

Scientific Judgment

Michael J. Friedel, Ph.D.

Technical reviewer for scientific journals

Ground Water Journal, 2003-present
Vadose Zone Journal, 2002-present
Journal of Applied Geophysics, 1993-present
Journal of Engineering Geology, 1993-present
Journal of Coal Geology, 1993-present
Water Resources Research, 2006-present
Journal of Hydrology, 2006-present
Israel Science Foundation, 2008

Technical reviewer for US agencies

Manuscripts and proposals

U.S. Geological Survey
U.S. Environmental Protection Agency
U.S. Center for Disease Control, National Institute Occupational Health and Safety
U.S. Bureau of Mines manuscripts
U.S. Bureau of Mines proposals

Special publications

U.S. Geological Survey surface water software (PULSE, RORA, PART) and user's guide, 2000
U.S. Geological Survey geostatistics web page primer, 2002
U.S. Geological Survey geostatistics textbook (R. Olea), 232 p., 2008

Selection and planning committees

Member, Committee on unsaturated zone for hydrology, American Geophysical Union, discipline, planning, proposal selection: 2004, 2005, 2006, 2007, 2008, 2009, 2010

Member, Program direction, planning, and technical review committee, senior staff, Colorado Water Science Center U.S. Geological Survey: 2001, 2002, 2003, 2004

Member, Agricultural flow and transport program committee, direction and long-range planning, National Water Quality Assessment U.S. Geological Survey: 2002, 2003

Member, Program direction, planning, and technical review committee, Illinois Water Science Center U.S. Geological Survey: 1997, 1998, 1999, 2000, 2001

Member, Reactive unsaturated zone transport model development program committee, direction and long-range planning, U.S. Geological Survey, National Research Program, 2001

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Member, Characterization of hazardous waste sites using geophysical technology committee, long-range planning, Environmental Technology Program, Bureau of Mines, 1995

Member, Well-drilling guidelines to reduce liability for groundwater pollution committee, U.S. Bureau of Mines, 1995

Member, Ground control committee, proposal selection, and funding; Health and Safety program, U.S. Bureau of Mines 1993, 1994, 1995

Peer-Review and Expert Panels

Advisory Board, Center for Computational and Mathematical Biology, University of Colorado	2012- present
Member, National Hazards Panel, U.S. Geological Survey	2008
Member, research grade evaluation panel, U.S. Geological Survey	2005
Member, research grade evaluation panel, U.S. Geological Survey	2004

Chairperson of Scientific Meetings

Co-chair, Regional Groundwater Systems: Advances in modeling, characterization, and applications I, Hydrology session H14E (oral), American Geophysical Union, San Francisco, CA, 2013

Co-chair, Regional Groundwater Systems: Advances in modeling, characterization, and applications II, Hydrology session H13O (oral), American Geophysical Union, San Francisco, CA, 2013

Co-chair, Regional Groundwater Systems: Advances in modeling, characterization, and applications II, Hydrology session H11H (poster), American Geophysical Union, San Francisco, CA, 2013

Co-chair, Characterization of Groundwater Systems, Hydrology oral sessions H11K and H12A (oral), and H13B poster session, American Geophysical Union, San Francisco, CA, 2012

Co-chair, Advanced Computational Modeling Paradigms for Hydrologic Systems, Hydrology poster session H21A, American Geophysical Union, San Francisco, CA, 2012

Co-chair, Uncertainty Assessment, Optimization, and Sensitivity Analysis in Integrated Hydrologic Modeling as Applications of Hydroinformatics III, Hydrology oral session H34D, American Geophysical Union, San Francisco, CA, 2011

Co-chair, Computational Intelligence in Earth and Space Systems, Union poster session U22a, American Geophysical Union, San Francisco, CA, 2011

Co-chair, Computational Intelligence in Earth and Space Systems, Union oral session U22b, American Geophysical Union, San Francisco, CA, 2011

Chair, Empirical, Numerical, Soft, and Hybrid Modeling, Environment and Environmental Security NATO Advanced Research Workshop series: Climate change Effect on Water Supplies – Issues of National and Global Security, Izmir, Turkey, 2010 [INVITED, INTERNATIONAL]

Co-chair, Water Resources Science and Strategies for Adaptation to Climate Variability and Change III, Hydrology oral session H24F, American Geophysical Union, San Francisco, CA, 2010

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Co-chair, Water Resources Science and Strategies for Adaptation to Climate Variability and Change II, Hydrology oral session H21G, American Geophysical Union, San Francisco, CA, 2010

Co-chair, Water Resources Science and Strategies for Adaptation to Climate Variability and Change I, Hydrology poster session H21G, American Geophysical Union, San Francisco, CA, 2010

Co-chair, Climate Change Effects on Ecosystem Services – Issues of Global Security, Natural Hazards oral session, H93, American Geophysical Union, San Francisco, CA, 2010

Co-chair, Quantitative Resource Assessments – Past, Present, and Future, Natural Hazards oral session, NH17, American Geophysical Union, San Francisco, CA, 2010

Co-chair, Advanced Inverse Strategies for Improved Characterization and Assessment of Groundwater, Mineral, and Petroleum Resources I, Near Surface geophysics poster session, NS31A, American Geophysical Union, San Francisco, CA, 2009

Co-chair, Advanced Inverse Strategies for Improved Characterization and Assessment of Groundwater, Mineral, and Petroleum Resources I, Near Surface geophysics oral session, NS41A, American Geophysical Union, San Francisco, CA, 2009

Co-chair, Relationship of Natural and Anthropogenic Hazards to National and Global Security, Public Affairs poster session, PA21B, American Geophysical Union, San Francisco, CA, 2009

Co-chair, Application of Joint Inverse Methods for Improved Characterization and Assessment of Ground-Water, Mineral, and Petroleum Resources, Near Surface geophysics poster session, NS31A, American Geophysical Union, San Francisco, CA, 2008

Co-chair, Multi-Scale Unsaturated Zone Flow and Contaminant Transport Processes, Hydrology poster session H13F, American Geophysical Union, San Francisco, CA, 2008

Co-chair, Improved Estimation and Prediction in Earth Science Through Integration of Multiple Data Sets and Model Types, Near surface geophysics oral session, NS43A, American Geophysical Union, San Francisco, CA, 2007

Co-chair, Preferential flow and transport in variably saturated porous media, Hydrology poster session, H33, American Geophysical Union, San Francisco, CA, 2006

Chair, Flood predictions in ungauged basins, Oral session, International Symposium – Methods in Hydrology, Hohai University, Nanjing, China, 2005 [INVITED, INTERNATIONAL]

Co-chair, Special session - Flood predictions in ungauged basins, International Symposium - Methods in Hydrology, November, Nanjing, China, 2005 [INVITED, INTERNATIONAL]

Chair, Water Quality, NATO Advanced Study Workshop - Groundwater and Ecosystems, Canakkale, Turkey, 2005 [INVITED, INTERNATIONAL]

Co-chair, Spatial Relations Between Plants, Soil, and Water in the Vadose Zone, American Geophysical Union, Hydrology poster session, H12, American Geophysical Union, San Francisco, CA, 2005

Co-chair, Preferential flow and transport in variably saturated porous media, American Geophysical Union oral session, H13I, American Geophysical Union, San Francisco, CA, 2005

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Chair, Regional Overviews, NATO Advanced Research Workshop series: Urban Groundwater Management and Sustainability, Baku, Azerbaijan, 2004 [INVITED, INTERNATIONAL]

Co-chair, Preferential flow and transport in variably saturated porous media, Hydrology poster session, H33B, American Geophysical Union, San Francisco, CA, 2004

Co-chair, Preferential Flow and Transport in Variably Saturated Porous Media, Hydrology oral session, H33A, American Geophysical Union, San Francisco, CA, 2004

Co-Chair, Model Calibration, Parameter Nonuniqueness, and Predictive Uncertainty Associated With Flow and Transport in Variably Saturated Media, hydrology poster session, H12A, American Geophysical Union, San Francisco, CA, 2003

Chair, Annual liaison meetings, budget conference calls, project reviews, Upper Illinois River Basin, National Water Quality Assessment Program, USGS, 1997-2001

Convener of Conference and Workshops

Co-convener, Environment and Environmental Security NATO Advanced Research Workshop series: Climate change Effects on Water Resources– Issues of National and Global Security, Sept.1-5, 2010, Izmir, Turkey [INVITED, INTERNATIONAL]

Editor and Board Member

Editorial board member, The Open Civil Engineering Journal, Bentham Science publishers, 2007-2014

Associate editor, The Journal of Water and Energy Security, Bentham Science publishers, new start in 2013

Co-editor, 2013, NATO Advanced Research book on Climate Change and its Effect on Water Resources- Issues of National and Global Security, [Climate change and its effect on water supplies - Issues of National and Global Security, NATO Science for Peace and Security Science Series C. Environmental Security, vol. 3, Springer, Dordrecht, The Netherlands](#), 318 p.

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