

David Kenneth Kreamer

Curriculum Vitae

Department of Geoscience
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EDUCATION:

Ph.D. Hydrology, minor Geosciences, December 1982, University of Arizona.
 M.S. Hydrology, May 1976.
 B.S. Microbiology, minor Chemistry, 1973, University of Arizona.

SELECTED PROFESSIONAL EXPERIENCE:

2016-2020 Vice President for Science and Program, International Association of Hydrogeologists
 2012-2016 Vice President for North America, International Association of Hydrogeologists
 2014-2015 President, Universities Council on Water Resources
 1998-present Professor of Hydrology/ Geoscience, UNLV
 2009-2012 Secretary, International Association of Hydrogeologists, U.S. National Chapter
 2009-2012 Board of Directors, National Ground Water Association, Scientists and Engineering Division
 1990-2002 Director of the Water Resources Management Graduate Program, University of Nevada, Las Vegas.
 1990-1998 Associate Professor of Hydrology/ Geoscience, University of Nevada, Las Vegas.
 1985-1990 Assistant Professor of Civil Engineering, Arizona State University.
 1984-1985 Visiting Assistant Professor, Arizona State University.
 1976-1984 Instructor and Associate in Research, Department of Hydrology and Water Resources, University of Arizona.
 1977 Research Assistant III, Staff Member, Water Resources Research Center, University of Arizona.

SUMMARY: SHORT COURSES, INVITED LECTURES/ EXTENSION ACTIVITIES

Dr. Kreamer has given over 150 invited lectures, seminars and workshops in recent years on topics including: *Computer Modeling of Hydrologic Processes; Lake Thermal Stratification Modeling, Vadose Zone Hydrology; Subsurface Gaseous Movement; Nonaqueous Phase Liquids; Propellents, Explosives, Pyrotechnics and other Energetic Compounds; Monitoring Well Design; RCRA Subtitle D and Landfills; and Groundwater Hydrology*. He has served as an expert witness and professional hydrologist reviewing several large projects. His presentations and reviews include:

1. National lectures for the U.S. Environmental Protection Agency, U.S. Bureau of Land Management, for the National Ground Water Association, and Superfund University Training Institute.
2. Short courses for the Departments of Environmental Quality, Environmental Conservation, and/or Transportation for over half the States or Commonwealths in the United States; other courses and presentations for groups such as City of Phoenix, University of California Extension, and Hanford Nuclear Site.
3. Presentations at over 50 Universities.
4. Overseas presentations including Haifa, Israel; San Juan, Puerto Rico; and Guam for the U.S. Environmental Protection Agency, Sao Paulo, Brazil for the U.S. Government Executive Branch (American Participant Program); People's Republic of China; lecture series in the United Kingdom; Baghdad, Iraq; Zimbabwe; Kenya; and Republic of South Africa.
5. Testimony before the U.S. Congress and the Nuclear Regulatory Commission on water quality issues associated with uranium mining.
6. Review of many projects including: proposal and technical report referee for many overseas water related projects such as those in the former Soviet Union, Egypt, Iraq, Israel; externally funded, water research programs in Africa; U.S. high level nuclear waste disposal at Yucca Mountain, NV and risk prediction at the Rocky Flats Plant, CO; the Colorado River Multispecies Conservation Program; the U.S. Water Census (USGS) ad hoc Committee; and Consultant to U.S. Environmental Protection Agency National Science Advisory Board.

SELECTED RESEARCH GRANTS RECEIVED AT UNLV,

(D. Kreamer was PI for 13 of these grants, Co-PI for 5):

- Millennium Challenge Corporation, Millennium Challenge Account – Niger. *Development of Tools for the Management of Groundwater Resources Planning and Capacity Building in Niger.*
- National Science Foundation, *Addressing Irrigation Aquifer Depletion and Challenges to Sustainability: Enhancing Dialogue on Solutions.*
- Grand Canyon Association – *Hydrogeology of the Grand Canyon.*
- U.S. Department of Energy, Savannah River Site through Savannah River Nuclear Solutions, *Chromium Contamination Remediation using Activated Carbon Coated with Polysulfide Rubber (PSR) and Zeolites Coated with Surfactants.*
- National Park Service through URS Corp. Denver, *Assessment of Orphan Uranium Mine, Grand Canyon, Arizona*
- Virgin Valley Water District: *Investigation of Groundwater Abundance and Migration through Analysis of Chemical Hydrologic Tracers and Mathematical Simulation of Groundwater Movement in the lower Virgin River Watershed, Arizona, Nevada, and Utah.*
- Cooperative Ecosystem Studies Unit (CESU) Network *Occurrence and Mobility of Uranium and Other Elements in the Grand Canyon Groundwater and Springs*
- U.S. Army Corps of Engineers: *Investigation of BIS(2-Chloroethyl)Ether Leachability from Solid Waste Material at Lapari Landfill Superfund Site, Gloucester County, New Jersey*
- U.S. Environmental Protection Agency: *Controlled Laboratory Experiments - To Investigate the Subsurface Movement of Petroleum Fuels.*
- Reynolds Electric and Engineering Company: *Determination of Sorption and Diffusion Coefficients for Seven Volatile Organic Compounds.*
- Las Vegas Valley Water District: *Evaluation of Sources of Salinity on the Lower Virgin River.*
- Mojave Water Agency: *Stable Isotope Studies of Groundwater Associated with Potential Recharge Sites in the Morongo Basin/ Johnson Valley Subarea, Southern California*
- National Park Service, and the Grand Canyon Historical Society: *Grand Canyon Groundwater Tracing.*
- Rocky Mountain University Consortium: *Review of Incremental Risk Assessment Methodology for Rocky Flats, and Remediation Selection at OU-1.*
- Raytheon Services Nevada: *Subsurface Fuels Contamination at Johnston Island, Pacific.*
- University Grants and Fellowships Committee. *Dating Grand Canyon Groundwater.*
- U.S. Department of Energy: *Fingerprinting of Groundwater.*
- U.S. Department of Energy: *Fluid Migration and Subsidence of NTS Landfill Caps*

\$3,990,326.00 TOTAL GRANTS UNLV

SUMMARY, RESEARCH PRIOR TO UNLV:

(Research funding, awarded on a competitive basis)

- Investigation of volatile contaminants (such as TCE) in groundwater, and the overlying unsaturated zone. Field sites included 52nd Street Motorola and Indian Bend Wash in the Phoenix metropolitan area, and the Tucson Superfund site.
- Hydrological study of the Arizona Superconducting Super Collider Site.
- Modeling contaminant migration around leaking underground storage tanks.
- Assessment of Priority Pollutants in the water supply for the Salt River Project, Arizona.
- Interdisciplinary research project on water quality in the 4,500 square mile San Pedro River basin, Arizona

SUMMARY, RESEARCH PRIOR TO UNLV (continued):

(Research funding, awarded on a competitive basis)

- Four research grants for evaluation of potential indicators of groundwater source and movement, particularly certain trace gases and stable isotopes.
- Several research projects concerning gaseous diffusion in unsaturated porous media. The research developed a new *in situ* tracer method for measuring and modeling characteristics of volatile contaminant transport through the vadose zone at nuclear or hazardous waste sites. This technology is being used to test a new method of mixed-waste, low level nuclear waste disposal, Nevada Test Site
- Assisted with research exploring water supply feasibility (quality and quantity) for a ten hectare shrimp aquaculture facility at Puerto Penasco, Mexico. Studied groundwater and estuarine surface water.
- Evaluation of the effectiveness of large interdisciplinary water-related research projects.
- Water quality studies on the Colorado River and over 50 Arizona Lakes.

TEACHING:

University of Nevada, Las Vegas -1990 to present.

Average Instructor Evaluation Grade is **4.76** out of 5.00 for all courses

Arizona State University - 1984 - 1990

Average Instructor Evaluation Grade is **4.44** out of 5.00 for all courses

University of Arizona 1979-1984

No Instructor Evaluations Given

GRADUATE STUDENT ADVISEMENT

D. Kreamer presently is serving or has served since 1991 on the committees of 77 graduate students, 16 of which are at the Ph.D. Level. He is or has been committee chair or co-chair for 29.

David is serving and, as past Director of the Water Resources Management Program, has served as the initial academic advisor for many more students who are not included in the above numbers, and has served as the Graduate College outside Representative on many other graduate committees.

SELECTED RECENT PROFESSIONAL SERVICE

- Vice President for Science and Program Coordination, International Association of Hydrogeologists (4yr elected term began Sept. 27, 2016).
- Vice President for North America, International Association of Hydrogeologists, (4yr elected term ended Sept. 27, 2016).
- Trustee of the International Association of Hydrogeologists Registered Charity, (Two, 4yr terms began Sept. 19, 2012).
- Board Member and President, Universities Council on Water Resources, (3 yr. term began July 19, 2012).
- National Academy of Science, Engineering and Medicine, National Academy of Sciences on the U.S.-Egypt Science and Technology Joint Fund. Subject Expert, Cycle 19, Cairo, Egypt, August 2018.
- Director, National Ground Water Association, Association of Ground Water Scientists and Engineers, 2-year term. (Second, 2yr elected position, 4 years total, ended December 3, 2012).
- Secretary/ Executive Board Member, International Association of Hydrogeologists, US National Chapter. (4yr term ended Sept. 21, 2012)
- Editor - International Association of Hydrogeologists, US National Chapter Newsletter, Average Issue is 25-30 pages. Three issues in 2012. (4yr term ended December 2012.)
- Juror – International Water Prize 2018, University of Oklahoma.
- Editorial Board Member – Journal *Water* (MDPI). Reviewed and made decisions on many manuscripts. (2013 to 2018)
- Member, Hydrogeologists Without Borders, Technical Committee.

SELECTED PROFESSIONAL SERVICE (continued)

- External Peer Reviewer, Georgia National Science Foundation (Shota Rustaveli), Tbilisi, Georgia (the country, not the State).
- National Academy of Science, Engineering and Medicine - U.S.-Egypt Science and Technology Joint Fund. Subject Expert, Cycle 18, Cairo, Egypt, April 2017.
- External Reviewer, International Proposals for the *Iraqi Science Fellowship Program* - U.S. Civilian Research and Development Foundation, November 2012.
- National Science Foundation, *Innovations at the Nexus of Food, Energy and Water Systems*, Reviewer, Track 1 Spring Panel 2017,05/22-24/2017.
- National U.S. Water Census Ad Hoc Committee, U.S. Geological Survey, Reston VA, and reviewer *Draft Report to Congress: Progress Toward Establishing a National Assessment of Water Availability and Use*, August 3 -24, 2012, under requirements of Section 9508 of the SECURE Water Act (P.L. 111-11).
- Editorial Board Member Iraqi Geological Journal.
- Session Moderator for 2 Sessions at the Annual International Association of Hydrogeologist Congress, Marrakech, Morocco, September 2014
- External Evaluator – Water use and Quality Model used for Dewatering Coal Seam Gas (Coal Bed Methane) operations in the Serrat-Bowen Basin, Australia.
- National Ground Water Association, 1. Division of Scientists and Engineers, Council on External Relations, member, 2. Developing Countries Interest Group, member, 3. Aquifer Protection and Management Subcommittee, member, 4. Student Evaluator at 2012 Summit, 5. Governmental Affairs Committee, member.
- External Assessor for the Ph.D. Dissertation of Vierah Hulley, Internal Supervisor Professor Kai Witthueser, “*Development of a Quantitative Predictive Decision Analysis Tool for DNAPL Remediation Technologies*”, Institute for Groundwater Studies, University of the Free State, Republic of South Africa.
- Kreamer, D. K., 2012. *Understanding Migration, Assessment, and Remediation of Non-Aqueous Phase Liquids*, National Ground Water Association - Invited Short Course, October 24-26, 2012, New Orleans, LA.
- Session Moderator “*Fracking 101 – Impacts and Hydrology*”. July 17, 2012. Annual 2012 Meetings of UCOWR/NIWR (Universities Council on Water Resources/ National Institutes of Water Resources), July 17-19, 2012, Santa Fe, NM.
- Session Moderator “Kreamer, D.K., 2012. “*Water as a National and International Security Issue*” National Ground Water Association Ground Water Summit, May 6-10, 2012, Garden Grove, CA.
- Editor for an issue on “Water and International Security” for the Journal of Contemporary Water Research and Education, Vol. 149, December 2012.
- Member USDA Colorado River Basin Planning Grant Team – Agricultural Water Project, headed by Colorado State University.
- Scientific Expert - Review of Iraqi Science, US State Dept. and US Dept of Energy, Amman , Jordan, October 1-7, 2011
- Co-Chair for the 2010 Joint Meeting of the National Ground Water Association, Ground Water Summit, and the Ground Water Protection Council Annual Meeting, April 11-15, 2010.
- National U.S. Water Census Ad Hoc Committee, U.S. Geological Survey, Reston VA, 2010 and 2011.
- Scientific Expert, Iraq Research and Development Initiative (IRDI) II Technical Review and Professional Development Conference, held in Amman, Jordan, October 1-7, 2011.
- Editor – Theme Issue for the Journal of Contemporary Water Research and Education, No. 145, August 2010, “Hydrophilanthropy and Education”.
- Project Email Mentor and Reviewer for “Groundwater Assessment and Management at the middle and southern parts of Iraq”, U.S. Civilian Research Development Foundation – *specifically, refereed final report on the Tikrit Samarra Ground Water Model*.
- Invited Participant – Water Sciences Forum, (Only 80 participants selected nationwide) “Cutting Edge Technologies for Water Services: Applications in Africa.” Sponsored by the National Science Foundation, Executive Office of the President of the United States, National Academy of Science, USAID, USEPA, USGS, US Dept. Interior, US Dept. of State, USDA, NOAA, US Army Corps of Engineers, and NASA. Held at the National Academy of Sciences and US State Department, June 26-27, 2008, Washington, D.C.
- Kreamer, D. K., 2008. *Understanding Migration, Assessment, and Remediation of Non-Aqueous Phase Liquids*, National Ground Water Association - Invited Short Course, September 23-25, 2008, Baltimore, MD.

SELECTED PROFESSIONAL SERVICE (continued)

- Panel Discussion Moderator, Hydrophilanthropy - The Possibility Developing a Professional Organization/University Consortium For Clean Water in the Developing World, Annual Meeting of the Universities Council on Water Resources, July 22-24, 2008, Durham, NC.
- Co-Chair for two sessions with Victor Heilweil (USGS) at the National Ground Water Association Ground Water Summit, March 30-April 2, 2008, Memphis, TN, “ Ground Water in Developing Countries: Challenges and Opportunities.”
- Chaired Session for International Conference on Water Scarcity, Global Changes, and Groundwater Hydrogeologists, USEPA, others; Modeling, forecasting and traditional management techniques; 1-5 December 2008, Irvine, California.
- External Reviewer, University of the Free State, South Africa, Institute for Groundwater Studies, “A groundwater review at Anglo Platinum’s RPM – Mogalakwena Section to determine if the mining activities are the cause of elevated nitrates in the Ga-Molekana and Old Ga-Pila communities’ groundwater.”
- Participant – “At Risk Water Resources Workshop” Coconino Plateau Water Advisory Council’s Technical Advisory Committee and Arizona Water Institute, May 1, 2008, Flagstaff, AZ.
- Referee for several Journals including *Environmental Science and Technology*, *Water Resources Research*, *the Journal of Environmental Quality*, *Ground Water*, *Ground Water Monitoring and Remediation*, and *Applied Geochemistry*.
- Reviewer for U.S. Department of Energy and U.S. Environmental Protection Agency (Kerr Laboratory, Ada, OK and Environmental Systems Monitoring Laboratory, Las Vegas) technical documents, for Research Reports and Technical Documents for Blue Water Navy Vietnam Veterans, and Referee for conference abstracts.
- Referee for National Science Foundation.
- Nevada Advisory Council on Water Resources, 1991 - present.
- Nevada Representative, Universities Council on Water Resources, 1990-present.
- UNLV Representative, U.S. Geological Survey Liaison Committee for the Nevada Basin and Range National Water-Quality Assessment (NAWQA) study.
- Independent Peer Reviewer, Yucca Mountain Hydrology, Early Site Suitability Evaluation.
- Peer Reviewer for the Incremental Risk Assessment Methodology at Rocky Flats Plant, Colorado as part of the Rocky Mountain Consortium.
- Member of U.S. Environmental Protection Agency, Science Advisory Board, Subcommittee on Carbon-14 at High-Level Nuclear Repository Sites.
- External Reviewer - Argonne National Laboratory, Environmental Sciences Division, University of Chicago.
- External Reviewer for Northern Arizona University Tenure and Promotion.
- Referee for Water Resources Institute, Technion, Israel Institute of Technology research proposals
- External Reviewer for University research funded by the Republic of South Africa, Water Resource Commission.
- External Reviewer South African Hazardous Waste Sites.
- External Reviewer for several research proposals over several years for cooperative environmental research in the Former Soviet Union (FSU), Civilian Research and Development Foundation, (CRDF)
- Referee for International Science and Technology Center, Moscow - Analysis of Burials of Radioactive Waste in the Territory of the Russian Research Center "Kurchatov Institute" in Moscow and Paths of Supposed Radionuclide Migration in the Environment.
- Reviewer for Master's Thesis Kuwait University, external referee for Ph.D student at University of Pretoria, South Africa, and two Ph.D. Students at the University of the Free State South Africa.
- Past Member and Consultant for the U.S. EPA National Science Advisory Board.

SELECTED RECENT SHORT COURSES / INVITED PRESENTATIONS/ EXTENSION ACTIVITIES

- U.S. Bureau of Land Management Training, Keynote presentation, 1 and 1/2 days of two week course, NTC Course 3700-8, June 12, 2018, “Groundwater Hydrology”, Las Vegas, NV .

RECENT SHORT COURSES / INVITED PRESENTATIONS/ EXTENSION (continued)

- Understanding Migration, Assessment, and Remediation of Non-Aqueous Phase Liquids, National Ground Water Association. 2 day course. December 8-9, 2014, Las Vegas, NV, D.K. Kreamer and Randy Sillan.
- U.S. Bureau of Land Management Training, Keynote presentation, 1 and 1/2 days of two week course, NTC Course 3700-8, December 1-2, 2014, “Groundwater Hydrology”, Las Vegas, NV .
- Lecture Series in Australia, November 2014, Environmental Tracers to Characterize Groundwater Dependent Ecosystems; Lectures at the University of Queensland, University of New South Wales, and Flinders University.
- Lecture Series in Italy, July 2014, Understanding Spring flow in Grand Canyon National Park; Presentations at the University of Tuscia, University of Rome Sapienza, University of Bologna, and University of Perugia.
- Invited Speaker – ASCE Young Engineers Forum, “Global Water Challenges”, April 29, 2014, Las Vegas, NV
- Invited Plenary Speaker for the 2013 Annual Meeting of the Nevada Water resources Association, *International Water Issues and the American West*. Reno, NV, Jan. 30, 2013.
- Invited Plenary Speaker for the 2012 Annual Meeting of the Consortium of Universities for the Advancement of Hydrologic Sciences (CUASHI) “*Water and Sanitation in the Developing World – Can Hydrophilanthropy Address the Quiet Persistent Disaster?*”, July 16, 2012.
- Invited Presentation for the Air and Waste Management Association - *Potential for Aquifer Disruption from Mining Activities*, November 26, 2012, Las Vegas, NV
- Invited Presentation for Association on Engineering and Environmental Geologists - *Solving Groundwater and Surface Water Challenges in Africa and Iraq*, November 13, 2012, Las Vegas, NV.
- U.S. Bureau of Land Management, Keynote presentation, “*Physical/Hydrological Attributes of Functioning Wetlands*” Grazing and Conservation of Aridland Aquatic Species – Are Exclosures the Best Strategy? April 26-28, 2011, Salt Lake City.
- Scientific Expert, Iraq Research and Development Initiative (IRDI) II Technical Review and Professional Development Conference, held in Amman, Jordan, October 1-7, 2011.
- Capitol Hill Congressional and State Department Briefing, Washington D.C., March 3, 2010, “*U.S. Universities and International Water Sanitation and Hygiene – A Proposal for a New Consortium and Survey of Current Activities*”.
- Presenter – National Science Foundation EPSCoR shortcourse – Interdisciplinary Modeling: Water-Related Issues and Changing Climate NRES 730, Summer 2010, “*Thermal Stratification Modeling of Lakes*”.
- Keynote Speaker – University of Arizona 20th Annual El Dia del Agua, March 31, 2010, “*Hydrophilanthropy*”.
- Universities Council on Water Resources Award Winner’s Invited Presentations, Hydrofutures, July 15, 2010, “*Converting Ships to Mobile Desalination and Power Plants for Security/ Humanitarian Objectives*”.
- U.S. Bureau of Land Management Training, Keynote presentation, 1 and 1/2 days of two week course, NTC Course 3700-8, May 10-11, 2010, “*Groundwater Hydrology*” .
- Invited Speaker- 2010 Grand Canyon River Guides Land-based and River-based Training, March 27 – April 7, 2010, “*Impacts of Uranium Mining in the Grand Canyon*”.
- Understanding Migration, Assessment, and Remediation of Non-Aqueous Phase Liquids, National Ground Water Association. Taught 2 days of a 3 day course. August 12-15, 2010, Boston, MA, D.K. Kreamer and Paul Yaniga .
- Oral and Written Congressional Testimony, July 23, 2009. House Resolution 644, “The Grand Canyon Watersheds Protection Act of 2009”, Washington, DC.
- Invited speaker at the National Academy of Sciences to address the International Hydrologic Programme of United Nations Educational, Scientific and Cultural Organization (UNESCO), on the topic of Water, Health and Sanitation in the Developing World, Washington, DC May 11, 2009.
- Remote Water Quality Monitoring. 5-day short-course April 12-16, 2009, Baghdad, Iraq.
- Conference Presentations – Guest Lecture for Graduate Students University of Nevada, Reno; Feb. 27, 2009.
- Plenary speaker; Water and Life Support Systems – Modeling, forecasting and traditional management techniques; International Conference on Water Scarcity, Global Changes, and Groundwater Management Responses, Convened by UNESCO, UC Irvine, USGS, International Association of Hydrogeologists, USEPA, others; 1-5 December 2008, Irvine, California.
- Kreamer, D. K., 2008. *The Future of Groundwater Quality in Sub Saharan Africa*, International Conference on Water Scarcity, Global Changes, and Groundwater Management Responses, Convened by UNESCO, UC Irvine, USGS, International Association of Hydrogeologists, USEPA, others; 1-5 December 2008, Irvine, California. Refereed.
- Keynote Speaker, Fall 2008 Public Health Conference, “Water Quality Challenges and Public Health”, University of Arizona, November 14, 2008, Tucson, AZ.

RECENT SHORT COURSES / INVITED PRESENTATIONS/ EXTENSION (continued)

- Non-Aqueous Phase Liquids - Hydrogeology and Groundwater Contamination. National Groundwater Association, Baltimore, MD, 2008, two days, September 23-24. D.K. Kreamer.
- Introduction to Hydrology, U.S. Bureau of Land Management Training, Keynote presentation, 1 and 1/2 days of two week course, August 12-13, 2008, Las Vegas, NV.
- University of the Western Cape (South Africa – 3 day short course), Groundwater Pollution, Migration and Fate, May 17-19, 2007.
- University of the Free State (South Africa) – Geophysical Methods in Site Assessment, May 31, 2007.
- University of Zimbabwe (Zimbabwe), Soil Salinity and Groundwater Contamination, May 28, 2007.
- Bindura University for Science Education (Zimbabwe – 3 lectures), May 25-27, 2007.
- University of Nairobi (Kenya), Use of environmental Isotopes in tracking salinity, May 21, 2007.
- Student World Water Forum, University Nevada, Reno, Nov. 15 – 16, 2007
- Plenary Lecture Invitation – Joint East and Southern Africa Environmental Chemistry Conference, Victoria Falls, Zimbabwe, Dec. 8, 2007
- U.S. Bureau of Land Management, Oil and Gas Operator’s Workshop, Western Wyoming Community College, April 18, 2007.
- Basic Hydrology, U.S. Bureau of Land Management Training, Keynote presentation, 1 and 1/2 days of two week course, May 8-9, 2006, Las Vegas, NV.
- 14 invited lectures in 5 weeks in the Republic of South Africa at conferences, universities and government agencies, July 17 – August 23, 2005.
- Introduction to Hydrology, U.S. Bureau of Land Management Training, Keynote presentation, 1 and 1/2 days of two week course, May 3-4, 2004, Las Vegas, NV.
- Contaminant Hydrology and Mine Reclamation, U.S. Bureau of Land Management short course, 1 day of a two week course, Butte, Montana, August 7, 2003.
- Kreamer, D. K. and H. Schuver. 4 day short course on Advanced Contaminant Hydrology, 1 day workshop, and several short lectures throughout South Africa, invited by the SA Department of Water Affairs and Forestry, May 19-30, 2003. Course notes published.
- Hydrologic Mathematical Modeling, U.S. Bureau of Land Management Training, 1/2 day, May 5, 2003, Las Vegas, NV, D.K. Kreamer.
- Groundwater Contamination and Surface-Groundwater Interactions, 3-day short course, May 21-23, 2002, Alaska Department of Environmental Conservation, Anchorage Alaska.
- Contaminant Hydrology and Mine Reclamation, U.S. Bureau of Land Management short course, 1.5 day of a two week course, Las Vegas, May 6-7, 2002.
- Kreamer, D. K. and R Breeden. 2 day seminar, 1 day workshop, several short lectures throughout South Africa, invited by the SA Department of Water Affairs and Forestry, March 1-15, 2002. Course notes published.
- Free Product Training - Migration, Assessment, and Remediation of Non-Aqueous Phase Liquids, Michigan Department of Environmental Quality, Storage Tank Division. Taught 2 1/2 days of a 3 day course, September 12-14, 2000. D.K. Kreamer and James Davidson. Course notes published. Invited Speaker.
- Groundwater Contamination, U.S. Bureau of Land Management Training, 1.5 days, April 24-25, 2000, Las Vegas, NV, D.K. Kreamer.
- New Perspectives on Monitoring and Remediation of Light Non Aqueous Phase Liquids, Montana Department of Environmental Quality Annual Conference, 4 1/2 hours, March 30-31, 2000, Anaconda, MT. D.K. Kreamer. Notes and abstract printed and distributed.

MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL SOCIETIES:

American Association for the Advancement of Science	American Geophysical Union
American Society of Civil Engineering	American Water Resources Association
ASTM - Section D-18.21.02 Vadose Zone Monitoring	Association of Engineering Geologists
Geological Society of America	Geological Society of Nevada
Nevada Advisory Council on Water Resources	Universities Council on Water Resources
Consortium of Universities for the Advancement of Hydrologic Science	
Association of Groundwater Scientists and Engineers, NGWA	
U.S. Environmental Protection Agency, Science Advisory Board	
International Association of Hydrogeologists	

AWARDS

Distinguished Service Award, Universities Council on Water Resources 2015, 2016
Distinguished Service Award, National Ground Water Association 2012
Friend of the Universities Council on Water Resources - 2010
Joseph Malone Fellowship for Middle East Studies 1997
UNLV International Faculty Development Award - April 20, 1999
University of Arizona Foundation Meritorious Performance in Teaching

UNLV UNIVERSITY SERVICE

Director, Water Resources Management Graduate Program 1990-2002
Member, Environmental Studies Program Planning Committee
Participant, 1991 Nevada Governor's Institute
Member, Ad Hoc Committee on UNLV Research
Member, Energy and the Environment Research Institute
Primary Author of Hydroscience EPSCOR Proposal
Chair, University Grants and Fellowship Committee
Chair, Water Resources Management Planning Committee
Member, University Grievance Committee
Chair and Member, Appeal Subcommittees for the Faculty Senate
Member, Graduate College Faculty and Student Issues Committee
Member, Special Hearing Committee, Administrative Code
Alternate Representative, Consortium of Universities for the Advancement of Hydrologic Science
Member, Critical Incidents and Inter-group Relations Task Force
Member, Graduate Council
Member, Committee for an Inclusive and Just University; plus many Department and College Committees.

COMMUNITY SERVICE

- Governor's Commission on Arizona Environment, Member and Advisory Council, Member, 1984-1990.
- Expert Witness on Hydrogeology of the Grand Canyon for the Havasupai Tribe (time donated), 1989-90.
- Advisor to the Arizona Water Resources Research Center, 1985-1987.
- Rockclimbing Instructor for the Arizona School for Deaf and Blind.
- Advanced First Aid Instructor, American Red Cross, 1973-1988.
- Southern Arizona Rescue Association, volunteer mountain rescue, 1973-1980.
- Technical Advisor to Arizona Nature Conservancy, Canelo Hills Cienega, 1986.
- City of Phoenix, Water Quality Advisory Committee, Member, 1984-1986..
- Board Member, Aquavision, 1992.
- Speaker for Senior Center Programs, 2000.
- Volunteer, Inner City Games, Habitat for Humanity, and Catholic worker homeless food program, 1999 to present.

SELECTED PUBLICATIONS:

Kreamer D.K., Ball D.M., Re V., Simmons C.T., Bothwell T., H.J.M. Verweij H.J.M., Mukherjee A. and M.F. Moreau 2020. *The Future of Groundwater Science and Research*. In: Global Groundwater, Mukherjee et al. eds., Elsevier, In Press, 19 pages.

Fetter, C.W. and D.K. Kreamer, 2020. *Applied Hydrogeology, 5th Edition*. Waveland Press, in preparation.

Al-Dabbas, M.A., Kreamer D.K., Al-Shammari, A.A., and A.M. Jwad 2020. *Management Of Bai Hassan Unconfined Aquifer , Lesser Zab River Basin, Kurdistan Region, Iraq Using A Groundwater Modeling Approach*. Submitted for publication – in revision, Iraqi Geological Journal.

SELECTED PUBLICATIONS (*continued*)

Swanson, R.K., Springer A.E., Kreamer, D.K., Tobin, B.W., and D.M. Perry, 2020. *Quantifying the base flow of the Colorado River: its importance to low flow in northern Arizona and southern Utah*. Accepted in Revision.

Günter Blöschl et al. 2019. Twenty-three unsolved problems in hydrology (UPH) – a community perspective, *Hydrological Sciences Journal* 64 (10):1141-1158

Asante, J., Dotson, S., Hart, E. and D.K. Kreamer 2018. *Water Circulation in Karst Systems: Comparing Physicochemical and Environmental Isotopic Data Interpretation*. *Environmental Earth Sciences*, 77:421. Springer Nature.

Fetter, C.W., Boving T. and D.K. Kreamer, 2018. *Contaminant Hydrogeology, 3rd Edition*. Published by Waveland Press, 647 pp. ISBN 978-157766-583-0. (See book review: Tew, K. *Environ Earth Sci* (2018) 77: 745. <https://doi.org/10.1007/s12665-018-7921-5>)

Tobin, B., Springer, A., Kreamer, D.K. and E. Schenk, 2018. *Review: The Distribution, Flow, and Quality of Grand Canyon Springs, Arizona (USA)*. *Hydrogeology Journal*, 26(3):721-732.. ISSN 1431-2174, DOI 10.1007/s10040-017-1688-8

Asante, J. and D. K. Kreamer, 2018. *Identifying local and regional groundwater in basins: chemical and stable isotopic attributes of multivariate classification of hydrochemical data, the Lower Virgin River Basin, Nevada, Arizona and Utah, U.S.A*, *Isotopes in Environmental and Health Studies*, 54(4):370-391. DOI: 10.1080/10256016.2018.1444611.

Archer, C., Noble, P.J., Kreamer, D.K., Piscopo, V., Petitta, M., Rosen, M., Poulson, S., Piovesan, G., and S. Mensing 2017. *Hydrochemical determination of source water contributions to Lake Lungo and Lake Ripasottile (central Italy)*. *Journal of Limnology*.76(2): 326-342. DOI: 10.4081/jlimnol.2016.1576.

Kreamer, D.K., 2016. *Hydrophilanthropy Gone Awry: How People Promoting Clean Water Availability, Sanitation, and Hygiene (WASH) Can Actually Injure Communities*, *Water Resources Impact*, American Water Resources Association, Middleburg, VA, Vol 18, No 1, January 2016, p. 8-12. ISSN 1522-3175.

Kreamer, D.K., 2016. *Hydrophilanthropy gone wrong—How well-meaning scientists, engineers, and the general public can make the worldwide water and sanitation situation worse*, in Wessel, G.R., and Greenberg, J.K., eds., *Geoscience for the Public Good and Global Development: Toward a Sustainable Future*: Geological Society of America Special Paper 520, p. 1–15, doi:10.1130/2016.2520(19). For permission to copy, contact editing@geosociety.org. © 2016 The Geological Society of America. All rights reserved.

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