophic collapse was included in a one-hour program of the History Channel entitled “Engineering Disaster”. The History Channel video is online at <http://www.history.com/shows/engineering-disasters>
- **PBS/NOVA (2015):** Our laboratory study of sinkhole development and catastrophic collapse was included in a one-hour program of PBS/NOVA entitled “Sinkholes: Buried Alive”. It is covered at FSU news <http://news.fsu.edu/More-FSU-News/Researcher-to-appear-on-NOVA-s-Sinkholes-Buried-Alive>. The PBS/NOVA video is online at <http://www.pbs.org/wgbh/nova/earth/sinkholes.html>.
- **WFSU (2014):** Our laboratory and computational studies on sinkhole development and catastrophic collapse was reported on PBS WFSU in 2014. View the media coverage at <http://news.fsu.edu/Watch-and-Listen/Radio-Stories/FSU-researchers-studying-sinkhole-patterns>.
https://www.youtube.com/watch?v=1d_5yLnlpA0&feature=youtu.be.
- **FSU News (2011):** Our development of new software for nitrogen transport modeling was report by FSU in 2011. See the report entitled “New software aids fight against

nitrates in Florida's groundwater" at <https://www.fsu.edu/news/2011/07/06/new.software/>.

- **NPR/Morning Edition (2007):** Our numerical study of radionuclide transport was reported on. See the report entitled "Gas Drilling Plan Near Nuclear Site Raises Worries" at <http://www.npr.org/templates/story/story.php?storyId=15056460>

GRADUATE AND UNDERGRADUATE STUDENTS

Ph.D. Degree (10 graduated + 1 current)

- (1) Michael Core, Fall 2022 – present, Department of Earth, Ocean, and Atmospheric Science, Florida State University
- (2) Kyle Compare (Spring 2024), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Dissertation: Hydrochemical and Deep Learning Investigations of Groundwater-Surface Water Interactions in the Eogenetic Karst Systems of Florida
- (3) Nur Ahmed (Spring 2020), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Dissertation: Isotope Analysis and Groundwater Modeling For Advanced Understanding of Lake Water and Groundwater Mixing through Lake Sinkholes in North Florida
- (4) Xiaoli Liu (Fall 2017), Department of Civil Engineering, Co-advised with Professor Gang Chen, Florida State University
Dissertation: Optimization of Groundwater Long-Term Monitoring Network with Ant Colony Optimization
- (5) Roger Benito Pacheco Castro (Summer 2017), Geophysical Fluid Dynamics Institute, Florida State University
Dissertation: Statistical Analysis of Karst Aquifer Pollution, Karst Flow Model Validation at Laboratory Scale, and Development of Seepage Meter
Now a scientist at Mexican Autonomous University, Mexico
- (6) Bikash Saha (Spring 2017), Department of Scientific Computing, Florida State University, Co-advised with Alan Niedoroda
Dissertation: Modeling of Complex Behaviors of Submarine Debris Flows
Now an engineer in the Florida Department of Management Services
- (7) Karina Khazmutdinova (Fall 2016) (Female), Geophysical Fluid Dynamics Institute, Co-advised with Professor Nick Moore in the Math department
Dissertation: Water and Air Flows in Karstic Caves and Conduits
Now a Mirzayan Science & Technology Policy Fellow at the National Academies of Sciences, Engineering, and Medicine
- (8) Benjamin McLaughlin (Summer 2015), Department of Scientific Computing, Florida State University, Co-advised with Professor Janet Peterson
Dissertation: Reduced-Order Modeling of Reactive Transport for Advection-Dominated Problems with Nonlinear Kinetic Reactions
Now a scientist at the Naval Support Activity Panama City
- (9) Heng Dai (Fall 2014), Department of Scientific Computing, Florida State University

Dissertation: Uncertainty Quantification for Groundwater Reactive Transport and Coastal Morphological Modeling
 Now an Associate Professor at Jinan University, China

(10) Dan Lu (Spring 2012) (Female), Department of Scientific Computing, Florida State University
Dissertation: Assessment of Parametric and Model Uncertainty in Groundwater Modeling
 Now a staff scientist at the Oak Ridge National Laboratory

(11) Hailin Deng (Fall 2009), Department of Geological Sciences, Florida State University
Dissertation: Upscaling Reactive Transport Parameters for Porous and Fractured Porous Media
 Now a Scientist at Australia Commonwealth Scientific and Industrial Research Organization (CSIRO)

Master Degree (16 graduated + 2 current)

- (1) Jordan Hopwood, Fall 2022 – present, Department of Earth, Ocean, and Atmospheric Science, Florida State University
- (2) John Deming, Fall 2021 – present, Department of Earth, Ocean, and Atmospheric Science, Florida State University
- (3) Clint Kromhout (Fall 2023), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Thesis: An Analysis of Sinkhole Morphometric Orientations and Lineament Orientations in Parts of Leon, Wakulla, Gadsden, and Jefferson counties of Florida
- (4) Joshua Shultz (2023 Spring), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Thesis: Numerical Modeling of Sewage Exfiltration and Solute Transport in Variably Saturated Media Using Finite Element Subsurface Flow and Transport System
- (5) Beth Perison (Fall 2022), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Thesis: Post Audit of a Subregional Groundwater Flow Model: Simulated and Measured Discharge at Wakulla Springs and Implications for Future Flow Modeling
- (6) Emily Lizotte (Spring 2022), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Thesis: Geochemical Investigation of Lake Jackson 2021 Dry-Down Event Water and Chemical Evolution along Flow Path Using Calcite Saturation Conditions
- (7) Sally Gorrie (Spring 2021), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Thesis: Geological, Geophysical, and Hydrogeological Investigation of the Underground Source of Drinking Water (USDW) Line to Support Deep Injection, Northern Pasco County, Florida
- (8) Greta Mikell (Spring 2021), Department of Earth, Ocean, and Atmospheric Science, Florida State University

(9) Thesis: Numerical Modeling and Field Investigation of Nitrate Loading from Septic Systems to Surface Water Bodies in the Bayou Chico Watershed, Pensacola, FL
 Kyle Compare, (Spring 2020, Department of Earth, Ocean, and Atmospheric Science, Florida State University
Thesis: Development and Testing of an Automated, In-Situ Groundwater Seepage Meter

(10) Serena Pham (Fall 2017), Department of Scientific Computing, Florida State University
Thesis: A Comparative Study between a Single Sorption Constant Model and a Humic Ion-Binding Model

(11) Hongzhuhan Lei (Fall 2017) Department of Scientific Computing, Florida State University
Thesis: Estimation of Nitrogen Load from Septic Systems to Surface Waterbodies in Indian River County, FL.

(12) Benjamin McLaughlin (Fall 2011), Department of Scientific Computing, Florida State University, Co-advised with Professor Janet Peterson
Thesis: Reduced Order Modeling of Reactive Transport in a Column Using Proper Orthogonal Decomposition
 Now a doctoral student at the Department of Scientific Computing at the Florida State University

(13) Heng Dai (Fall 2011), Department of Scientific Computing, Florida State University
Thesis: Barrier Island Responses to Storms and Sea-Level Rise: Numerical Modeling and Uncertainty Analysis
 Now a post-doc at the Pacific Northwest National Laboratory

(14) Raoul Fernandes (Summer 2011), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Thesis: Statistical Methods for Estimating Denitrification Rate
 Now an Environmental Engineer at New Zealand Environmental Services

(15) Fernando Rios (Fall 2010), Department of Scientific Computing, Florida State University
Thesis: A GIS-Based Model for Estimating Nitrate Fate and Transport from Septic Systems in Surficial Aquifers
 Now a post-doc at the John Hopkins University

(16) Geoffery L. Miller (Fall 2010), Department of Scientific Computing, Florida State University
Thesis: Parametric Uncertainty Analysis of Uranium Transport Subsurface Complexation Models
 Now a Lecture of the Program of Interdisciplinary Computing of the Florida State University

(17) Feng Pan (Fall 2005), Department of Geosciences, University of Nevada, Las Vegas
Thesis: Uncertainty Analysis of Radionuclide Transport in the Unsaturated Zone at Yucca Mountain (Thesis advisor)
 Now a Research Assistant Professor in the Department of Civil & Environmental Engineering, Energy & Geoscience Institute of the University of Utah

Undergraduate Honors Theses

(1) Carolyn Emerson (Spring 2024), Department of Earth, Ocean, and Atmospheric Science, Florida State University
Thesis: An Atmospheric-Terrestrial Teleconnection Study for Impacts of ENSO-Influenced Precipitation on Groundwater Levels Relating to Lake Sinkhole Dry-Down Events

POST-DOCS, TECHNICIANS, AND VISITING SCHOLARS

Post-docs (8 + 1 current)

(1) Wei Mao, 2/2023 – present, Graduated from Wuhan University
(2) Ahmed Elshall, 1/2020 – 6/2022, Graduated from Louisiana State University
(3) Ahmed Elshall, 3/2014 – 2/2017, Graduated from Louisiana State University
(4) Mohammad Sayemuzzaman, 6/2014 – 8/2015, Graduated from North Carolina A&T State University
(5) Xuehang Song, 8/2014 – 10/2016, now a post-doc at the Pacific Northwest National Laboratory
(6) Yan Zhu, 2/2014 – 2/2015, now an Associate Professor at Wuhan University
(7) Huawei Sun, 9/2012 – 10/2013, now a Lecture at Huazhong University of Science and Technology
(8) Liying Wang (female), 4/2010 – 5/2012, now a Project Manager at the China Pearl River Water Resource Planning Surveying and Designing Co. Ltd,
(9) Xiaoqing Shi, 1/2011 – 1/2012, now an Associate Professor at Nanjing University

Technician (2)

(1) Jing Yang, 3/2019 – 11/2022, Graduated from China University of Geoscience, Wuhan
(2) Daniel Dominguez, 1/2019 – 7/2019, Graduated from Florida State University

Visiting Scholars (24)

(1) Tian Jiao, 12/2019 – 9/2022, China University of Geoscience, Wuhan, China
(2) Wanghua Sui, 12/2019 – 12/2019, China University of Mining and Technology, China
(3) Bingxin Zhao, 1/2019 – 1/2020, Ningxia University, China
(4) Jiawei Liu, 11/2018 – 11/2019, China University of Mining and Technology, China
(5) Juxiu Tong, 10/2018 – 10/2019, China University of Geoscience, Beijing, China
(6) Xiaobing Kang, 10/2018 – 9/2019, Chengdu University of Technology, China
(7) Sheng Luo, 10/2018 – 9/2019, Sichuan Normal University, China
(8) Jing Yang, 3/2018 – 9/2018, China University of Geoscience, Wuhan, China.
(9) Jie Ren, 12/2016 – 12/2017, Xi'an University of Technology, China
(10) Jun Li, 11/2016 – 11/2017, Sichuan University, China
(11) Yue Zhang, 11/2016 – 11/2017, Yunnan Agricultural University, China
(12) Bin Xu, 10/2016 – 10/2017, China University of Mining and Technology, China
(13) Qiming Zhang, 10/2015 – 4/2016, Ningxia University, China
(14) Li Wang, 10/2015 – 4/2016, Ningxia University, China
(15) Ting Li, 10/2015 – 4/2016, Ningxia University, China

- (16) Liyu Chen, 10/2015 – 4/2016, Ningxia University, China
- (17) Saeedeh Samani, 2/2015 – 9/2015, University of Tabriz, Iran
- (18) Dangliang Wang, 2/2014 – 2/2015, Now an Associate Professor at China University of Mining and Technology
- (19) Xianqui Zeng, 9/2013 – 8/2014, Now a Lecture at Nanjing University
- (20) Xiaohu Tao, 9/2013 – 8/2014, Now a Doctoral student at Hohai University
- (21) Peigui Liu, 7/2013 – 1/2014, now a Lecturer at Hefei University of Technology
- (22) Dongwei Gui, 5/2013 – 12/2013, now a Research Scientist at Xinjiang Institute of Ecology and Geography
- (23) Dejun Feng, 9/2011 – 8/2012, now an Associate Professor, Southwest Jiaotong University
- (24) Zhiliang Wang, 3/2007 – 2/2008, now a Professor, North China University of Water Conservancy and Electric Power

MEMBERSHIPS

American geophysical Union (AGU)
 Geologic Society of America (GSA)
 American Society of Civil Engineers (ASCE)
 National Groundwater Association (NGWA)
 International Association of Hydrological Sciences (IAHS)
 International Association for Mathematical Geosciences (IAMG)
 Chinese American Water Resources Association (CAWRA)

LIST OF PUBLICATIONS

Peer-Reviewed Journal Articles (Published)

2024 (3 papers)

- 178. Dai, H., Liu, Y.J., Guadagnini, A., Yuan, S.H., Yang, J., and **Ye, M.** (2024), Comparative assessment of two global sensitivity approaches considering model and parameter uncertainty, *Water Resources Research*, 60(2), DOI: 10.1029/2023WR036096
- 177. Dai, H., Ju, J.L., Gui, D.W., Zhu, Y., **Ye, M.**, Liu, Y.J., Cui, J.B., Hu, B.X. (2024), A two-step Bayesian network-based process sensitivity analysis for complex nitrogen reactive transport modeling, *Journal of Hydrology*, 632, DOI: 10.1016/j.jhydrol.2024.130903
- 176. Mao, W., Zhu, Y., Huang, S., Xan, X.D., Su, G.F., Ye, M., and Yang, J.Z. (2024), Assessment of spatial and temporal seepage losses in large canal systems under current and future water-saving conditions: A case study in the Hetao Irrigation District, China, *Agricultural Water Management*, 291, DOI: 10.1016/j.agwat.2023.108615.

2023 (6 papers)

- 175. Dai, H., Zhang, F., **Ye, M.**, Guadagnini, A., Liu, Q., Hu, B., & Yuan, S. (2022). A Computationally Efficient Method for Estimating Multi-Model Process

Sensitivity Index. *Water Resources Research*, 58, e2022WR033263. <https://doi.org/10.1029/2022WR033263>.

174. Qian, Y., Zhu, Y., Zhang, X., Wu, J., **Ye, M.**, Mao, W., Wu, J., Huang, J., & Yang, J. (2023). A Local Grid-Refined Numerical Groundwater Model Based on the Vertex-centred Finite-Volume Method. *Advances in Water Resources*, 173.

173. Wang, M., Zhu, Y., Mao, W., **Ye, M.**, & Yang, J. (2023). Chemical characteristics and reactive transport of soil salt ions in frozen soil during the freeze and thaw period. *Journal of Hydrology*, 621.

172. Zhu, Y., Zhao, T., Mao, W., **Ye, M.**, Han, X., Jia, B., & Yang, J. (2023). Development of flow model for partly and fully saturated soils using water balance and water table depth fluctuation analysis. *Journal of Hydrology*, 618.

171. Du, Y., **Ye, M.**, & Zhang, Q. (2023). Global martingale solutions to stochastic population-toxicant model with cross-diffusion. *Applied Mathematics Letters*, 145.

170. Ren, W., Dai, H., Yuan, S., Dai, Z., **Ye, M.**, & Soltanian, M. R. (2023). Global sensitivity study of non-reactive and sorptive solute dispersivity in multiscale heterogeneous sediments. *Journal of Hydrology*, 619.

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