

CURRICULUM VITAE

JOHN M. (Jack) SHARP, JR.

Permanent Address: Department of Geological Sciences, Jackson School of Geosciences
2275 Speedway, EPS 3.150 [C9000]
The University of Texas, Austin, Texas 78712-1722 U.S.A.
(Phone: 512-471-3317; FAX: 512-471-0959; cell: 512-680-5717)
(Email: jmsharp@jsg.utexas.edu)

EDUCATION:

Ph.D., 1974, M.S., 1974, University of Illinois. Hydrogeology (GPA: 5.00/5.00). Ph.D. dissertation: An Investigation of Energy Transport in Thick Sequences of Compacting Sediments (Committee: Pat Domenico (advisor), Fred Donath, Vic Palciauskas, Tom Anderson, R.E. Miller), 140p.
32 semester hours, 1972-73, Midwestern University. Business Administration (attended nights while in the U.S. Air Force). Emphasis on economics and management science. (4.00/4.00)
B. Geological Engineering with Distinction, 1967, University of Minnesota (emphasis on rock mechanics, porous media flow, and site development). (3.45/4.00). B. Geol. E. thesis: Eastern Minnesota Copper Prospects (Don Yardley, advisor), 43p.

PROFESSIONAL EXPERIENCE:

The University of Texas, Austin, Texas:

2019 – on	David P. Carlton Professor of Geology <i>Emeritus</i>
2002-2018	David P. Carlton Professor of Geology
1993-2002	Chevron Centennial Professor of Geology
1989-1993	Gulf Foundation Centennial Professor of Geology
1986-1989	C.E. Yager Professor of Geology
1985-2018	Professor of Geology
1984-1986	Associate Chairman
1982-1985	Associate Professor of Geology

Primary responsibilities:

Classes taught: Physical Hydrogeology, Groundwater Hydrology, Aquifer Testing, Geology for Engineers, Groundwater Field Methods, Fractured Rock Mechanics and Hydrology, Geology and Hydrology, Urban Hydrogeology, Applied Karst Hydrogeology, Hydrogeophysics, Environmental Hydrogeology, Numerical Methods in Hydrogeology, and (additionally at the University of Missouri) External Earth Process, Principles of Geology, Geology Field Camp, and Mathematical Methods in Geology;

Conduct research and supervise both graduate supervise graduate and undergraduate students engaged in research. Research topics include: the hydrogeology of fractured rock, karstic, desert basin, crystalline rock, tuffaceous, glacial drift, and alluvial aquifers; stream/groundwater interactions; water resource sustainability and decision support systems; thermohaline free convection; the effects of urbanization on groundwater systems, volcanogenic karstification; energy transport, subsidence, and excess fluid pressures in sedimentary basins; dolomitization; flow and transport in fractures and the effects of fracture skins; and the hydrogeology of reclaimed coal strip mines.

Short-term industrial consulting: - State of Texas Professional Geologist No. 1800; A.I.H. Registered Professional Hydrogeologist No. 135; S.I.P.E.S. Professional Earth Scientist No. 2419.

PROFESSIONAL EXPERIENCE (continued):

Alumni activities: Founded Development Board at Missouri; assisted in founding a number of dedicated funds in hydrogeology, the Jackson Fellowship, and Oliver Lectureship in Texas Hydrology and Water Resources at Texas.

Curricula development: Initiated three new curricula:

- 1) B.S. in Hydrogeology and Civil Engineering (joint program with civil engineering) at the University of Missouri;
- 2) B.S. in Geology (Hydrogeology) at The University of Texas; and
- 3) B.S. in Geosystems Engineering and Hydrogeology (joint program with petroleum engineering) at The University of Texas.

Visiting Scientist:

2014 – 2015 Program Director, Hydrologic Sciences, National Science Foundation, Arlington, Virginia
2013 Australian National Centre for Groundwater Research & Training, Adelaide, Australia
2010 U.S. Geological Survey, Reston, Virginia
1994 C.S.I.R.O. Centre for Groundwater Studies, Adelaide, Australia

Von Humboldt Research Fellow:

1981 & 1983 Institut fuer Allgemeine und Angewandte Geologie der Universitaet Muenchen, Munich, Germany

University of Missouri, Columbia, Missouri:

1980-1982 Department Chairman
1981 Director, Branson Field Laboratory
1979-1982 Associate Professor of Geology
1977-1980 Director of Graduate Studies
1974-1979 Assistant Professor of Geology

University of Illinois, Urbana, Illinois: Teaching Assistant and Research Fellow (1971-1974) - Assisted in teaching undergraduate courses in physical geology and environmental physical science (for nonscience majors).

Committee to Save Park, Research Associate, Urbana, IL (1972-1973) - Economic analysis of municipal water supplies and evaluation of reservoir environmental impact.

U.S. Air Force, Officer, civil engineering (1967-1971) - Officer-in-charge of 60-man field engineering team (Prime BEEF); fallout shelter analysis, traffic engineering, long-range base development planning and construction planning; prepared preliminary construction estimates and designs; supervised and scheduled base maintenance and repairs; also, various military and related duties. 3750th Civil Engineering Group, Sheppard Air Force Base, Wichita Falls, Texas.

University of Minnesota, Minneapolis, Minnesota: Consultant (1966-1967) - Prepared consulting report for a private mining company on the rock properties and caving characteristics of the Duluth gabbro, under the supervision of Prof. E.P. Pfeider, Professor of Mineral Engineering.

AWARDS AND RECOGNITIONS:

Professor Emeritus (2018), The University of Texas
Outstanding Reviewer (2017), Environmental Research Letters
Lifetime Achievement Award (2017) Barton Springs / Edwards Aquifer Conservation District
Keynote Speaker (2016), 36th Annual IAH (Irish Group) Groundwater Conference, Tullamore, Ireland.
Society for Mining, Metallurgy, and Exploration Legion of Honor (2016)
Keynote Speaker (2015), Hard-Rock Aquifers: The up-to-date concepts and the practical applications,
IAH French National Chapter, Vendée, France
Plenary Speaker (2014), 41st Congress, International Association of Hydrogeologists, Groundwater
Challenges and Strategies, Marrakech, Morocco.
Edwards Aquifer Authority Distinguished Lecturer (2013)
Presidents' Award, International Association of Hydrogeologists (2012) both for outstanding international
contributions to the development/application of groundwater science and for service to IAH missions.
2009 AEG Publication Award for "The Secondary Permeability of Impervious Cover" (Wiles and Sharp)
in Engineering and Environmental Geoscience.
Robert Farvolden Lecturer (2007), University of Waterloo, Canada.
Scientists for Groundwater Award (2006) of the Save Barton Creek Association (with Will Cain, Marcel
Dulay, and Suzanne Pierce) for commendable efforts to develop the groundwater decision support
system.
Research Conservation Award (2004) of the Barton Springs / Edwards Aquifer Conservation District for
contribution to protect...Barton Springs...the Edwards Aquifer and groundwater resources of Central
Texas.
Expert of International Standing, Australian Research Council College of Experts (2004-2011; 2016)
Big XII Faculty Fellow (2002)
AT&T Industrial Ecology Faculty Fellow (2000)
Founders Award (1998), American Institute of Hydrology, for outstanding and dedicated service to
groundwater hydrology.
Society of Independent Professional Earth Scientists, Central Texas, Chapter Award (1998)
C.V. Theis Award (1996), American Institute of Hydrology, for outstanding contributions to hydrology
Hydrogeology Division of the Geological Society of America Distinguished Service Award (1996)
Joseph B. Hoening Distinguished Lecturer of the Kentucky Geological Survey (1995)
Fellow, Geological Society of America (since 1988)
Alexander von Humboldt Fellow to West Germany (1983 & 1981)
O.E. Meinzer Award (1979) of the Geological Society of America for outstanding contributions to
hydrogeology
Promethean Society (The University of Texas, College of Natural Sciences)
Sigma Xi
Honor societies:
 Phi Kappa Phi (National Academic Honor Society)
 Tau Beta Pi (National Engineering Honor Society)
University of Illinois Fellow in Geology
Distinguished graduate of:
 U.S. Air Force Officer Training School
 U.S. Air Force Base Civil Engineer School
 U.S. Navy Fallout Shelter Analysis School
Undergraduate (University of Minnesota):
 Alpha Delta Phi Literary Award
 Residence Halls Scholarship Honors
 W. H. Ziegler Company Scholarship
 University of Minnesota Freshman Scholarship

SERVICES TO PROFESSION:

Geological Society of America:

- 2016-2019 Co-editor, GSA Memoir, The Edwards Aquifer
- 2015-2017 Meinzer Award Committee
- 2014 Programmatic Overview Committee
- 2011-12 Programmatic Overview Committee
- 2011-2019 Representative to International Association of Hydrogeologists (IAH)
& Hydrogeology Division liaison to IAH
- 2011 Chair, GGSA Foundation, *ad hoc* Committee on Development Committee Membership
- 2010 125th Anniversary Subcommittee (books)
- 2009-2011 Development Committee, GSA Foundation
- 2009-2010 Chairman, External Awards Committee
- 2008-2009 Past President and Councilor; Executive Committee; Finance Committee;
ad hoc Committee on Committees (Chair); GSA Public Service award
Committee (Chair); *ad hoc* Committee on Accreditation
- 2007-2008 President and Councilor; Executive Committee; Finance Committee
- 2006-2007 Vice-President and Councilor; Executive Committee; Finance Committee
- 2007-2008 Vice-Chairman, GSA Foundation Cornerstone Initiative Capital Campaign
- 2006-2007 GSA representative, Council of Scientific Society Presidents
- 2007 Alternate delegate, U.S. National Committee on Scientific Hydrology
- 2007-2008 AGI Ian Campbell Award Committee
- 2005-2006 Committee on Nominations
- 2004-2005 Hydrogeology Division Distinguished Service Award Committee; Chair (2005)
- 2001-2003 Committee on Nominations
- 2000 Committee on Committees (Chairman)
- 1995-2002 Editor, Environmental and Engineering Geoscience
- 1994-2001 Publications Committee
- 1994-1996 Local Committee, Program Chairman, 1996 South-Central Section Meeting
- 1993-1995 Hydrogeology Division Nominations Committee
- 1993-2019 Campus Representative
- 1993 *ad hoc* Committee to Review Society Services to members
- 1991-1993 Council (Audit Committee, 1991-93; Executive Committee, 1992-93; Long-
Range Planning Committee, 1993)
- 1991 Program Committee
- 1989-1992 Representative to U.S. Committee, International Assoc. of Hydrogeologists
- 1986-1992 Associate Editor, Geological Society of America Bulletin
- 1985-1988 Management Board, Hydrogeology Division (Chairman, 1986-1987)
- 1985-1986 Program Committee, 1986 Annual Meeting
- 1984-1987 Meinzer Award Committee (Committee chairman, 1985-1986)
- 1982 Co-convener of Penrose Conference, "Hydrodynamics and Geochemistry of Ore
Deposits in Sedimentary Environments"

GSA session chairman:

- Hydrogeology -
 - Annual Meeting (1983, 1989, 1998, 1999, 2003, 2004, 2010, 2012, 2015)
 - South-Central Section (1987, 1991, 1993, 1995, 1996, 2009)
 - North-Central Section (1977, 1979, 1987, 1995)
- Engineering Geology - North-Central Section (1982)

SERVICES TO PROFESSION (*Geological Society of America*, continued):

GSA theme session/symposium convener:

- 2017 “Groundwater Availability in Texas: Rule of Capture and Sustainable to Consensus Yield” South-Central Sec. Meeting
- 2015 “Effects of Urbanization on Hydrological and Geochemical Cycling in Surface and Groundwaters” Annual Meeting
- 2013 “Fractures and fluids: From observations to numerical models” South-Central Sec. Meeting
- 2012 “Hydrology of Urban Groundwater, Streams, and Watersheds” Annual Meeting
- 2010 “The Hydrogeological Effects of Urbanization” Annual Meeting
- 2009 “Water Resources and Opportunities in North-Central Texas and Surrounding Region” South-Central Sec. Meeting
- 1998 First GSA International Internet Symposium "Understanding Ground Water in Arid and Semi-Arid Environments of North America and Australia" Annual Meeting
- 1986 "Hydrogeology of Sedimentary Basins" Annual Meeting
- 1983 Geological Society of America Centennial Frontier Symposium "Hydrodynamics and Geochemistry of Ore Deposits in Sedimentary Environments" Annual Meeting

American Institute of Hydrology:

- 2004 Founders Award Committee
 - 2001-2003 Examination Committee
 - 2001 Convener of symposium, Groundwater Challenges in the 21st Century
 - 2000-2001 Scientific Advisory Committee, 2001 annual meeting
 - 1999-2000 Nominations Committee
 - 1997-1998 Scientific Advisory Committee, 1998 annual meeting
 - 1996-1997 Scientific Advisory Committee, 1997 annual meeting
 - 1991-1995 Chairman, Board of Registration
 - 1988-1995 Executive Committee
 - 1992-1994 Chairman, Organizing Committee, 1994 annual meeting
 - 1988-1991 Vice President for Academic Affairs
 - 1985-1988 Registration Board
 - 1985-1990 Editorial Board: Hydrological Science and Technology
 - 1983-1985 Task Force on Professional Education
- Session Chairman:
- Annual Meeting (1991, 1997, 1998, 2001)
 - USA/USSR Joint Conference (1990)

American Association of Petroleum Geologists:

- 1986-1988 Committee on Opportunities in Water Resources and Waste Management
- 1988-1991 Publications Committee

Austin Geological Society:

- 2013-2016 Executive Committee & President (2014-2015)
- 1985-1986 Program Chairman

SERVICES TO PROFESSION:

International Association of Hydrogeologists:

- 2018-on Commission on Mineral and Thermal Water
- 2017 Endowment Committee (US National Committee)
- 2017 Scientific Committee - GwFR'2017 – International Conference on Groundwater in Fractured Rocks, Portugal.
- 2016 Scientific Committee & Convener of “Geometrical structure and hydrogeological properties of hard-rock aquifers,” Groundwater and Society: 60 Years of IAH,” IAH 43rd Congress, Montpellier, France.
- 2013-2015 Scientific Committee & Convener of “Hydrogeology of fractured rocks: progress in understanding of flow and mass transport,” Aqua 2015 – Back to the Future, IAH 42nd Congress, Rome, Italy
- 2014-2015 Scientific Committee, Hard-Rock Aquifers: The up-to-date concepts and the practical applications, IAH French National Chapter, Vendée, France.
- 2014 Scientific Committee, 1st International Conference on Fractured Rock Hydrogeology in South and Central America, Port Allegre, Brazil.
- 2012-2014 Editor, Fractured Rock Hydrogeology
- 2011-2012 Scientific Advisory Committee, International Conference on Groundwater in Fractured Rocks, Prague, Czech Republic
- 2010-2012 North American Scientific Advisory Committee, 39th Congress, Niagara Falls, Canada
- 2008-2012 Executive Committee & Finance Committee (US National Committee)
- 2004-2008 Treasurer (International)
- 2004-2008 Chairman (US National Committee)
- 2004-2007 Scientific Committee, 35th IAH Congress, Portugal
- 2004-2007 Co-editor, Selected Papers Volume 9, Groundwater in Fractured Rocks
- 2004-2005 Scientific Advisory Committee, IAH Conference on Karst, Belgrade
- 2001-2003 Scientific Advisory Committee, IAH Conference on Groundwater in Fractured Rocks, Prague
- 1999-2004 Vice Chairman, Commission on Education and Training
- 1999-2001 IAH Programme Committee, 29th Congress, Munich, 2001
- 1999-2000 Nominating Committee, U.S. National Committee
- 1997-2007 Co-editor, Working Group on Hard Rock Hydrogeology
- 1996-2000 Vice President (International)
- 1998 International Judge, International Conference on Mineral and Thermal Groundwater (Domnisoara Izvorul Minunilor)
- 1996-1998 Advisory Committee, 28th Annual Congress
- 1995-1997 Associate editor, Journal of Hydrogeology
- 1994-1995 Associate editor, Journal of Applied Hydrogeology
- 1993-1996 International Advisory Committee
- 1985-1992 U.S. National Advisory Council
- 1989-1990 Co-editor, Proceedings, 28th International Geological Congress

Session chairman:

- Groundwater and Life: Science and Technology into Action. 45th Congress, Daejeon, Korea (2018)
- Groundwater and Society: 60 Years of IAH, 43rd Congress, Montpellier, France. (2016)
3 sessions – 1 on karstic and 2 on hard-rock (crystalline) aquifers
- President de Séance, Hard-Rock Aquifers: The up-to-date concepts and the practical applications, Vendée, France (2015)

SERVICES TO PROFESSION:

International Association of Hydrogeologists (continued):

- Groundwater: Challenges & Strategies, 41st Congress, Marrakech, Morocco (2014)
- Groundwater in Fractured Rocks, Prague, Czech Republic (2012)
- Groundwater Quality Sustainability, 38th Congress, Krakow, Poland (2010)
- Groundwater and Ecosystems, 35th Congress, Lisbon (2007)
- Groundwater in Fractured Rocks, Prague, Czech Republic (2003)
- New Approaches to Characterising Groundwater Flow, 29th Congress, Munich, Germany (2001)
- Mineral and Thermal Groundwater, Mercurea Ciuc, Romania (1998)
- Groundwater: Sustainable Solutions, Melbourne, Australia (1998)
- Hydrogeology of Hard Rocks, 24th Congress, Oslo, Norway (1993)

Council of Scientific Society Presidents:

- 2010 Treasurer
- 2009-2012 Board of Directors
- 2007 Chair, Energy and Environment Committee
- 2005-2008 Geological Society of America representative

National Research Council:

- 1998-2001 Advisory Committee on the Waste Isolation Pilot Plant (WIPP)

Society of Independent Professional Earth Scientists:

- 1997-98 Chairman, Austin Chapter

Other miscellaneous services to profession:

- 2020 – on Editorial Board, Discover Groundwater
- 2020 – on Houston Advanced Research Center, Houston Regional Groundwater Science Advisory Committee
- 2019-2020 Guest editor, Geosciences
- 2018-on Science Committee, Edwards Aquifer Habitat Conservation Plan
- 2018-2019 Guest editor, Arabian Journal of Geosciences
- 2006-2019 Edwards Aquifer Authority, Aquifer Sciences Advisory Panel
- 2001-on Luminant Energy Environmental Steering Committee
- 2018 Discussion chair, American Groundwater Trust Texas Aquifer Conference
- 2014 Steering Committee, Texas Hydro-Geo Workshop, San Antonio
- 2014 The Nature Conservancy, Texas Scorecard Advisory Council
- 2013-2014 Scientific Board, Characterization and Engineering of Karst Aquifers International Field Course. University of Belgrade, Republic of Serbia
- 2013-2014 International Scientific Advisory Committee, International Conference on Groundwater, Andhra University, Visakapatnam, India.
- 2013 Discussion chair, American Groundwater Trust Conference on Aquifer Recharge
- 2013 Summit Committee, National Ground Water Association
- 2012 National Council for Science and the Environment - Workshop panelist on “Integrating People into Decisions about Water”
- 2010-2011 Editor Board, Aqua mundi
- 2009-2011 Biological Advisory Team for the Barton Springs/Edwards Aquifer Conservation District
- 2006-2008 International Scientific Committee, Water Down Under 2008: 4th International Conference on Water Resources and Environment Research and the 31st Hydrology and Water Resources Symposium

SERVICES TO PROFESSION (*Other miscellaneous services to profession, continued*):

- 2005-2008 Barton Springs Edwards Aquifer Conservation District, Barton Springs Habitat Conservation Plan (HCP)
- 2005-2014 Texas Water Development Board, Technical Advisory Group (TAG) for Groundwater Availability Modeling (GAM)
- 2004 Judge, student poster session, Texas Ground Water 2004: Towards Sustainability
- 2003-2004 Advisory Board, Texas Water Development Board, Rule of Capture Conference
- 2003-2004 Advisor, Barton Springs/Edwards Aquifer Conservation District, Barton Springs Groundwater Availability Model.
- 2001-2003 Stakeholder Advisory Forum, Central Carrizo-Wilcox Aquifer Groundwater Availability Model
- 2001 Reviewer of manuscripts for Desert Fishes Symposium
- 2001 State of Wisconsin, Department of Regulation and Licensing – Fundamentals of Hydrology Examination Test Development
- 1999 Association of Ground Water Scientists and Engineers. Convener of sessions on Municipal and Industrial Water Supplies.
- 1997-1999 International Scientific Committee, Second International Conference on Water Resources & Environmental Research, Brisbane, Australia.
- 1997-1998 Scientific Advisory Committee, SEPM Carbonate Research Conference, Door County, Wisconsin
- 1997 Review of Core Programme, British Geological Survey
- 1995-2002 U.S. National Committee for Scientific Hydrology
- 1995-2000 Organizing Committee, International Tuff Properties Workshop, Santa Fe, New Mexico
- 1994-2009 Australian Research Council Panel of Assessors
- 1993-2004 Board of Directors, Texas System of Natural Laboratories
- 1993-1994 Advisor, American Hydrological Society
- 1992-1994 Local Committee, 35th U.S. Symposium on Rock Mechanics
- 1991-1993 Water Resources Center Science Advisory Group, Desert Research Institute, Nevada
- 1990 National Environmental Research Council (Great Britain) Review of Hydrogeology, London
- 1990 Advisor to National Geographic Society
- 1979 Convener, Missouri Academy of Science Symposium - Missouri's Water Resources – Outlook for the Coming Century
- 1977 State Representative -Missouri River Basin Commission Ground-Water Management Workshop

Other currently active professional societies:

- Alexander von Humboldt Association of America
- American Geophysical Union
- American Institute of Hydrology
- American Institute of Mining Engineers (S.M.E.)
- Association of Groundwater Scientists and Engineers (National Ground Water Association)
- Austin Geological Society
- Geological Society of America
- West Texas Geological Society

Session chairman at other professional society miscellaneous meetings:

- 2013 NGWA Groundwater Summit, San Antonio, TX
- 2009 UCOWR/NIWR Conference, Urban Water Management, Chicago, IL
- 2008 Water Down Under, Adelaide, Australia
- 1999 National Ground Water Association (NGWA), annual meeting, Nashville, TN
- 1999 SEPM Research Conference on Fluid Flow in Carbonate Rocks, Door County, WI
- 1996 Gulf Coast Association of Geological Societies, Environmental Geology, San Antonio, TX
- 1995 2nd International Conference on Mechanics of Jointed and Faulted Rock, Vienna, Austria
- 1993 & 1994 American Water Resources Association, Texas Section, Austin, TX
- 1979 Geology Section - Missouri Academy of Science, Jefferson City, MO

Reviewer of materials and tests for the Educational Testing Service.

University program reviews & site review visits:

- University of Arizona
- Centenary College
- Desert Research Institute (University of Nevada)
- Flinders University School of the Environment
- Indiana University
- Louisiana Tech
- Oklahoma State University
- University of Louisiana, Monroe
- University of Nebraska

Reviewer of research proposals for:

- American Chemical Society - Petroleum Research Fund (ACS-PRF)
- Arkansas Science and Technology Institute
- Australian Research Council
- Austrian Science Fund
- The Center for Field Research
- Cottrell Research Foundation
- German-Israeli Water Technology Cooperation Program
- Idaho Board of Education
- International Science (Soros) Foundation
- Kuwait Foundation for the Advancement of Sciences
- Louisiana Board of Regents (several programs)
- Louisiana Universities Marine Consortium
- Missouri Water Resources Research Center
- National Aeronautics and Space Administration (NASA)
- National Science Foundation (several NSF branches & panels)
- State of Nebraska
- New Mexico Water Resources Research Center
- Swiss National Science Foundation
- U.S. Air Force
- U.S. Civilian Research & Development Foundation
- U.S. Department of Energy
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

Proposal reviews (continued):

U.S. Geological Survey (104 program)
United States - Mexico Foundation for Science
University of Wisconsin Water Resources Institute

Reviewer of manuscripts for various professional and scientific journals and organizations, including:

American Association of Petroleum Geologists Bulletin
Applied Sciences
Arabian Journal of Geosciences
Barton Springs/Edwards Aquifer Conservation District
Chemical Geology
Deep Karst 2016
Desert Fishes Council
Earth-Science Reviews
Environmental Earth Sciences (formerly Environmental Geology)
Environmental and Engineering Geoscience (formerly Bulletin Assoc. of Engineering Geologists)
Environmental Engineering and Management Journal
Environmental Monitoring and Assessment
Environmental Research Letters
Environment Texas Research & Policy Center
Geofluids
Geological Society of America Bulletin
Geological Society of India Bulletin
Geology
Geophysical Research Letters
Ground Water
Groundwaters of Africa
Gulf Coast Association of Geological Societies (GCAGS) Journal
GCAGS, Transactions
Hays Trinity Groundwater Conservation District
Hydrogeology Journal (formerly Applied Hydrogeology)
Hydrological Science and Technology
Infrastructures
International Association of Hydrogeologists
2nd International Conference on Residuals Science & Technology
International Journal of Research in Environmental Studies
Journal of African Earth Sciences
Journal of Contemporary Water Research & Education
Journal of Geochemical Exploration
Journal of Environmental Engineering
Journal of Geophysical Research
Journal of Geophysics and Engineering
Journal of Hydrology
Journal of Maps
Journal of South American Earth Sciences
Korean Society of Civil Engineers (KSCE) Journal of Civil Engineering
Langmuir
Materials

Manuscript reviews (continued):

Mathematical Geology

National Cave and Karst Research Institute
Rolex Awards Program (Switzerland)

Science

Scientific World Journal

Sustainability

Texas Water Development Board

Transport in Porous Media

Water

Water Down Under 2008

Water Resources Bulletin

Water Resources Management

Water Resources Research

SERVICES TO THE UNIVERSITY:

At The University of Texas:

University-wide: Writing Flag Course Committee (2013-2016); Advisor, Student Chapter of the Save Our Springs Coalition (2003-05); Fulbright Fellowship Committee (2001-2003); Advisor and founder of the American Institute of Hydrology Student Chapter (the first one!); International Education Fee Scholarship Selection Committee (1999-2002); Universities Council on Water Resources (1988 - 1999); University Continuing Fellowships Committee (1999-2002); Multicultural Education Committee (1990-1991); Institutional Insurance Advisory Committee (1989 -1990); U. T. Faculty Welfare Committee (1987-1989 {Chairman, '88-'89); Graduate Assembly (1986-1989); Mentor Program; Faculty Fellow for Blanton Women's Dorm (1982-1983).

College-wide: Science Education/Teacher Certification Committee (1988 -90); Course and Curriculum Committee (1985-1987, 1988 -1992, Chairman, 1990-1992); Coop/Internship Committee (1990 -1992)

Departmental: GSA Campus representative (1985-present); Department Associate Chairman and Foundation Faculty Review Committee (1984-1986); Department Executive Committee, (1983-1984); Initial sponsor/advisor, Association for Women Geoscientists, Austin Chapter (1984-1986); coordinator for student exchange programs between UT and Flinders University (Adelaide, Australia) and (formerly) Norwegian Technical University (Trondheim).

Many departmental committees (budget council, search, faculty evaluation, strategic planning, EER committees, *ad hoc*, etc.)

At the University of Missouri:

University-wide: University-Wide Water Resources Advisory Committee; Committee on Hydrology and Water Resources Interdisciplinary Minor (Chairman)

Department: Department Chairman (1980-1982); Initiator of Geology Development Board (1981); Director of Graduate Studies (1977-1980); Initiator of Geology/Civil Engineering Dual Degree Program and Geology Development Board; Director, Branson Field Laboratory (1980); many departmental committees.

I write the monthly Hydrogeology Newsletter since 2005 that is distributed (via email) to over 300 recipients (mostly alumni of the UT hydrogeology program).

OTHER:

Austin-Adelaide Sister Cities Committee (1997-on); Various volunteer projects with Tarrytown United Methodist Church, Ballet Austin, Boy Scouts of America, Girl Scouts of America, Northwest Austin Little League, Balcones Civic Association, American Cancer Society, etc.

SELECTED NON-PUBLISHED, INVITED PRESENTATIONS

"Groundwater Supply Problems and their Solutions in Missouri" - Bicentennial Environmental Engineering Seminar Series, Columbia, Mo., Nov. 1975.

"Energy Transport in Sediments" - a 2-day seminar and workshop given at Exxon Production Research, Houston, Tex., Nov. 1975.

"Hydrogeology of the Missouri River Flood Plain" - Michigan State University Colloquium Series, East Lansing, Mich., Mar. 1976.

"Ground Water in the Alluvium of the Missouri River Flood Plain" – University of Missouri Soils Seminar, Columbia, Mo., Sept. 1976.

"Role of Fluids as an Energy Transport Mechanism in Evolving Sedimentary Basins" - Geol. Soc. America Penrose Conference, Vail, Col., Nov. 1976

"Groundwater Resources in Flood Plains": University of Missouri Environmental Engineering Graduate Seminar, Columbia, Mo., Oct. 1977.

"Flood-Plain Hydrogeology" - Kansas Geological Survey, Lawrence, Kan., 18 Nov. 1977. Also presented at the annual meeting of the Missouri Association of Professional Soil Scientists, Columbia, Mo., Dec. 1978.

"Energy Transport in Compacting Porous Media" - University of Arizona Geological Engineering Seminar, Tucson, Ariz., Feb. 1978.

"Hydrogeology" - Missouri Soil Mappers' Rendezvous, Columbia, Mo., May 1979.

"Hydrogeology of the Missouri River Floodplain Alluvium" - University of Illinois Colloquium, Urbana, Ill., Mar. 1980.

"Hydrogeologic Concepts in Mineral Deposition" - Illinois State Geological Survey, Urbana, Ill., March, 1980.

"Hydrogeology of Major Alluvial Aquifers" – The University of Texas, Austin, Tex., Oct. 1981.

"Preliminary Results: Application of Hydrogeologic Models to Ore Deposits of Tuscany, Italy" - The University of Texas, Austin, Tex., Oct. 1981.

"Physical Hydrogeology of Tuscany, Italy, and its Effects on the Hydrothermal Systems and on the Occurrence of Mercury and Antimony Deposits" - University of Illinois Colloquium, Urbana, Ill., Feb. 1982.

Selected non-published invited presentations (continued):

- "Hydrogeologic Models of Mineral Deposition" – Geological Society of America Penrose Conference on Hydrodynamics and Geochemistry of Ore Deposits in Sedimentary Environments: Lake of the Ozarks, Mo., June 1982.
- "Hydrogeology of Some Tuscan (Italy) Geothermal Systems" - Austin Geological Society, Austin, Tex., Apr. 1983.
- "Opportunities in the Geological Sciences for Graduate Students in Geotechnical Engineering" - The University of Texas Civil Engineering Geotechnical Engineering Seminar, Austin, Tex., Oct. 1983.
- "Gulf Coast Research at the University of Texas" - Marathon Oil, Littleton, Col., April. 1984.
- "Subsidence" - American Institute of Hydrology Workshop on Current and Future National Water Problems and Issues as Related to Hydrology, Washington, D. C., June 1984.
- "Is Environmental Geology Dead?" - Texas Junior College Association, Austin, Tex., February 1986.
- "Geology and Geotechnical Engineering" – The University of Texas Civil Engineering Geotechnical Engineering Seminar, Austin, Tex., Mar. 1986.
- "Hydrogeology of the Toyah Basin": Austin Geological Society, Austin, Tex., Nov. 1986.
- "Coupled Flow in Sedimentary Basins" - Geological Society of America Penrose Conference on Brines in Deep Sedimentary Basins, Oxnard, CA., Mar. 1987.
- "Large-Scale Fluid Transport Systems in Sedimentary Basins - Settings, Processes and Their Effects on Sedimentary Basins" - Texas Tech. University, Lubbock, TX., Feb. 1988.
- "Evolution of Fluid Pressure and Temperature in the Sediments of the Gulf Coast" - Department of Petroleum Engineering, The University of Texas, Mar. 1988.
- "Groundwater" - Lt. Governor's Conference, Water in Texas: The State of the State, L. B. J. School of Public Affairs, The University of Texas, Mar. 1988.
- "Evolution of Momentum and Energy Transport Systems in the Gulf of Mexico Basin" - University of Minnesota, May 1988.
- "Groundwater/River Interaction" - University of Minnesota, May 1988.
- "Some Comments on Water Resources Management in Texas with Special Consideration Towards Ground-Water Issues" - Governor's Committee on Water Resources Management, Austin, Texas, Sept. 1988.
- "Risk Assessment and Causes of Subsidence and Inundation Along the Texas Gulf Coast" - NATO-ARW Workshop on Geohydrological Management of Sea Level and Mitigation of Drought, Fuerteventura, Canary Islands, Mar. 1989.
- "Hydrodynamics and Geothermics of the Texas Gulf Coast and Relations to Diagenesis" - University of Alabama, Tuscaloosa, Mar. 1989.

Selected non-published invited presentations (continued):

- "Origin of the Bad Water Zone of the Edwards Aquifer" - University of Alabama, Tuscaloosa, March, 1989.
- "Risk Assessment of Subsidence and Inundation, Texas Gulf Coast" - Desert Research Institute, Reno, Nevada, Apr. 1989.
- "Regional Groundwater Flow Systems in Trans-Pecos Texas" - Desert Research Institute, Las Vegas, Nevada, Apr. 1989.
- "Evolution of Fluid Pressure and Temperature in the Sediments of the Gulf Coast" - Oryx Energy Co., Dallas, Texas, Nov. 1989.
- "Technical Factors in Edwards Aquifer Use and Management" - Special Joint Texas Senate and House of Representatives Committee on the Edwards Aquifer, Feb. 1990.
- "The Potential Impact of Aerosols on Ground-water Systems" - University of Minnesota, Minneapolis, Sep. 1990
- "Fracture and permeability Patterns in a Welded Tuff, the Santana Tuff of Trans-Pecos Texas - Implications for Waste Disposal" - University of Minnesota, Minn., Sep. 1990.
- "Permeability and Fracture Patterns in a Welded Tuff" – The University of Texas Environmental Engineering Seminar, Austin, Texas, Oct. 1990.
- "Geothermics/Hydrogeology of the Northern Gulf of Mexico Basin" - Southern Methodist University, Dallas, Texas, Feb. 1991.
- "The Edwards Aquifer, the Technical Advisory Panel, and One Man's Opinion" - Austin Geological Society, Austin, Texas, April 1991.
- "Reevaluation of the Causes of Subsidence Along the Texas Gulf of Mexico Coast and Some Extrapolations of Future Trends" - Fourth International Symposium on Land Subsidence, Houston, Texas, May 1991.
- "Texas Gulf Coast Subsidence: Causes and Predictions" – The University of Texas Geotechnical Engineering Seminar, Austin, Texas, February 1992.
- "Hydrogeology of Trans-Pecos Texas" – The University of Texas at El Paso, El Paso, Texas, March 1992.
- " The A. I. H. Certification Process" - Joint meeting of the American Water Resources Association and Amer. Inst. Hydrology, Texas Hydrology Roundup, Austin, Texas, April, 1993.
- "Consideration of Basic Hydrogeology in the Design of On-Site Waste Water Treatment Systems" - 1993 On-Site Waste Water Treatment Conference, Austin, TX, October, 1993.
- "Update on Springflow Augmentation" - National Biological Survey Fountain Darter/Comal River Projects Meeting, San Marcos, Texas, December, 1993.

Selected non-published invited presentations (continued):

- "The Edwards Aquifer, User Conflicts, and Springflow Augmentation" - Regional Clean Air and Water Association, San Antonio, Texas, December, 1993.
- "Hydrogeological Principles for Fractures Rocks - Properties and Effects of Fracture Skins", Hydrological Society of South Australia, Adelaide, SA, Australia, Feb. 94.
- "Regional Subsidence Along the Texas Gulf of Mexico Coastline" - Department of Geography, University of Adelaide, Adelaide, SA, Australia, March 1994.
- "Stream-Groundwater Interactions" - Department of Geography, University of Adelaide, Adelaide, SA, Australia, April 1994.
- "Free Convection at Various Scales" - C.S.I.R.O. Division of Water Resources, Adelaide, SA, Australia, June 1994.
- "Arid Basins of Trans-Pecos Texas" - C.S.I.R.O. Division of Water Resources, Adelaide, SA, July 1994.
- "Area Geohydrology of The Edwards Aquifer, Barton Creek, and Bull Creek" - Aquatic Biological Assessment Team, Austin, Texas, January 1995.
- "Springflow Augmentation for Comal and San Marcos Springs?" - Austin Geological Society, Austin, Texas, February 1995.
- "The Edwards Aquifer" - Geology Department, College of Wooster, Ohio, February, 1995.
- "Modeling Flow in Fractured Rocks and the Effects of Fracture Skins" - Joseph B. Hoening Lecture, Kentucky Geological Survey, Lexington, Kentucky, February, 1995.
- "Pressure and Temperature Patterns in the Gulf of Mexico Basin: Implications for Analysis of Flow Systems", University of Texas Institute for Geophysics, Austin, Texas, September, 1995
- "The Sources of Water for Balmorhea Springs " - Adopt-A-Wetlands Workshop, Balmorhea, Texas, October, 1995.
- "Springflow Augmentation, Endangered Species, the Edwards Aquifer, and Politics" - Society of Independent Earth Scientists (SIPES), - Austin Chapter, Austin, Texas, February, 1996.
- "Springflow Augmentation" - A Water Forum for the People, San Antonio, Texas, March, 1996.
- "Springflow Augmentation as Part of the Water Resources Solution Puzzle" - Edwards Aquifer Authority, San Antonio, Texas, August, 1996.
- "Flow and Transport in Porous Media" - The University of Texas PDE Seminar, Austin, Texas, October, 1996.
- "Springflow Augmentation" - City of San Antonio Citizens Committee on Water Policy, San Antonio, Texas, November, 1996.
- "Groundwater Story in Central Texas" - Austin Mineralogical Society, Austin, Texas, February, 1997.

Selected non-published invited presentations (continued):

- “Springflow Augmentation” - City of San Antonio Citizens Committee on Water Policy, San Antonio, Texas, November, 1996.
- “Groundwater Story in Central Texas” - Austin Mineralogical Society, Austin, Texas, February, 1997.
- “Edwards Aquifer, Flow Controls” - Society of Independent Earth Scientists (S.I.P.E.S.), National Meeting, Austin, Texas, March, 1997.
- “Ground-Water Supply Issues in Urban and Urbanizing Areas” - Keynote address, Groundwater in the Urban Environment: Problems, Processes and Management, 27th Congress, International Association of Hydrogeologists, Nottingham, September, 1997.
- “Synopsis, Conclusions, and Challenges From the Conference on Groundwater: Sustainable Solutions” - International Association of Hydrogeologists Conference, Melbourne, VIC, Australia, February, 1998.
- “Fracture Skins - What Are They and Why Do We Care?” - C.S.I.R.O. Land and Water, Adelaide, SA, Australia, February, 1998.
- “Flow and Transport in Fractured Systems: The Effect of Fracture Skins” - New South Wales Chapter, International Association of Hydrogeologists, Sydney, NSW, Australia, February, 1998
- “The Hydrogeology Program at The University of Texas” - Hydrogeology and Engineering Geology Department, Charles University, Praha (Prague), Czech Republic, June, 1998.
- “Free Convection and Gulf of Mexico Evolution” - Department of Geosciences, University of Houston, Houston, TX, September, 1998.
- “LUST Characterization in Urban Fractured Karstic Aquifers” [with Halihan, T., and Hansen, C.N.] at both:
- 1) Karst Waters Symposium on Karst Modeling Charlottesville, VA, and
 - 2) Austin Geological Society, Austin, Texas, February, 1999.
- “Fracture Experiments at Various Scales”- Austin Geological Society, Austin, Texas, February, 1999.
- “Urban Hydrogeology” – Board of Directors, American Ground Water Trust, San Antonio, TX, March, 1999.
- “Contaminant Transport in Sets of Parallel Finite Fractures with Fracture Skins” - T. Mylan Stout Lecture, Workshop in Mathematics and the Geosciences, University of Nebraska, Lincoln, NE, March, 1999.
- “Fracture Skins and Their Effects on Transport in Fractured Rock and Dual Porosity Systems” - Southwest Research Institute, San Antonio, TX, May, 1999.
- "Density-Driven Groundwater Flow Through Fractured Low Permeability Units of the Gulf of Mexico, USA: Implications, Resolutions, and Remaining limitations" - Flinders University, Adelaide, SA, Australia, July, 1999.

Selected non-published invited presentations (continued):

- “The Urbanising [sic] World – Hydrogeologic Implications” - South Australian Hydrological Society, Adelaide, SA, Australia, July, 1999.
- “How Urbanization Affects Groundwater Systems” - Geomatrix Consultants, Newport Beach, CA, September, 1999.
- “The Mayak and Chernobyl Sites - Roundtable Discussion” - 4th USA/CIS Joint Conference on Environmental Hydrology and Hydrogeology, Hydrologic Issues for the 21st Century: Ecology, Environment and Human Health, San Francisco, CA. November, 1999.
- "Fracture Skins - Origins, Properties, and Significance" - Lawrence Berkeley Laboratory, ESD Colloquium, University of California, Berkeley, CA, November, 1999
- "Sustainability of Groundwater Yields" - Tanta University, Tanta, Egypt, January, 2000
- "Characteristics of Major Fluvial Aquifers in the U.S. A." - Research Institute for Groundwater, Cairo, Egypt, January, 2000,
- "Tracing Regional Flow Paths to Major Springs in Trans-Pecos Texas Using Naturally - Occurring Geochemical and Isotopic Species"- Austin Geological Society, Austin, Texas, February 2000.
- "The Urbanizing World - Hydrogeological Implications" - Department of Geology, University of Indiana, Bloomington, IN, September, 2000
- "Hydrogeology of Fractured Rocks - Effects of Fracture Skins" - Department of Geology, University of Indiana, Bloomington, IN, September, 2000
- “Effects of Urbanization on Groundwater Systems” - School of Geology, Oklahoma State University, Stillwater, OK, October 2000.
- “Hydrogeology of the Central Nile Delta – Formulation of a Research Project” - School of Geology, Oklahoma State University, Stillwater, OK, October, 2000.
- “The Effects of Urbanization on Hydrogeology”- Austin Geological Society, Austin, Texas, March, 2001.
- “Groundwater Field Methods Classes at Brackenridge Field Laboratory” [with Miller, K. M.] - Brackenridge Field Laboratory, The University of Texas, Austin, Texas, June, 2001.
- “Overview of the Edwards-Trinity System” - Edwards-Trinity System Workshop, Austin, Texas, August, 2001.
- “Effects of Urbanization on Groundwater Systems” - University of Minnesota, Minneapolis, MN, November, 2001.
- "Regional Groundwater Flow Systems in Trans-Pecos Texas" - Texas Water Development Board, Aquifers of West Texas Symposium, Alpine, TX, November, 2001
- “Characterizing and Modeling Heterogeneity of Low-Permeability Stratified Units” - Austin Geological Society, Austin, Texas, February 2002.

Selected non-published invited presentations (continued):

- “Thermohaline Convection in Coastal Plain Sediments and Sedimentary Rocks” - Department of Geology, Brigham Young University, Provo, Utah, March, 2002.
- “Anthropogenic Effects on Water Budgets in Urban Areas” - School of Chemistry, Physics, and Earth Sciences, Flinders University, Adelaide, Australia, June, 2002
- “Regional Flow Systems of Trans-Pecos Texas” - School of Chemistry, Physics, and Earth Sciences, Flinders University, Adelaide, Australia, June, 2002
- “Urban Hydrology” - Ground Water Institute for Teachers, American Ground Water Trust, San Antonio, Texas, November 2002.
- "The Edwards Aquifer: Will There Be Water for Texas?" Outreach Lecture Series, Environmental Science Institute, The University of Texas, November, 2002. [On CD available through ESI]
- “Sustainable Groundwater Yields” - Barton Springs Edwards Aquifer Conservation District, Austin, Texas, May, 2003.
- “Hydrogeological Studies – Department of Geological Sciences, The University of Texas” – PEMEX visiting team, Austin, TX, August, 2003.
- “Groundwater Flow and Transport in Fractured Rocks: Approaches, Opportunities, and Future Challenges” - Int. Conference on Groundwater in Fractured Rocks, International Association of Hydrogeologists, Prague, Czech Republic, October, 2003 [Opening lecture]
- “Stream-Groundwater Interactions – Groundwater Flow Systems” – Integrated Watershed Sciences Symposium: Bridging the Gap Between Science and Application, The University of Texas, November, 2003.
- “Groundwater, the Edwards Aquifer, and Sustainability in Central Texas” – Hays County Regional Water Planning, December 2003.
- "Barton Springs and the Edwards Aquifer" – Edwards Aquifer - UT Responds, utenvironmental.org, Austin, TX, April, 2004
- "West Texas Water Roundtable: What Science Tells Us" - Sul Ross State University, Alpine, TX, May, 2004.
- "The Edwards Aquifer and Barton Springs" – Board of Directors, American Ground Water Trust, Austin, TX, June, 2004.
- "Hydrogeology in a rapidly growing urban area and urban-enhanced recharge" [Garcia-Fresca, B., Sharp, J.M., Jr., and Pierce, S. A.] - 32nd International Geological Congress Program p. 90, Florence, Italy, August, 2004.
- "Evaluating groundwater allocation alternatives in an urban setting using a GIS model and economic valuation techniques:"[Pierce, S. A., Sharp, J.M., Jr., and Garcia-Fresca, B.] - 32nd International Geological Congress Program, p. 122, Florence, Italy, August, 2004.

Selected non-published invited presentations (continued):

- "Effects of Urbanization on Hydrogeological Systems" – Utah State University, Logan, UT, November, 2004 [also on the CUAHSI web site]
- "Developing Chemical Data to Define Flow Systems in Cuatro Ciénegas, Mexico" [with Shanna B. Evans] - Texas Ground Water 2004: Towards Sustainability, Austin, TX, November, 2004.
- "Emerging and Forgotten Issues of West Texas Groundwater" - Texas Ground Water 2004: Towards Sustainability, Austin, TX, November, 2004.
- "San Antonio Water System, Carrizo Aquifer Storage and Recovery" [with Brad Wolaver] - Texas Ground Water 2004: Towards Sustainability, Austin, TX, November, 2004.
- "Urban-Enhanced Groundwater Recharge in Austin, Texas" [with Beatriz Garcia-Fresca] - Texas Ground Water 2004: Towards Sustainability, Austin, TX, November, 2004.
- "Fracture Skins and Their Effects on Flow and Transport" – Texas A&M University, Conoco-Phillips Colloquium Series, College Station, TX, February, 2005.
- "Effects of Urbanization on Groundwater" - Texas A&M University, College Station, TX, February, 2005.
- "Urban-enhanced groundwater recharge in Austin, Texas" [with Beatriz Garcia-Fresca] – University of Texas at San Antonio, San Antonio, TX, March, 2005.
- "Water, the Bible, and the Edwards Aquifer" – O.W.O.P., Austin, TX, March, 2005.
- "Fracture Skins" – Bureau of Economic Geology, Austin, TX, March 2005.
- "Thermohaline Free Convection in Groundwater: Example from Padre Island" – The University of Texas, Marine Science Institute, Port Aransas, TX, April, 2005.
- "Groundwater Careers in Academia" – National Ground Water Association, Student Mentoring Luncheon, San Antonio, TX, April, 2005.
- "Consensus as constraint: Identifying key parameters to model groundwater allocation using stakeholder elicitation and causal narratives" [with Suzanne A. Pierce, Thomas S. Lowry, and Marcel Dulay] - Groundwater Management Area #9 Conference, Kerrville, TX, November, 2005.
- "Effects of Urbanization on the Hydrologic Cycle" – Hill Country Urbanization and the Flash Flood Threat, National Weather Service – Lower Colorado River Authority Workshop, Austin TX, April, 2006.
- "Which Way Did It Go? Basic Hydrogeology, Texas Style" – 2006 National Groundwater Summit, Groundwater Management in Texas: A Continuing Challenge in a Changing Environment, San Antonio, TX, April, 2006.
- "IAH as a Business" – International Association of Hydrogeologists, 50th Anniversary Colloquium, Dijon France, May, 2006.

Selected non-published invited presentations (continued):

- “The Edwards Aquifer and Sustainability” – Air & Waste Management Association, Austin TX, November, 2006.
- “The Edwards Aquifer” – GeoForce, San Antonio, TX, February, 2007.
- “Urbanization and Groundwater Systems” – Virginia Tech University, Blacksburg, VA, February, 2007.
- “Decision Support Systems” – CAMPO Mobility Financing Task Force, Austin TX, February, 2007.
- “Groundwater Management in Texas” – Hill Country Geoscientists, Kerrville, TX, April, 2007.
- “Deep and Wide - Implications from Studies of Carbonate Aquifer Systems in Mexico” – The Farvolden Lecture, University of Waterloo, Waterloo, Ontario, Canada, October 2007.
- “Sistema Zacatón: Hydrogeologic Discoveries from DEPTHX” [Marcus O. Gary, John M. Sharp, Jr., and Juan Alonso Ramírez Fernández] - Geol. Soc. America Special Session, DEPTHX — The DEep Phreatic THERmal eXplorer: Robotic exploration and characterization of Sistema Zacatón on the mission path to Europa, Geological Society of America Annual Meeting, Denver, CO, October 2007.
- “The Earth’s Deepest Sinkhole: The Cenote Zacatón” – Lakeway Men’s Breakfast Club, Lakeway (Austin), TX, February, 2008.
- “Deep and Wide – Exploring Carbonate Aquifer Systems in Mexico” – Flinders University, Adelaide, SA, Australia, April, 2008.
- “Challenges to Hydrophilanthropy” – Universities Council on Water Resources, Durham, NC, July, 2008.
- “Urbanization and the Contribution of Storm Drain Leakage to Recharge” [with Katie Buckner]- The University of Texas REU Symposium, Austin, TX, August, 2008.
- “Some Comments on the Bad-Water Zone of the Edwards Aquifer” – Barton Springs Edwards Aquifer Conservation District Conference, Edwards Saline Zone Workshop, Buda, TX, August, 2008.
- “Mapping the Earth’s Deepest Sinkholes – Implications from the Studies at Zacatón” – Scholia, Austin, TX, February, 2009.
- “Hydrogeological Investigation of Tecolote Farm” - Travis County Commissioners Court, Austin, TX, August, 2009.
- “Some observations on the Edwards Aquifer in central Texas” – Jackson School of Geosciences, Friends and Alumni Network, San Antonio, Texas, October, 2009.
- “The Characteristics of the Limestone Carbonate Aquifer System in Cadiz Groundwater Storage” - Southern California – Managing for Self Sufficiency, Association of Ground Water Agencies & American Ground Water Trust, Water Resources Issues in California Conference, Ontario CA, February, 2010.
- “Deep and Wide: Implications from Studies of Carbonate Aquifers in Mexico” - Geology Colloquium Series, University of Maryland, College Park, MD, February, 2010.

Selected non-published invited presentations (continued):

- “Deep and Wide: Implications and Some Questions from Studies of Carbonate Aquifers in Mexico” – U.S. Geological Survey, Reston, VA, February, 2010.
- “The Edwards Aquifer of Texas” – Victoria State Chapter of Australian National Chapter, International Association of Hydrogeologists, Melbourne, VIC, Australia, April, 2010.
- “Effects of Urbanisation on Groundwater Systems – Implications for Urban Water Management” – Flinders University, Adelaide, SA, Australia, April, 2010.
- “The Effects of Urbanization on the Sustainability of Urban Groundwater Systems” – Scholia, Austin, TX, November, 2010.
- “Effects of Urbanization on Groundwater Systems: Is Mankind the Major Hydrogeologic Agent?” - Department of Geology, Brigham Young University, Provo, Utah, September, 2011.
- “Water Resources: Current and Future Issues” – Geological Energy and Environmental leadership Organization, The University of Texas, Austin, TX, October, 2012.
- “Effects of Urbanisation on Shallow Surface Waters and Groundwater Systems” -National Centre for Groundwater Research and Training Seminar Series, Adelaide, SA, Australia, February, 2013
- “Aperture and Roughness of Rock Fractures; Is Upscaling Possible?” - Flinders University, Adelaide, SA, Australia, February, 2013
- “Prediction of fracture roughness aperture, and other hydraulic properties: Is upscaling of flow and transport possible?” – New South Wales Australian Chapter, International Association of Hydrogeologists, Sydney, NSW, Australia, February, 2013.
- Edwards Aquifer Authority Distinguished Lecture Series- San Antonio, Texas, June 2013.
- “Groundwater – Texas style”
 - “Aquifers & karst systems”
 - “The Edwards Aquifer”
 - “Edwards Aquifer – Evolution of our conceptual models”
 - “Sustainability of (karst) aquifers”
 - “Decision support”
 - “Ethics !”
 - “The effects of urbanization”
 - “Regional flow systems”
 - “Volcanogenic karst systems – VKS”
 - “The Edwards Aquifer - Needs and perplexing questions”
- “The Effects of Urbanization on Groundwater Systems” - Department of Geology, Baylor University, Waco, Texas, November, 2013.
- “Texas Water - Texas Style” – Capital City Village Men’s Club, Austin, July 2014.
- “Fracture Controls on Recharge and Discharge: Example of Trans-Pecos Texas” – International Association of Hydrogeologists, 41st Congress, Marrakech, Morocco, September 2014.

Selected non-published invited presentations (continued):

“Volcanogenic Karst Systems” – Geological Society of Washington, Washington, DC, January 2015.

“Effects of Urbanization on Shallow Hydrogeologic Systems” - Center for Urban Environmental Research and Education, University of Maryland, Baltimore County, Baltimore, Maryland, May 2015.

“Volcanogenic Hypogene Karst – Zacatón and Other Deep Systems” – District of Columbia Grotto, National Speleological Society, Chevy Chase, Maryland, July 2015.

“Balmorhea Springs and West Texas Groundwater” – Big Bend Conservation Alliance, Balmorhea, Texas, November 2016.

“Threats to Balmorhea Springs from Oil & Gas Operations” – West Texas Water Symposium, Big Bend Conservation Alliance, Alpine, Texas, April, 2017.

“Crystalline Rock Aquifers of the Llano Uplift” – Austin Gem & Mineral Society, Austin, Texas, August 2017.

“Evolution of Edwards Aquifer models” – South Central Texas Water Research Interest Group, Seguin, Texas, December 2017.

“What is on the Horizon for Texas Groundwater - Management Challenges and Groundwater Research?” – American Groundwater Trust Annual Texas Aquifer Conference, Austin, Texas, June 2018.

“Balmorhea Springs: Hydrogeologic History and Review” – Texas Parks and Wildlife Department, Trans Pecos Workgroup, Austin, Texas, March 2019

“Preliminary Results: Hydrogeologic Evaluation & Vulnerability Analysis for Balmorhea-Area Springs” (9 authors, presented by Brad Wolaver) – Texas Parks and Wildlife Department, Trans Pecos Workgroup, Austin, Texas, March 2019

BOOK REVIEWS

For journals:

- Geohydrology of the Dakota Aquifer, by Jorgenson and Signor (1984), for Am. Assoc. Petrol. Geologists Bulletin
- Fluid Flow in Sedimentary Basins and Aquifers, by Goff and Williams (1989), for Am. Assoc. Petrol. Geologists Bulletin
- Thermal History of Sedimentary Basins, by Naeser and McCulloh (1990), for Mathematical Geology
- Urban Watersheds, by Kaufman, Rogers, and Murray (2012), for Environmental and Engineering Geoscience.

For publishers:

- Introduction to Hydrogeology for WCB/McGraw-Hill (2002)
- Holt Science and Technology for Holt Rinehart and Weston (2003)
- Chernicoff's Geology for Prentice Hall (2004)
- Earth Science for Civil and Geological Engineers for Cambridge University Press (2004)
- Holt Science and Technology 2007 for Holt, Rinehart, and Winston (2006)
- Bretz's Flood for Sasquatch Books (2008)
- Fundamentals of Earth Science for Engineers for (2012)
- Urban Pollution for Wiley Blackwell (2015)
- Standing Between Life and Extinction: Ethics and Ecology of Conserving Aquatic Species in the American Southwest for University of Chicago Press (2016)
- Karst and Cave Science: Processes and Products in the Critical Zone for Cambridge University Press (2019)

For Choice -

- Fundamentals of Numerical Reservoir Simulation, by Peaceman (1977)
- Probability Methods in Oil Exploration, by Harbaugh et al. (1977)
- Floods, by Ward (1978)
- Water in Environmental Planning, by Dunne and Leopold (1978)
- Coal Mine Ground Control, by Peng (1979)
- Soil Erosion, by Morgan (1979)
- International Conference on the Applications of Science and Technology for Desert Development, (1980)
- Groundwater Resources, by Mandel and Shiftan (1981)
- Introduction to Groundwater Modeling, by Wang and Anderson (1982)
- Quantitative Geography, by Wrigley and Bennet (1982)
- Surface Water, by Bowen (1982)
- General Hydrogeology, by Pinneker (1983)
- Sinkholes: their Geology, Engineering, and Environmental Impact, by Beck (1985)
- Log Analysis of Subsurface Geology, by Doveton (1986)
- Managing Water Resources, by Cairns and Patrick (1986)
- Microcomputer Applications, by Hanley and Merriam (1986)
- River Engineering, by Peterson (1986)
- Applied Geothermics, by Economides and Ungemach (1987)
- The Finite Element Method in the Deformation and Consolidation of Porous Media, by Lewis and Schrefler (1987)
- Ground Water Quality and Agricultural Practices, by Fairchild (1987)
- Geostatistical Case Studies, by Matheron and Armstrong (1988)
- Analytical Groundwater Modeling, by Walton (1989)

BOOK REVIEWS (continued):

Numerical Groundwater Modeling, by Walton (1989)

Irrigation-Induced Water Quality Problems (1989), National Research Council

The Poisoned Well, by Jorgenson (1990)

Drinking Water Hazards, by Stewart (1991)

Drinking Water Quality, by DeZuane (1991)

Temperate Palaeohydrology, by Starkel and Gregory (1991)

The Drinking Water Book, by Ingram (1992)

Fractals and Chaos in Geology and Geophysics, by Turcotte (1992)

Structures in the Stream (1995)

Drinking Water, by Symons (1995)

GRANTS

At University of Missouri:

Hydrogeologic Characteristics of the Missouri River Flood Plain: \$5,500, U.S. Dept. of the Interior (O.W.R.T.), July 1975 to June 1976.

Items for Advanced General Geology Instructional Improvement: \$1,814, Univ. of Missouri Task Force on Undergraduate Education, 1975.

N.S.F. Energy Related Traineeships (with Dept. Nuclear Engineering): \$16,000 (approx.) funded research for two graduate students, 1976 and 1977.

Hydrogeology and Delineation of Buried Glacial River Valley Aquifers in Northwestern Missouri: \$10,700, U.S. Dept. of the Interior (O.W.R.T.), July 1976 to Sept. 1977.

Improvement of Courses Related to Geomorphology: \$1,000, Univ. Missouri Task Force on Undergraduate Education, 1977.

Modeling the Effects of Compaction Disequilibrium and Aquathermal Pressuring in Accumulating Sediments: \$18,628, Amer. Chemical Society, Petroleum Research Fund, Sept. 1978 to Aug. 1982.

Delineation of Buried River Valley Aquifers in Dissected Till Plains: \$9,948, U.S. Dept. of the Interior (O.W.R.T.), Oct. 1978 to Sept. 1979.

Identification of Instream Flow Requirements: \$9,030, State of Missouri Office of Administration, Oct. 1978 to June 1979.

Laboratory Equipment for Surficial Materials Testing: \$7,652, Nat. Science Foundation, April 1979 to Oct. 1980.

Evaluation of the Water Resources Potential of the Lower Missouri River Alluvial Aquifer: \$4,000, U.S. Dept. of the Interior (O.W.R.T.), June 1980 to Dec. 1981.

In Situ Properties of Surface Materials in the Bevier and Mendota-Novinger Coal Fields: \$8,300, Univ. of Missouri, Weldon Spring Fund, 1980-1981.

Permeability and Hydrology of Monroe and Ralls Counties, Missouri: \$7,721, Missouri Dept. of Natural Resources, Jan. to Dec. 1981.

Travel Funding for Foreign Speakers: \$3,310, Amer. Chemical Society - Petroleum Research Fund, May to June 1982.

Funding for Field Camp Pickup Truck: \$6,000, ARCO, 1982.

Grants at The University of Texas:

Paleohydrogeology of the Northern Gulf of Mexico: \$35,000, Amer. Chemical Society, Petroleum Research Fund, Sept. 1983 to Dec. 1987.

Upgrading Laboratories for Geology of Engineering: \$7,906, Univ. of Texas, summer 1984.

Industrial funding for an Inductively Coupled Plasma Spectrometer (ICPS): \$42,000 plus matching, Exxon, ARCO, Marathon, Sohio, Chevron, Mobil, and Conoco, 1985.

Computer Modeling of the Hickory Aquifer: a Test of Recharge Enhancement Potential: \$1,547, Hickory Underground Water Conservation District No. 1, June 1985 to June 1986.

Analysis and Prediction of Regional Subsidence Trends along the Texas Gulf Coastal Plain: \$5,000, Univ. of Texas Research Institute, Jan. to June 1986.

Hydrogeologic Study of the Edwards Limestone Aquifer: North Travis and Williamson Counties, Texas: \$7,300, John Lloyd Developers, June 1985 to June 1986.

Carbon-14 Analysis of the Hickory Sandstone Aquifer: \$2,600, Hickory Underground Water Conservation District No. 1, June 1986 to June 1987.

Effect of Aerosol Distribution of High-Level Hazardous Wastes on Ground-water Systems: \$36,000 (3 years at \$12,000/year), Oak Ridge National Laboratories, January 1987, to Dec. 1990.

Fluid Flow and Thermal Anomalies in the Gulf of Mexico Basin: \$37,000, American Chemical Society – Petroleum Research Fund, September 1988, to August 1992.

Characterization of Permeability in Tuffaceous Strata: \$36,600 (3 years at \$12,200/year), Oak Ridge National Laboratories, June 1988 to May 1991.

Hydraulic Transport Parameters in the Saturated Zone of a Reclaimed Lignite Surface Mine: \$33,460, Texas Utilities Electric Environmental Research Program, September 1988 to August 1990.

Evaluation of Underflow and its Application to Texas Water Resources Management: \$43,870 plus matching, Lower Colorado River Authority, June 1989 to May 1991.

Field Skills and Activities Development for Earth Science Teachers (M.J. Guccione, Univ. Arkansas, PI, with J.P. Huntsberger as local co-PI): \$80,872, National Science Foundation, 1992.

Field Instrumentation for Subsidence/depressurization Testings, Baytown, Texas: \$25,000 (est.), City of Baytown, Texas Water Development Board, U.S. Geological Survey, and Houston-Galveston County Subsidence District, Nov. 1989 - Dec. 1991.

Hydrodynamic, Hydrochemical, and Hydrothermal Investigation of Bank Storage Effects Using Coupled Process Models: U.S. Geological Survey, \$85,144 plus matching, August 1990 to August 1992.

Grants at The University of Texas (continued):

Geochemical Evolution and Hydrogeologic Characterization of the Saturated Zone at a Reclaimed Lignite Surface Mine, East Texas: \$32,705, Texas Utilities Electric Environmental Research Program, September 1990, to August 1992.

Instrument to Test Permeability of Fracture "Skins" and Weathered Surfaces: N. S. F., \$18,933, January - August, 1991.

Supplemental Funding for Design of Minipermeameter: \$2200, University Research Institute, June-December 1991,

The Effect of Fracture "Skins" on Flow in Doubly Porous Media: Quantification of Permeability Patterns: \$87,000, Texas Higher Education Coordinating Board, January 1992 - December 1994.

Fluid and Heat Flow in Sedimentary Basins: Geologic and Hydrologic Constraints on a Thermal Anomaly in South Texas, Northern Gulf of Mexico: \$39,855, American Chemical Society – Petroleum Research Fund, September 1992 - August 1994.

Energy Flux and Hydrogeology of Thermal Anomalies in the Gulf of Mexico Sedimentary Basin - South Texas Example: \$147,307, U.S. Department of Energy, August 1992 - September 1995.

The Origin of Badwater in the Edwards Aquifer, Texas: An Integrated Approach to Regional Flow Systems in a Carbonate Aquifer (J. L. Banner co-P.I.): \$94,095 N. S. F., June 1992 - May 1994.

Springflow Augmentation of Comal Springs and San Marcos Springs, Texas (D. C. McKinney co-PI): \$288,000, Texas Water Development Board, March 1993 - March 1995.

Controls of Infiltration and the Effects of Reclamation on Resaturation of Shallow Spoil Aquifers at a Reclaimed Lignite Mine, East Texas: \$32,299, Texas Utilities Electric Environmental Research Program, June 1993 - December 1994.

Mass Transport Properties of Fracture Skins (P. C. Bennett co-PI): \$272,000, N. S. F., March 1994 – December 1997.

Using an Integrated Hydrochemical and Numerical Modeling Approach to Characterize the Hydrogeology of Diamond Y Springs, Pecos County, Texas: \$3000, Texas Nature Conservancy , February 1995 - February 1996

National Science Foundation Graduate Traineeships in Hydrogeology (J. Famiglietti, J. Banner, and P. C. Bennett co-PIs) - \$562,000, January, 1995 - December 2000.

Thermohaline Convection in the Gulf of Mexico Basin - South Texas Example: \$177,448, U.S. Department of Energy, Office of Energy Research, 1 June 1997 - 31 May 2000.

Study of Factors Affecting Chemical Composition of Groundwater in the Nile Delta (Egypt) (P. C. Bennett, co-PI), \$30,000, N. S. F., September, 1999, - August, 2002

Urban "Karst": A Pilot Study on the Impacts of Service Conduits/Ducts and Trenches on Urban Groundwater, Systems (J. D. Mather, University of London, co-PI), \$66,790, N. S. F., January, 2000 - December, 2000.

Grants at The University of Texas (continued):

Urban "Karst": The Impacts of Utility Conduits, Ducts, and Trenches on Urban Water Resources and the Environment: \$50,000, AT&T Foundation, May, 2000, - June, 2003.

Hydrogeological Laboratory Equipment: \$39,000, College of Natural Sciences, The University of Texas, June, 2000 - May, 2001.

Rom Rhome Professional Development Fund, \$1000, College of Natural Sciences, The University of Texas, December, 2000.

Sediment Transport in an Urbanizing Karst Watershed (P. C. Bennett, co-PI), \$100,000, N.S.F. March, 2001- May, 2003.

Big XII Faculty Fellowship: \$2500, The University of Texas, 2002.

Characterizing Heterogeneity in Low-Permeability Strata and Its Effect on Convective Transport: \$68,100, American Chemical Society — Petroleum Research Fund, June 2003 - August 2005.

Development of an Integrated Superconducting Gravity Meter Sensor System for Subsurface Water Storage (C. Wilson, PI, and J.M. Sharp and B. Scanlon, co-PIs), \$494,000, N.S.F. March 2004 - February, 2010.

Deep Phreatic Thermal Explorer (DEPTHX): Robotic Exploration and Biologic Sampling in 3D Unexplored Environments (many co-PIs): \$55,000, Stone AeroSpace Engineering (total grant from NASA ~\$5,000,000), January 2004, - December, 2006.

Sustainable Yield for Aquifers: Management Using Hydrogeologic and Economic Evaluation methods With Hybridized Decision Support Systems: \$33,406, Environmental Protection Agency, September, 2004, - August, 2007.

Barton Springs/Edwards Aquifer Conservation District Habitat Conservation Plan (Bridget Scanlon, co-PI): matching time donations *pro bono*, Barton Springs Edwards Aquifer Conservation District, July, 2004, to February, 2007.

Evaluating Fracture Roughness and Its Effects on Fluid Flow (R. Ketcham, co-PI), \$347, 467, N.S.F., January, 2005, to December, 2010.

Merging Spatially Variant Physical Process Models Under an Optimized System Dynamics Framework, \$190,000 (\$102,500 - UT component), Sandia National Laboratory, May, 2005, to September, 2005.

Merging Spatially Variant Physical Process Models Under an Optimized System Dynamics Framework, \$350,000 (\$194,000 - UT component), Sandia National Laboratory, October, 2005, to September, 2010.

Advancing the Ability of Groundwater Districts in Their Decision-Making Process (PI: S. Schwartz, Center for Public Policy Dispute Resolution, School of Law, co-PIs: D. Eaton, LBJ School), \$99,908, Texas Water Development Board, September, 2006, to August, 2007.

Grants at The University of Texas (continued):

Statistical Characterization of Water Chemistry in Heterogeneous Reclaimed Spoil at Monticello Mine, East Texas: \$33,293, Texas Utilities Electric Environmental Research Program (Peggy Cagle), June 2006 - December 2007.

Estimation of Storage in the Edwards Aquifer via Superconducting Gravimetry, (PI: C. Wilson), \$150,000, NHARP - Earth Sciences, June 2010 – May 2012

A Statistical Comparison of Pre- and Post-Disturbance Water Quality at Oak Hill Mine, a Lignite Mine in Northeast Texas: \$56,000, June 2012, to August 2014.

Intergovernmental Personal Act, \$194,253, National Science Foundation., August, 1 2014 – August 2015.

External funds generated by J. M. Sharp (as PI or co-PI)

At the University of Missouri (1974-1982):

Research and teaching funds: \$118,603¹

Endowed funds in which I played a leading part in their initiation:

Geology Development Board (now over several millions of dollars)

At The University of Texas (1982-present):

Research and teaching funds > \$4,500,000²

Some of the endowed (hydrogeology) funds that I helped initiate:

Oliver Lecture Series	> \$200,000
Jackson Scholarship	> \$450,000
Kent Scholarship	>\$25,000
Gibbs Hydrogeology Research Fund	> \$150,000
Russ & Judy Slayback Fund	>\$150,000
Wiley Hydrogeology Library Fund	>\$400,000

¹ Does not include student research support external to the university or to students via the USDA or the USGS.

² Does not include student research support external to the university or to students via private consulting firms, industrial internships, the Edwards Aquifer Authority, the Texas Bureau of Economic Geology, the Texas Water Commission, the Texas Water Development Board, the Texas Commission on Environmental Quality, the USBLM, the USF&WS, or the USGS.

UNDERGRADUATE STUDENTS AT THE UNIVERSITY OF TEXAS

[These are undergraduate honor's theses, and coop/internship reports (with sponsoring agencies, if applicable, and employment [-], if known):

- Thorakos, Elizabeth, 1985, Hydrogeochemistry of the Phelen Abandoned Mine Site, Bastrop County, Texas.
- Larkin, Randall G., 1988, Hydrogeologic and Environmental Influences on Infiltration and Inflow in the City of Austin's Wastewater Collection System - City of Austin, Texas. [retired, formerly principal, TerraDynamics]
- Hewitt, Charles D., 1989, Installation and Development of Four Spoil Monitoring Wells at the Big Brown Mine, Freestone County, Texas - Texas Utilities, Dallas, TX. [Texas Utilities, Dallas]
- Bauer, Patricia, 1991, Chemical Concentration Maps of the Marshall Aquifer, Michigan - U.S. Geological Survey (USGS), Water Resources Division, Austin, TX. [USGS, San Antonio]
- Bergeron, Karen, 1991, Remediation Techniques and Applications to Three Case Studies - ERM, Southwest, Inc. Houston, TX [Philip Environmental, Houston]
- Wynn, Kirby, 1991, Potentiometric Surface of the Edwards-Trinity Aquifer System and Contiguous Hydraulically Connected Units, West-Central Texas - USGS, Water Resources Division, Austin, TX [U.S.G.S., Fort Collins, CO]
- Ging, Keith D., 1992, Manual on Selected U.S.G.S. Data Collection Equipment and Techniques for Beginning Hydro-Techs - USGS, Water Resources Division, Austin, TX [LCRA, Austin]
- Harren, Michael, 1992, Monitoring of Stream and Riparian Quality in South Central Oregon - U.S. Bureau of Land Management, Klamath Falls OR.
- Brown, Michael A., 1993, Geohydrologic Characterization of the Delaware Basin.
- Koch, Jurgen, 1996, The Environmental Investigation and Remediation of Gasoline-Contaminated Soils and Ground Water in Jacksonville, Texas - Texas Natural Resources Conservation Commission TNRCC), Austin, TX. [Texas Commission on Environmental Quality, Austin]
- Weissmantel (Gell), Christianne, 1996, Design and Implementation of a Ground-Water Monitoring System for the Texas Low-Level Radioactive Waste Site, Hudspeth County, Texas - Texas Bureau of Economic Geology (BEG), Austin, TX. [Marathon Oil, Houston]
- Campbell, Amy L., 1997, The Application of Remediation of Petroleum-Contaminated Groundwater by Natural Attenuation - TNRCC, Austin, TX. [Morgan Stanley Dean Witter, Austin]
- Gale, Douglas A., 1997, Limited Site Assessment of 2419 Lancaster Street, Dallas, Texas - TNRCC, Austin, TX. [Tetra Tech EM, Inc., Denver, CO]
- Savage, James, 1997, Risk-Based Assessment of the East Side Ministries Site, Fort Worth, Texas - TNRCC, Austin, TX.

UNDERGRADUATE STUDENTS (continued):

- Shah, Sachin, 1997, LPST #101351, Brentwood Stair, Fort Worth, Tarrant County, Texas - (TNRCC, Austin, TX. [USGS, Austin, TX]
- Landrum, Michael, 1998, TNRCC Plan: A Risk-based Assessment [U.S. National Park Service]
- Abel, Aaron, 1999, Site Activities and Assessment at an LPST Site in Hillsboro, Texas - TNRCC, Austin, TX [Brazos River Authority, Waco, TX]
- Lorenzo-Rigney, Barbara, 1999, Surfactant-Enhanced Aquifer remediation of Dense Non-Aqueous Phase Liquids – Duke Engineering, Austin, TX [INTERA, Austin, TX]
- Persky, Kristie, 1999, Calculating Peak Discharge Using the Slope-Area Method, U.S. Geological Survey Gauging Station 08157700 - USGS, Austin, TX [LBG-Guyton, Austin, TX]
- Waddail, Aubrey, 1999, Erosion Monitoring and the Implementation of Erosion Control Devices on Restored Wetlands: Reliant Energy- Reliant Energy, Houston, TX
- Brisler, Tina, 2000, Water Availability Models: TNRCC, Austin TX.
- Stahn, Catherine, 2000, Procedures for Transforming Data into Arcview Format for Analysis of CO2 Sequestration with Specific Emphasis on the Morrison Formation, BEG.
- Bentley, Taylor, 2001, Hydrogeology of the Trinity Aquifer in Region C - USGS, Austin, TX. [EMT]
- Bumgarner, Jonathan, 2001, Experimental Hydrology - USGS [USGS, New Mexico]
- Bird, Jennifer, 2002, The Public Water System Assistance Contract - TNRCC, Austin, TX. [teaching, Dripping Springs, TX]
- Kohl, Christy, 2002, Downie Roadcut: Third Control Measurements - Duke Engineering, Austin, TX [consulting, Houston, TX]
- Dildine, Ron, 2003, Changes in Atrazine and Nitrogen as Part of the National Water Quality Assessment Program - USGS, Austin, TX. [consulting, Austin, TX]
- Adamme, Gloria (St. Mary's University), 2003, Urbanization: A Case Study of San Antonio's Effects on Groundwater Recharge - ESI Scholar, Austin, TX. [graduate studies, University of Texas at San Antonio]
- Pecarina, Julie, 2003, Overview of the Soil Attenuation Model - MFG, Inc., Austin, TX [MFG, Inc., Austin, TX]
- Reeve, Lindsay, 2004, Safe Yield in the Edwards Aquifer, the Effects of Pumping on Drought Trigger Wells, Study of the Drought History I, II, III, Processing Monitoring Well Data, and Aiding in Chemical Analysis and Dye Tracing Study - Barton Springs Edwards Aquifer Conservation District, Austin, TX [consulting, Houston, TX]
- Mouri, Sassan, 2004, Ogata-Banks Equation and Fracture Apertures (Hydraulic, Mechanical, and Transport) – The University of Texas Intellectual Entrepreneurship Program, Austin TX [Malcolm Pirnie Consultants, Houston, TX]

UNDERGRADUATE STUDENTS (continued):

- Nguyen, Kim-Anh, 2005, The Due Diligence Process at W&M Environmental, Inc. - W&M Environmental, Inc., Dallas, TX. [consulting, VA].
- Hernandez, Andrew, 2006, Random Simulation of Fracture Aperture Using R.
- Moede, Ian, 2006, Water Resources of the Terrace Deposits and Alluvium East of Austin, Texas [Escarpment Environmental, Austin, TX]
- Robertson, Wendy M., 2006, Characterization of Fracture Roughness Using Computed Tomography, Undergraduate Honors Thesis [Central Michigan University, Mt. Pleasant, MI]
- Cornelius, Melody A., 2007, Water Quality Investigation of Wells Within Hays and Travis Counties [URS, Albuquerque, NM]
- Dlubac, Katherine, 2007, Utilizing Ground-Penetrating Radar to Map Subsurface Aquifer recharge Features in a Karst Environment. [consulting, California]
- Schumacher, Wesley, 2007, Water Availability in the Lower Transmissive Unit of the Trinity Aquifer (Bandera, Kendall, Kerr, and Real Counties). [Escarpment Environmental, Austin, TX]
- Buckner, Katie, 2008, Effects of Storm Drains on Groundwater Recharge [practicing law, North Carolina]
- Helfrich, Julie, 2009, Long Term Trends in Discharge, Dissolved Oxygen, and Specific Conductance of Barton Springs, Austin, Texas.
- Doyle, Sarah L., 2010, Measuring Diffusion Coefficients in Sandstone Using LA-ICP-MS, Undergraduate Honors Thesis [graduate studies, University of New Mexico].
- Mortenson, Kelly, 2010, Global Precipitation Chemistry [BEG, Austin, TX]
- Markovich, Katie, 2012, Undergraduate Honors Thesis [University of Arizona, Tucson, AZ]
- Kocis, Tiffany, 2014, Understanding Surface Water – Groundwater Interactions on the Blanco River, Hays County, TX, Undergraduate Honors Thesis [graduate studies, University of California, Davis]
- Setlur, Neeraja, 2017 & 2018, Fracture Skins in the Crystalline Rock Aquifer of the Llano Area [Exxon Mobil, Houston, TX].
- Velasquez, Mariana, 2018, Organic Carbon Content as a Function or Grain-size Parameters in Alluvial Sediments, Central Texas.

Undergraduate presentations: Partial list of undergraduate students at The University of Texas who gave research oral or poster papers at conferences which were generated either as class projects, as my research assistant, or through internship/cooperative programs:

- Roberts, Julie, 1995, Hydrogeology of Guadalupe County: Geol. Soc. America, Abs. with Programs (North-Central/South-Central Sec.).
- Fenstemaker, T.F., 1996, A revision of the physical groundwater flow model for San Saba County, Texas: Geol. Soc. America, Abs. with Programs (South-Central Sec.), v. 26, p. 13.
- Koch, J.J., 1996, The hydrogeology of Erath County, Texas: Geol. Soc. America, Abs. with Programs (South-Central Sec.), v. 26, p. 23.
- Weissmantel, C.M., 1996, Hydrogeologic map of Hudspeth County, Texas: Geol. Soc. America, Abs. with Programs (South-Central Sec.), v. 26, p. 68.
- Landrum, M.T., 1997, Diffusion coefficients in a sandstone: Comparison of fracture skins and matrix samples: Geol. Soc. America, Abs. with Programs (South-Central/Rocky Mountain Sec.), v. 29, p. 18.
- Lorenzo-Rigney, B., and Sharp, J.M., Jr., 1999, Urban recharge in the Edwards aquifer: Geol. Soc. America, Abs. with Programs (South-Central Sec.), v. 31, p. A-12.
- Gary, M.O., 2000, Genesis and evolution of massive cenotes, Tamaulipas, Mexico: Abs. with Programs (South-Central Sec.), v. 32, no. 3, p. A-11.
- Kygar, R.M., 2004, Finding the saturated thickness of the Edwards aquifer: Abs. with Programs (South-Central Sec.), v. 36.
- Stine, D.G., 2004, Permeability of utility trenches: Abs. with Programs (South-Central Sec.), v. 36.
- Mouri, S., 2005, Comparison of varying aperture calculations: Abs. with Programs (South-Central Sec.), v. 37, no. 3, p. 8.
- Cornelius, M., et al., 2006, Spatial analysis of urban infrastructure density as a function of land use for refining aquifer recharge estimates [abs.]: The Abstract Book of the 2006 Ground Water Summit Program, National Ground Water Association, Westerville, OH, p. 142.
- Henderson, C.A., et al., 2006, Developing the visual narrative of an aquifer [abs.]: The Abstract Book of the 2006 Ground Water Summit Program, National Ground Water Association, Westerville, OH, p. 141.
- Moede, I.H., 2006, Hydrogeologic maps of Uvalde County, Texas: Abs. with Programs (South-Central Sec.), v. 38, no. 1, p. 35.
- Robertson, W.M., 2006, Characterization of roughness in fractures using computed tomography: Abs. with Programs (South-Central Sec.), v. 38, no. 1, p. 34.
- Dlubac, K., 2007, A ground-penetrating radar survey over Flint Ridge Cave, Austin Texas, for karst aquifer recharge studies: Abs. with Programs (South-Central Sec.), v. 39, no. 3, p. 58.

Undergraduate presentations (continued):

Llado, L.E., 2007, Springflow trends in the Edwards Aquifer – long term urbanization effects: Abs. with Programs (South-Central Sec.), v. 39, no. 3, p. 58.

Doyle, S., et al., 2009, Laser ablation LA-ICP-MS to derive diffusion coefficients in sandstones: Geo. Soc. America, Abs. with Programs (South-Central Section Mtg.), v. 41, no. 2, p. 31.

Setlur, N., et al., 2016, Crystalline rock aquifers: The Llano Uplift, Central Texas, USA [abs.], in Groundwater and Society: 60 Years of IAH, Proceedings. 43rd Congress, International Association of Hydrogeologists, Montpellier, France, <http://60iah2016.org>.

MISCELLANEOUS STUDENT REPORTS SUPERVISED

A Hydrogeologic Investigation of the Tiger Creek Drainage Basin in McCulloch and Mason Counties, Texas (1985)

Analysis of the San Saba River Basin on the Hickory Sandstone Outcrop in Southeastern McCulloch County, Texas (1985)

Hydrogeology of Hornsby Bend, Travis County, Texas (1987)

Hydrogeology of Hornsby Bend and Hunter Bend Area, Travis County, Texas (1988)

Hydrogeological Investigations of a Perched Water Table in Pecos, Texas (1990)

Preliminary Hydrogeological Investigation of the Evans Ranch Area. Jeff Davis County, Texas (1990)

Geochemical Sampling and Analyses of Surface and Ground Waters, Padre Island National Seashore, North Padre Island, Kleberg County, Texas (1991)

Geophysical Survey, North Padre Island National Seashore, Kleberg County, Texas (1991)

Hydrogeology of North Padre Island (1991)

A Groundwater Investigation of Dell City, Texas (1992)

Hydrogeologic Investigation of Diamond Y Springs Nature Preserve, Pecos County, Texas (1995)

Hydrologic Investigation in the Toyah Basin near Balmorhea, Texas (1995)

Hydrogeology of Vieja Pass: Recharge of the Ryan and Lobo Flats Aquifer, Trans-Pecos, West Texas (1996)

Hydrogeological Characterization of Padre Island National Seashore, 28 km South of Corpus Christi, Texas (2001)

Hydrogeological Investigation of Tecolote Farm, Manor, Texas (2009)

Hydrogeology of Hornsby and Hunters Bend, Austin, Texas (2011)

Near-Surface Geophysical Investigations at Quadborder Sink, Austin, Texas (2011)

Hydrologic Investigation of Surface [Water] and Groundwater in Decker and Gilliland Creek Watersheds, Travis County, Texas (2011)

GRADUATE STUDENTS AT THE UNIVERSITY OF TEXAS

[includes present or last known position/profession]

Masters degrees (57):

- McMahon, Peter B., 1984, Computer Simulation of Mass Transport in Groundwater: Effect of Macroscopic Heterogeneities in Hydraulic Conductivity, 111p. [USGS - Denver, CO]
- Bodner, Daniel P., 1985, Heat Variations Caused by Groundwater Flow in Growth Faults of the South Texas Gulf Coast Basin, 188p. [FIDO, San Francisco, CA]
- LaFave, John I., 1987, Groundwater Flow Delineation in the Toyah Basin of Trans-Pecos Texas, 159p. [Montana Geological Survey, Butte, MT]
- McNeish, Jerry A., 1987, Indirect Evaluation of Hydrogeologic Spatial Correlation Length: An Approach to Quantification of Hydraulic Conductivity Variance Reduction Using Synthetic Hydraulic Tests, 120p. [INTERA, Las Vegas, NV]
- Black, Curtis W., 1988, Hydrogeology of the Hickory Sandstone Aquifer, Upper Cambrian, Riley Formation, Mason and McCulloch Counties, Texas, 195p. [US EPA - Seattle, WA]
- Donnelly, Andrew C. A., 1988, Meteoric Water Penetration in the Frio Formation, Texas Gulf Coast (C. W. Kreitler, co-supervisor), 137p. [D.B. Stephens & Associates, Austin, TX]
- Germiat, Steven J., 1988, An Assessment of Future Coastal Land loss in Galveston, Chambers, and Jefferson Counties, Texas, 190p. [Aspect Consulting LLC, Bainbridge Island, WA]
- Larkin, Randall G., 1988, Hydrogeologic Controls on Underflow in Alluvial Valleys -Implications for Texas Water Law, 134p. [now retired, formerly principal, TerraDynamics, Austin, TX]
- Pfeiffer, Deborah S., 1988, Temperature Variations and Their Relation to Groundwater Flow, South Texas, Gulf Coast Basin, 199p. [BHP, New Orleans, LA]
- Brown, Theresa J., 1989, Modeling the Effects of Aerosols on Groundwater Systems, 182p. [retired, Sandia National Laboratory, Albuquerque, NM]
- Clement, Tonia J., 1989, Hydrochemical Facies in the Badwater Zone of the Edwards Aquifer, Central Texas, 168p. [Golder & Associates, Atlanta, GA, now deceased]
- Hewitt, Charles D., 1990, Hydraulic Properties of the Saturated Zone of a Reclaimed Lignite Surface Mine, East Texas, 151p. [Texas Utilities, Dallas]
- Matherne (Fuller), Carla J., 1990, Fracture and Permeability Analysis of the Santana Tuff, Trans-Pecos Texas, 101p. [Lamar University, Beaumont, TX]
- Gabaldon, Gilbert, 1991, A Hydrogeologic Characterization of the Presidio Bolson, Presidio County, Trans-Pecos Texas, 100p. [ERM, Houston, TX]
- Hart, Margaret A., 1992, The Hydrogeology of the Davis Mountains, Texas, 157p. [TNRCC, Austin, TX, now deceased]

- Holzmer, Frederick W., 1992, Redevelopment of the Groundwater System at a Reclaimed Lignite Surface Mine, East Texas, 103p. [Devine-Tarbull Associates, Sacramento, CA]
- Black, Jeffrey W., 1993, Hydrogeology of the Lobo and Ryan Flats Area, Trans-Pecos Texas, 113p. [Thermoretec Inc., Golden, CO]
- Ferris, Malcolm A., 1993, Distribution of Permeability Patterns- Upper San Andres Formation Outcrop, Guadalupe Mountains, New Mexico, 184p. [TCEQ, San Antonio, TX]
- Hill, David W., 1993, Land Subsidence in the Big Hill and Fannett Fields of Jefferson County, Texas: A Predictive Model, 134p. [PSI, Inc., Austin, TX]
- Li, Fu, 1993, Instrumentation of an Electronic Minipermeameter and Controls on Permeability Variations in the Fractured and Liesegang-Banded Breathitt Sandstone, Eastern Kentucky, 145p. [Golder & Associates, Seattle, WA]
- Crowe, Joanna C., 1994 (Fall), Detailed Hydrogeologic Maps of the Comal and San Marcos Rivers for Endangered Species Habitat Definition, 154p. [Johns Hopkins University, Baltimore, MD]
- Jarocki, Karen E., 1994 (Fall), Properties of and Factors Influencing Infiltration Rates at a Reclaimed Lignite Mine, Freestone County, Texas, 141p. [Jacobs, Albuquerque, NM]
- Oetting, Gregory C., 1995 (Summer), Evolution of Fresh and Saline Groundwaters in the Edwards Aquifer, Central Texas: Geochemical and Isotopic Constraints on Processes of Fluid-Rock Interaction and Fluid Mixing (J.L. Banner, co-supervisor), 203p. [Utilicorp, Kansas City, MO]
- Smyth-Boulton, Rebecca C., 1995 (Summer), Porosity and Permeability Controls in the Santana Ash-Flow Tuff, Trans-Pecos Texas, 99p. [Texas Bureau of Economic Geology, Austin, TX]
- Uliana, Matthew M., 1995 (Fall), The Potential for Springflow Augmentation at Comal and San Marcos Springs, 147p. [INTERA, Austin, TX]
- Kreisel, Ilan, 1996 (Spring), Fracture Skins and Their Effects on Solute Transport in a Fractured Porous Medium With Examples From the Brushy Canyon Formation, West Texas, 109p. [Amdocs, Ramat-Gan, Israel]
- Boghici, Radu, 1997 (Summer), Hydrogeological investigations at Diamond Y Springs and Surrounding Area, Pecos County, Texas, 120p. [Texas Water Development Board, Austin, TX]
- Schuster, Stefan K., 1997 (Summer), Hydrogeology and Local Recharge Analysis in the Toyah Basin Aquifer, 130p. [D.B. Stephens & Associates, Austin, TX]
- Zahm, Christopher K., 1998 (Fall), Use of Outcrop Fracture Measurements to Estimate Regional Groundwater Flow, Barton Springs Segment of Edwards Aquifer (R. Marrett, co-supervisor), 154p. [Bureau of Economic Geology, Austin, TX]
- Bene, James, 2000 (Spring), Non-Darcy Flow Through Porous Media, 179p. [Harden and Associates, Austin, TX]
- Fenstemaker, Thomas F., 2000 (Summer) Density-Driven Free Convection Across Low Permeability Strata, South Texas Example, 131p. [Harden & Associates, Austin, TX]

- Khorzad, Kaveh, 2000 (Spring), Land Subsidence Along the Texas Gulf Coast Due to Oil and Gas Withdrawal, 108p. [principal, Wet Rock Groundwater Services, Austin, TX]
- Landrum, Michael T., 2000 (Spring), Hydrogeologic Properties of Fracture Skins and their Effects on Radionuclide Transport, 133p. [National Park Service]
- Lindsay (Tsoflias), Sarah R., 2000 (Summer), Controlled Fracture Study of Geologic Materials, 60p. [Ph.D. student, University of Kansas, Lawrence, KS]
- Ressler, Ted, 2001 (Spring), Preliminary Characterization of the Valley-Fill Aquifer in Forty Mile Wash, Southwestern Nevada, 164p. [Groundwater Solutions, Inc., Portland, OR]
- Van Broekhoven, Norman G., 2002 (Summer), recharge in a Semi-Arid Basin Aquifer: Ryan and Lobo Flat, Trans-Pecos, Texas, 257p. [Caran & Associates, Austin, TX, now deceased]
- Krothe, Jason, 2002 (Fall), M.S., Role of Utility Trenches in Redirecting Groundwater Flow, 190p. [Hydrogeology, Inc., Bloomington, IN]
- Naing, Thet, 2002 (Fall), M.S., Mapping Hydraulic Conductivity of the Ogallala Aquifer in Texas, 105p. (A. Dutton, co-supervisor), 105p. [Geomatrix, Costa Mesa, CA]
- Phyu, Thandar, 2002 (Fall), M.S., Transient Modeling of Contaminant Transport in Dual porosity Media with Fracture Skins, 125p. [Geomatrix, Costa Mesa, CA]
- Hobbs, Amy L., 2003 (Summer), M.S., Estimating the Sediment Budget for the Barton Springs Segment of the Edwards Aquifer, 238p. [Parish Geomorph, Toronto, ON, Canada]
- Garcia-Fresca, Beatriz, 2004 (Summer), M.S., Urban Effects on Groundwater Recharge in Austin, Texas, 173p. Chevron Research, La Habra, CA]
- Evans, Shanna B., 2005, Using Chemical Data to Define Flow Systems in Cuatro Cienegas, Mexico, 114p. [ERM Corp., Austin, TX]
- Hemphill, Lloyd, 2005 (Spring), M.S., Hydrogeology of Heterogeneous Alluvium in the Leona Aquifer, Caldwell County, Texas, 164p. [consulting, Kansas]
- White, Kristin Miller, 2005 (Spring), M.S., Hillslope Seepage Erosion, Spring Sapping, and Knickpoint Migration: Evidence Trinity Aquifer, Honey Creek Basin, Comal County, Texas, 149p. [Escarpment Environmental, Austin, TX]
- Lindley, Adrian, 2005 (Fall), M.S., The Hydrologic Function of Small Sinkholes in the Edwards Aquifer Recharge Zone, 112p. [Parsons Consulting, Austin, TX]
- Thompson, Clark, 2005 (Fall), M.S., Investigation of Surface Roughness of Natural Rock Fractures Using High-Resolution X-Ray Computed Tomography and Laboratory Flow Test Measurement, 262 p. [consulting, Austin, TX]
- Stevens, Joel D. 2007 (Spring), M.S., Variable-Density Groundwater Flow Beneath the Wind-Tidal Flats of Padre Island, 175p. [Geo-Strata, San Antonio, TX].

- Cagle, Peggy Neill, 2007 (Fall), M.S., Controls of Sulfate Variability in Groundwater at a Lignite Mine, northeast Texas, 200p. [Hockaday School, Dallas, TX]
- Wiles, Thomas J., 2007 (Fall), M.S., The Secondary Permeability of “Impervious” Cover in Austin, Texas, 108 p. (EnCana, Denver, CO)
- Andring, Megan J., 2010 (Spring), M.S., Hydrogeological analysis of groundwater chemistry and sulfate distribution, Blanco and Hays Counties, Texas, 152p. [HDR Engineering, Austin, TX]
- Walz, John, 2010 (Fall) M.A. (Public Affairs), Islamic foundations for effective water management: Four case studies (David J. Eaton, co-supervisor), 64p. [World Bank, Cairo, Egypt]
- Al-Johar, Mishal, 2011 (Spring), Constraining Fracture Permeability by Characterizing Fracture Surface Roughness, 193p. [Arcadis, Portland, OR]
- Passarello, Michael, 2011 (Spring), New Methods for Quantifying and Modeling Estimates of Anthropogenic and Natural Recharge: A Case Study for the Barton Springs Segment of the Edwards Aquifer, Austin, Texas, (S.A. Pierce, co-supervisor), 199p. [ExxonMobil, Houston, TX]
- McGlynn, Edward R., 2012 (Summer) Alternative Groundwater Resources in North-Central Texas for the Development of the Barnett Shale Gas Play (J. P. Nicot, co-supervisor), 90p. [3M, Austin, TX]
- Snatic, Jon W. 2013 (Spring), Identification of groundwater recharge sources contributing to urban stream base flow in Austin, Texas (Jay L. Banner, co-supervisor), 90p. [consulting, LA]
- Mercier, L. Joy, 2014 (Summer), Low pH Waters in the Vicinity of Oak Hill Mine: A s Statistical Evaluation of Water Quality, 306 p. [TCEQ, Austin, TX]
- Kromann, Jenna, 2015 (Spring), Surface Water Recharge in Karst: Edwards-Trinity Aquifers-Nueces River System (Marcus O. Gary, co-supervisor), 194p. [HDR, Austin, TX]

Doctoral degrees (24):

- Blanchard, Paul E., 1987, Fluid Flow in Compacting Sedimentary Basins, 190p. [Agronomy Dept., U. of Missouri, Columbia, MO]
- Senger, Rainer, 1989, Hydrodynamics of Gravity-Driven Flow Systems in Sedimentary Basins: Example of the Palo Duro Basin, Texas, 191p. [INTERA, Austin, TX]
- Hibbs, Barry J., 1993, Numerical Modeling and Hydrologic Analysis of the Floodplain Hydrogeology, Bank Storage Interactions, and Underflow in the Colorado River Alluvial Aquifer, 329p. [California State University at Los Angeles, Los Angeles, CA]
- Mayer, James R., 1995, The Role of Fractures in Regional Groundwater Flow: Field Evidence and Model Results from the Basin and Range of Texas and New Mexico, 218p. [University of West Georgia, Carrollton, GA]
- Lee, Roger L., 1996, Geochemistry of Sewage-Contaminated Water in the Shallow, Glacial Outwash Sand and Gravel Aquifer, Cape Cod, Massachusetts (P. C. Bennett, co-supervisor), 242p. [retired, U.S. Environmental Protection Agency, now with ERM, Austin, TX]
- Darling, Bruce K., 1997, Delineation of the Ground-Water Flow Systems of the Eagle Flat and Red Light Basins of Trans-Pecos, Texas, 179p. [Southwest Groundwater Consulting, Austin TX]
- McKenna, Thomas E., 1997 (Summer), Geologic and Hydrologic Constraints on Fluid and Heat Flow in Overpressured Rocks of the Rio Grande Embayment, Gulf of Mexico, 241p. [Delaware Geological Survey, Newark, DE]
- Mace, Robert E., 1998 (Spring), Ground-Water Flow and Solute Transport in a Fractured Chalk Outcrop, North-Central Texas, 386p. [Texas Water Development Board, Austin, TX]
- Tsoflias, George P., 1999 (Fall), Hydrogeologic Characterization of Fractured Carbonate Aquifers Employing Ground-Penetrating Radar, 96p. [Department of Geology, University of Kansas, Lawrence, KS]
- Halihan, Todd, 2000 (Spring), Permeability Structure in Fractured Aquifers 132p. [Department of Geology, Oklahoma State University, Stillwater, OK]
- Uliana, Matthew M., 2000 (Fall), Delineation of Regional Groundwater Flow Paths and Their Relation to Regional Structural features in the Salt and Toyah Basins, Trans-Pecos Texas, 215p. [INTERA, Austin, TX]
- Asquith, William, 2003 (Spring), Modeling Runoff-Producing Rainfall Hyetographs in Texas Using L Moment Statistics, 386p. [U.S. Geological Survey, Lubbock, TX]
- Shi, Mingjuan, 2005 (Spring), Characterizing Heterogeneity in Low-Permeability Strata and Its Control on Fluid Flow and Solute Transport by Thermohaline Free Convection, 229p. [Amerada Hess, Houston, TX]
- Pierce, Suzanne A., 2006 (Fall) Groundwater Decision Support: An Integrated Assessment Linking Causal Narratives, Numerical Models, and Combinatorial Search Techniques to Determine Available Yield for an Aquifer System, 313p. [Texas Advanced Computing Center, Austin, TX]

- Garner, Terence, T., 2007 (Spring) Characterization of transport properties in granitic fractures with skins, 191p. [Occidental, Houston, TX]
- Budge, Trevor, 2008 (Summer) Delineating Contributing Areas for Karst Springs Using NEXRAD Data and Cross-Correlation Analysis, 188p [INTERA, Richland, WA]
- Wolaver, Bradley D., 2008 (Summer) Hydrogeology of the Cuatrociénegas Basin, Coahuila, Mexico: An Integrative Approach to Arid Karst Aquifer Delineation, 316p. [U.S. Fish & Wildlife Service, Albuquerque, NM]
- Hauwert, Nico, 2009 (Spring) Groundwater Flow and Recharge Within the Barton Springs Segment of the Edwards Aquifer, Southern Travis and Northern Hays Counties, Texas, 328p. [City of Austin, Austin, TX]
- Gary, Marcus O., 2009 (Fall) Karst Hydrogeology and Speleogenesis of Sistema Zacatón, Tamaulipas, Mexico, 232p. [Edwards Aquifer Authority, San Antonio, TX]
- Garcia-Fresca (Grocin), Beatriz, 2009 (Fall) Outcrop-Constrained Flow and Transport Models of Reflux Dolomitization, 180p. [Statoil, Austin, TX]
- Nance, H .S. (Seay), 2010 (Spring) Controls on and Uses of Hydrochemical and Isotopic Heterogeneity in the Plateau Aquifer System, Contiguous Aquifers, and Associated Surface Water, Edwards Plateau, Texas, 300p. [deceased, last with the Bureau of Economic Geology, Austin, TX]
- Slotke, Donald T., 2010 (Spring) Characterizing the Effect of Surface Roughness on Fluid Flow through Fractures, 234p. [Schlumberger, Houston, TX]
- Robertson, Wendy. M., 2014 (Spring), Anthropogenic Impacts on Recharge Processes and Water Quality in Basin Aquifers of the Desert Southwest: A Coupled field Observation and Modeling Study, 169 p. [Central Michigan University, Mt. Pleasant, Michigan].
- Bobeck, Patricia A. (Spring) 2017, Jean-Baptiste Paramelle: Method, Results, and Contribution to Hydrogeology, 410p. [Geotechnical Translations, Austin, TX]

International exchange student advisees:

Patrick Bruines, University of Delft, 1996-1997

Beatriz Garcia-Fresca, University of the Basques, 1996-1997

Lorenzo Marchesini, University of Bologna, 1996-1997

Robert Cannon, Flinders University, 2000

Amber Inwood, Flinders University, 2000

James McCallum, Flinders University, 2000

Yueqing (Stephen) Xie, Flinders University, 2011

Visiting postdoctoral and doctoral fellows/ visiting scientists :

Dr. T. Vinoda Rao, Andhra University, Visakapatnam, India, 1992

Prof. Zeng Jianhui, University of Petroleum, Beijing, China. 1996-1997

Dr. Neville I. Robinson, CSIRO, Adelaide, Australia, 1996, 2000, and 2005

Prof. Craig T. Simmons, CSIRO and Flinders University, Adelaide, Australia, 1996, 1999, 2007, & 2011

Prof. Jim Hendry, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, 1997

Prof. Xue-Yu Zhu, Nanjing University, Nanjing, China, 1997

Prof. John D. Mather, University of London, Royal Holloway College, London, United Kingdom, 1998 & 2000

Prof. Glenn Ledder, Dept. Mathematics and Statistics, U. Nebraska, Lincoln, NE, 2000 (2 visits)

Dr. Jiang Si-Min, Shanghai University, Shanghai, China, 2011

Adjudicator/examiner of international theses/dissertations:

- Grant Garven at University of British Columbia, Canada: The Role of Groundwater Flow in the Genesis of Stratabound Ore Deposits: A Quantitative Model, 1982.
- Dave Rudolph at University of Waterloo, Canada: Hydrogeologic Effects of Fractures in Lacustrine Sediments, 1986.
- S. Siddi Raju at Sri Venkateswara University, India: Geohydrology and Water Resources of the Pulang River Basin, Cuddapah District, Andhra Pradesh, India, 1993.
- Yammani Srinivasa Rao at Sri Venkateswara University, India: Hydrogeology and Some Environmental Aspects of Niva River Basin, Chittoor District, Andhra Pradesh, South India, India, 1993.
- K. Thiru Sankar at Madras University, India: Hydrogeological Studies in the Kanyakumari District, Tamil Nadu, 1996.
- P. Sanhara Rao at Andhra University, India: Hydrogeophysical and Other Related Studies in the Gomuhki River Sub-Basin, Vizianagram District, Andhra Pradesh, India, 1997.
- Craig T. Simmons at Flinders University of South Australia, Australia: Density-Induced Groundwater Flow and Solute Transport Beneath Saline Disposal Basins, 1997.
- Seth Johnson at University of Western Australia, Australia: Hydrogeological Investigation of the Northern Goldfields Region, Western Australia, 2000.
- Kamel Abdel Abdallah at Cairo University, Egypt: Hydrogeological Studies for Re-evaluation of Conditions and Potentialities of the Groundwater Aquifer of El Kharga Oasis, Western Desert – Egypt, 2001.
- Istvan Almasi at the University of Alberta, Canada: Petroleum Hydrogeology of the Great Hungarian Plain, Eastern Pannonian Basin, Hungary, 2001.
- Mahmoud Shaban Abd El-Mageed at Cairo University, Egypt: Environmental Impacts of Development on the Hydrogeology and Hydrochemistry, West of Delta — Egypt, 2002.
- M. P. Darmesh at University of Mysore, India: Blockwise Groundwater Assessment of Nagamangala Taluk, Mandya District, Karnataka, India, Using GIS and Remote Sensing Techniques, 2003.
- Ivan Cesar Bazaldua Rodriguez at Universidad Autónoma de Nuevo León, Mexico: Complex Geophysical Study of the La Fragua Canyon, Cuatro Ciénegas, Coahuila (Estudio geofísico integral en el canon La Fragua, Cuatro Ciénegas, Coahuila), 2008.
- Aleksandra Rancic at the University of New South Wales: Reconstruction of Bore Hydrograph Trends in Fractured Aquifers Using Data Mining Techniques, 2014.
- Mark Aaron Peterson at the University of New South Wales: The Radioactive-Stable Tracer Diffusion Method to Quantify Diffusive Losses in Fractured Rocks and Homogeneous Aquifers, July 2017.
- Sanaa Issa at the University of Sydney: Salinity Processes and Urbanisation Impact in Western Sydney, Australia, 2018.
- Babu Rao Gudipudi at the Acharya Nagarjuna University, India: Geochemistry and Origin of Fluoride Enriched Groundwater with Special Reference to Fluorosis Hazards in a Part of Semi-Arid Crystalline Aquifers of Guntur District from Andhra Pradesh, India. 2018.

STUDENT AWARDS

(Note: Records before 2004 are incomplete)

American Association of Petroleum Geologists Grant
Garcia- Fresca, Beatriz 2006

AAPG Selected Student Presentation
Garcia-Fresca, Beatriz 2009

AGU Hydrology Section Outstanding Student Paper
Wendy Robertson 2011

American Ground Water Trust Scholarhsip
Karen Bergeron, 1990

BHP Billiton Scholarship
Garcia-Fresca, Beatriz 2007
Wolaver, Brad 2007

EPA Star Fellowship
Pierce, Suzanne 2004 - 2006

Fulbright Fellowship
Markovich, Katie 2012

GCAGS Fellowships
Garcia- Fresca, Beatriz 2006
Wolaver, Brad 2005 & 2006
Uliana, Matt 1998

Geological Society of America, Research Grant
Kromann, Jenna 2013
Senison, Jeff 2012
Passarello, Mike 2010
Al-Johar, Adam 2009
Gary, Marcus 2008
Wolaver, Brad 2006
Garcia-Fresca, Bea 2006
Garner, Terence 2003
Shi, Mingjuan 2002
Fenstermaker, Tom, 2001
Uliana, Matt 1998
Landrum,. Mike 1998
Halihan, Todd 1998
Tsoflias, George 1997
Khorzad, Kaveh 1997
Van Broekhoven, Norm 1995
McKenna, Tom 1924
Caran, Chris, 1992
Skilton, Neil, 1979

Houston Geological Society Scholarship

Kocis, Tiffany 2013
Pierce, Suzanne 2004
Bergeron, Karen 1991

Jones- Amsbury Research Grant (South Texas Geological Society)

Senison, Jeff 2013

Luminant Energy (formerly Texas Utilities) Environmental Fellowship

Mercier, Joy 2012-2013
Cagle, Peggy 2006-2007
Jarocki, Karen 1993-1994
Holzmer, Fred 1991-1992
Hewitt, Charlie 1989-1990

NSF Pan-American Advanced Studies Institute

travel grant to Adaptive Water-Energy Management in the Arid Americas, La Serena, Chile,
Kromann, Jenna 2103

Ozarka Scholarship

Robertson, Wendy 2012

PEO Fellowship

Pierce, Suzanne 2004-2006

Sigma Xi Research Grant

Robertson, Wendy 2012

Tinker Fellowship

Wolaver, Brad 2005

Todd Sutherland Memorial Scholarship

Gabaldon, Gil 1992
Smyth, Becky, 1994

GRADUATE STUDENTS AT THE UNIVERSITY OF MISSOURI (19)
[includes present or last known professional position]

Mike Bernthal [Graduate school, Cornell University]

Scott Christenson [retired, USGS, Oklahoma City, OK]

Dave Draney [Chevron, San Francisco, C, now deceased]

Jan Falteisek [retired, Minnesota Department of Natural Resources, St. Paul, MN]

Jane Flachman [unknown]

Terry Foreman [retired, formerly vice president, CH2M-Hill, California]

Doug Frick [retired, formerly principal, McCulley, Frick, and Gilman, Seattle, WA]

Lee Gorday [Georgia Geological Survey, Atlanta, GA]

Norm Grannemann [retired, USGS, Lansing, MI]

Morris Hall [Mozark Corp. Houston]

Tom Heseman [Rocky Mountain Consultants, Denver, CO]

Mark Hodson [Conoco, Houston]

Cindy Keefe [Shell Oil, Houston]

Jean Lewis [unknown]

Mike Korten Hof [Oregon Dept. Natural Resources, Portland, OR]

Olav Malvik [retired, formerly Phillips Petroleum, New Guinea]

Greg Seifert [Consulting, Houston]

Craig Stewart [Geomatrix Consultants, CA]

Mark Zatezalo [Crouse and Company, Monroeville, PA]

Selected short courses taught:

Geophysical Exploration for Groundwater, Short course for SAGA Geophysics and the U.S. Air Force, Austin, Texas, 1992.

Introduction to Hydrogeology, Permian Basin Graduate Center, Midland, Texas, May, 1998.

Selected consulting:

Rock Properties and Caving Characteristics of the Duluth Gabbro – Maturi Road Deposit: Report for International Nickel Company, 1967.

Analysis of joint and fracture patterns and rock mechanics tests to assess the feasibility of block caving for mining the Maturi Road prospect.

[pro bono] Goal Gasification Task Force Report for Columbia, Missouri, City Council, 1977.

This report feasibility and environmental effects of a proposed coal gasification plant. It was shown that the tailings would have been disposed at the only site in the entire county that could have contaminated the City of Columbia's well field.

Opinion on D-L Ranch, San Juan Basin, Colorado: Report for J. W. Patterson & Associates, 1978.

Report on the MIES Site, Macon County, Missouri, 1980.

Report on Dighton Rock for Friends of Dighton Rock Museum, 1980.

Report to Law Engineering, Atlanta, Georgia: Review of Salt Dome Research for ONWI, 1980.

This was the expert review analysis of the Nuclear Regulatory Commission's salt dome research consultant report.

Opinion on Geothermal Energy, Ohio: Report to Wolfson, Wolfson, and Cochran, 1985.

Report (supervision) on the Marsalise Tract, Texas: Alternate Wastewater Systems, 1986.

Potential Impacts of the Proposed Discharge of Treated Sewage Effluent in Bear Creek, Travis County: Report to the Texas Water Commission, Austin, 1986.

Potential Effects of the Proposed Bear Creek M.U.D. on the Edwards Aquifer: Report to the City of Austin, Texas, 1986

The above two reports assessed the potential physical and chemical effects of proposed developments along Bear Creek on the Edwards Aquifer. The first project would have had minimal affects; the latter had potentially negative consequences.

Findings on gasoline contamination at a site in Dallas: Report for Calhoun, Gump, Spillman, and Stacy, 1988.

Selected consulting (continued):

Reconnaissance Study of Groundwater Availability for the Texas Panhandle SSC Site: Report to Texas Superconducting Supercollider Project Office and Ebasco Services, 1987.

This report analyzed the groundwater resources for a proposed supercollider site and showed them to be adequate.

Report on the Schwartz Well, Georgetown, Texas, 1988.

Gulf Coast Research: ORYX Energy, 1989.

Review of PSM Site at Robert Mueller Airport, 1990.

Analysis of contamination in alluvial groundwater in the alluvium near Robert Mueller Airport in Austin.

Potential Effects of Planned Slaughter Creek Sewage Line on the Ed Harrell Property, Austin, Texas, 1990.

This study reviewed potential effects of sewage line / storm sewer line construction in a shallow fractured carbonate system that could affect streamflow.

Review of Sediment Toxicity Testing Program: For Freeport-McMoran, Inc., 1991.

Report to Mr. Dale Johnson on the "Watering-Out" of the Makin-Bacon#2 Well, 1991.

Report of the Scientific Review Team on the Dryden Site, Application of Chemical Waste Management, Inc.: Report to INTERA (Review team chairman) (Team members: Armstrong, Dickerson, Freeze, Lesser, McCreath, Muehlberger, Quinlan, Veni, and White), 1992.

Report of the State-Wide Review Committee in Geology to State of Louisiana Board of Regents, 1993.

Report to Travis Engineering on the possibility of MTBE contamination arising from the Kraft-Frostex site, Austin, TX, 1996.

This report demonstrated that a specific leaky storage tank could not be the cause of areal MTBE contamination. This study was also the beginning of my studies on the effects of urbanization on groundwater systems.

Opinion on ABS Well Site, Carrizo-Wilcox aquifer: Report to ABES, 1997.

Preliminary findings on potential groundwater contamination, Midland-Odessa area: Report to Funderburk & Funderburk, 1997.

[pro bono] National Research Council - Advisory Committee on the Waste Isolation Pilot Plant (WIPP), 1998-2001.

I addressed groundwater issues pointing out the divergences in flow directions between field tests and site numerical model, proposed tests for evaluating the possibility of karst conduits, and the need for data on NORMS (naturally occurring radioactive materials) from oil & gas operations around WIPP.

Selected consulting (continued):

Preliminary opinion on the Danvers, Massachusetts, site: Report to Reich & Binstock, 2000.

Opinion on the source of elevated groundwater salinity and related issues at the D. K. Boyd site, Winkler County, Texas: Report to Gallagher, Lewis, Downey, and Kemp, 2001.

This study showed that a saline water disposal well had failed and was a potential source of shallow groundwater contamination.

State of Wisconsin, Department of Regulation and Licensing – Fundamentals of Hydrology Examination Test Development, 2001.

[pro bono] Review of Draft Conceptual Model Report for Dell City Area, El Paso Water Utilities, 2002.

Kelly AFB Numerical Model: Report for Mitretek, San Antonio, TX, 2003.

This report analyzed the sources, extent, and potential spread of NAPL contamination.

[pro bono] Opinion on the definition of “waters of the United States” for HR 962, for U.S. Rep. Wayne T. Gilchrest, 2003.

Dell City Sustainability Analyses: Report to Axiom Blair Engineering, Austin, Texas, 2003.

Prepared safe yield calculations for the Dell City aquifer system.

Conceptual model for the Igneous and West Texas Bolsons Aquifers: Draft Report to Support Groundwater Availability Model, LBG Guyton, Austin, Texas, 2003.

Review of Padre Island Desalination Plant Feasibility Analysis and Siting Plan: Report to Carollo Engineers, Austin, Texas, 2003.

This review addressed the feasibility of using the Chicot Aquifer as a source of water for desalination and its use in ASR.

Review of RCS and ITRS proposal (Louisiana Board of Regents), Baton Rouge, LA, 2003.

Opinion on Well Yield, Guadalupe River State Park: Report to Travis Engineers, 2004.

Differential Subsidence at the Boxcars Property, Report to Lapin & Landa, 2005.

This study refuted dewatering of the shallow aquifer as a cause of differential subsidence on an adjoining property.

AAAS Review of the Desert Research Institute, 2006-2007.

Creedmor-Manor Aquifer Test Analyses: Report to Travis Engineers, 2007-2008.

[pro bono] Edwards Aquifer Authority – Aquifer Scientific Advisory Panel, 2007-on.

Review of the Indiana University Geology Department, 2008.

Selected consulting (continued):

Permeability of the Carbonate Aquifer at Cadiz, Cadiz Inc.: Report to Brownstein Hyatt Farber Schreck, LLP, 2010.

This report identified the cause of anomalous well behavior – a rise in well water levels in a pumping test of exceptionally high yield in a carbonate aquifer

Opinion on the Lateral Extension of Permeable Karstic Carbonate Aquifer, Fenner Gap, California: Report to Brownstein Hyatt Farber Schreck, LLP, 2010.

This report assessed the possible extent of these permeable units in the Fenner Gap area..

Hydrogeology and Possible Effects of Water Exportation From Pecos County, Texas: Report to A.W Blair Engineering, 2011.

This report analyzed the safe yields and the effects of pumping from the Rustler and Edwards Aquifers in Pecos County

Findings and Recommendations Cadiz Groundwater Conservation, Recovery and Storage Project: Groundwater Stewardship Committee for Cadiz and Fenner Gap, California, 2011 & 2012.

I was the project lead for the expert review assessment team that analyzed all available reports on the pumping yields, the regional groundwater flow systems and recharge, possible environmental effects; and legal/policy aspects of a large groundwater development – ASR project that would provide large volumes of groundwater to Southern California. The assessment showed the project was feasible hydrologically with minimal potential environmental effects.

Review of Sinkholes and Bubblers in the Alberta Basin, McMurray Formation: Shell Oil, Calgary, Alberta, Canada, 2013.

This review analyzed sinkholes that developed in conjunction with hydrocarbon production. I provided Shell personnel facts on the development of sinkholes and bubblers and defined data needs and potential needed corrective actions.

Environmental Monitoring Services for the Colorado River Corridor Plan: URS Corporation, 2011, 2012, 2013 & 2014.

Panel Review: Cadiz Groundwater Conservation, Recovery and Storage Project, California, 2014.

Review of Acid-Seep Investigation Report Oak Hill Mine, Rusk County, Texas: Luminant Mining Company, 2014.

This review analyzed natural and manmade acid drainage at the mine site. The statistics showed that there has been an increase in water acidity after mining, but also that the majority of well waters and some surface streams did not meet reclamation standards (pH > 6) prior to mining. Restoring to natural conditions would not meet the mine reclamation criteria.

Selected consulting (continued):

Opinion on Creedmoor-Maha Well Field and Sinkhole: Travis Associates Consulting, Buda, Texas, 2015.

Analyzed the causes for sinkhole development near pumping wells in the Edwards Aquifer.

Review of Environmental Monitoring Services for Colorado River Corridor Plan: URS Corporation, 2016-2017.

[pro bono] Technical Advisory Workgroup on Trinity Pumping: Barton Springs Edwards Aquifer Conservation District, 2016.

Athens, Texas, Pumping Test Analysis: Travis Associates Consulting, Buda, Texas, 2016.

Evaluated pumping tests on the Carrizo-Wilcox Aquifer.

Review of Draft Methods Report for the Study of Brackish Water in Texas, Project 1 - Gulf Coast Aquifer, INTERA, Austin, Texas, 2016.

Review of Draft Methods Report for the Study of Brackish Aquifers in Texas - Project No.3 – Rustler Aquifer, INTERA, Austin, Texas, 2016.

Opinion on Franklin Mountain Well Proposal: Travis Associates Consulting, Buda, Texas, 2016.

Evaluated possibilities for pumping groundwater at a state park near El Paso, Texas.

Comments on and Analysis of the River Oaks Ranch Test Well #3 Aquifer Test and Well Analysis Report: Travis Associates Consulting, Buda, Texas, 2016.

Evaluation of pumping tests and potential well sites in the Trinity Aquifer.

Review of the Finch Report: A.W. Blair Engineering, Austin, Texas, 2017.

Assessed the effects of pumping water at ranches in the Delaware Mountains on water resources of Wild Horse Flat, Texas.

Updated Assessment of Cadiz Water Project's Potential Impacts to Bonanza Springs, San Bernadino County, California, 2017-2018.

Reviewed hydrogeologic context of Bonanza Spring. Report indicated the future Cadiz pumping should not affect spring flow.

Review of Environmental Monitoring Services for Colorado River Corridor Plan: URS Corporation, 2017-2018.

I reviewed URS analyses of the groundwater conditions at a proposed gravel mining operations on the Colorado River floodplain.

Selected consulting (continued):

Report on Year One Preliminary Results: Hydrogeologic Evaluation and Vulnerability Analysis for Balmorhea-Area Springs: BEG Report to Apache Corporation, 2019.

Results of year one of Balmorhea-area spring hydrogeology study within the regional hydrogeologic context of Trans-Pecos Texas, including the Alpine High play.

[pro bono] Texas Rangers, Austin Police Department, Lockhart, Texas, quarry inspection, 2019.

Services to develop procedures and tools to delineate areas designated or used for class ii well wastewater injectate, WSP, 2020.

Groundwater Science Advisory Committee, Houston Advanced Research Center, 2020.

Notes:

1. Not listed above are:
 - a) confidential consulting reports and
 - b) consultation with the Nuclear Regulatory Commission as a subcontractor with Williams and Associates.
2. Between August 2014 and September 2015, I was precluded from consulting because of my role at the National Science Foundation.