

ANDREA E. BROOKFIELD

Curriculum Vitae

BIOGRAPHICAL

Contact: Department of Geography and Atmospheric Science
University of Kansas
1475 Jayhawk Blvd
419 Lindley Hall
University of Kansas
Lawrence, KS U.S.A. 66045
abrookfield@ku.edu
785-864-2199

RESEARCH INTERESTS

My interests include the development and use of efficient yet effective numerical tools for resource management. Primarily, I study the use of hydrological models to simulate flow and contaminant transport, including the thermal regime and sediment transport, for prediction, management, and process investigation.

PROFESSIONAL EXPERIENCE

August 2018 – Present	University of Kansas Assistant Professor Department of Geography and Atmospheric Science
September 2009 – August 2018	University of Kansas Assistant Scientist Kansas Geological Survey
May 2009 – August 2009	University of Waterloo Research Scientist Department of Earth Sciences
September 2000 – April 2009	University of Waterloo Teaching Assistant/Research Assistant Department of Earth Sciences

EDUCATION

Ph.D. (2009)	University of Waterloo, Department of Earth and Environmental Sciences Simulation of Thermal Transport in a Fully-Integrated Surface/Subsurface Framework Supervisor: Dr. E.A. Sudicky
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- M.Sc. (2003) University of Waterloo, Department of Earth Sciences
Analysis of Acid Mine Drainage Generation Through
Reactive Transport Modelling and Field Studies
Supervisor: Dr. D.W. Blowes
- B.A.Sc. (2000) University of Waterloo, Civil (Environmental) Engineering
Treatment and Recycling of Heavy Metals from Acid Mine
Drainage (4th year Research Project)
Supervisor: Dr. J. Sykes

TEACHING EXPERIENCE

- January 2013 – Present University of Kansas
Lecturer
Geol 591/791 – Differential Eqns for Hydrology
Department of Geology
- October 2009 – November 2011 University of Kansas
Guest Lecturer
Geol 751– Physical & Chemical Hydrogeology
Department of Geology

PUBLICATIONS

A). Refereed Journal Papers

* *student-led papers*

- 19) *Rawitch, M., Macpherson, G.L., and Brookfield A.E., In Review. Exploring methods of measuring CO₂ degassing in headwater streams. Sustainable Water Resources Management.
- 18) Brookfield, A.E., Rodell, M., Loomis, B.D., Hill, M., Stotler, R.L. Porter, M.E., and Bohling, G.E., Accepted. In-Situ and GRACE-based observations: Similarities, discrepancies and evaluation in the High Plains Aquifer in Kansas. Water Resources Research.
- 17) *Vero, S.E., Macpherson, G.L., Sullivan, P.L., Brookfield, A.E., Kirk, M.F., Datta, S., and Kempton, P., 2017. Developing a conceptual framework of landscape and hydrology on tallgrass prairie. Vadose Zone Journal, doi: 10.2136/vzj2017.03.0069.
- 16) Brookfield, A.E., Stotler, R.L. and Reboulet, E., 2017. Interpreting temporal variations in river response functions: An example from the Arkansas River, Kansas, USA. Hydrogeology Journal, Vol. 25, No. 5, pp 1271-1282.
- 15) Brookfield, A.E., Macpherson, G.L., and Covington, M.D., 2017. Effects of changing meteoric precipitation patterns on groundwater temperature in karst environments. Groundwater, Vol. 55, No. 2, pp 227-236 doi: 10.1111/gwat.12456.

- 14) Brookfield, A., Gnau, C. and Wilson, B., 2017. Incorporating Surface Water Operations in an Integrated Hydrologic Model: Model Development and Application to the Lower Republican River Basin, USA. *Journal of Hydrologic Engineering*, Vol. 22, No. 4 doi: 10.1061/(ASCE)HE.1943-5584.
- 13) Brookfield, A., Gnau, C., 2016. Optimizing Water Management for Irrigation under Climate Uncertainty: Evaluating Operational and Structural Alternatives in the Lower Republican River Basin, Kansas, USA. *Water Resources Management*, Vol. 20, No. 2, pp 607-622.
- 12) Meixner, T., Manning, A.H., Stonestrom, D., Ajami, H., Allen, D.M., Blasch, K., Brookfield, A., Castro, C.L., Clark, J.F., Gochis, D., Flint, A., Neff, K., Niraula, R., Rodell, M., Scanlon, B., Singha, K. and Walvoord, M., 2015. Implications of Projected Climate Change for Groundwater Recharge in the Western United States. *Journal of Hydrology*, Vol. 534, pp 124-138.
- 11) Butler Jr., J., Bohling, G.C., Brookfield, A.E., Liu, G, Whittemore, D.O. and Wilson, B.B., 2014. Importance of a Sound Hydrologic Foundation for Assessing the Future of the High Plains Aquifer in Kansas. *Proceedings of the National Academy of Sciences of the United States of America*, vol. 111 no. 5 E 531.
- 10) Brookfield, A.E. and Sudicky, E.A., 2013. Implications of Hyporheic Flow on Temperature-based Estimates of Groundwater/Surface Water Interactions, *Journal of Hydrologic Engineering*, Vol. 18, No. 10 pp 1250-1261.
- 9) Devlin, J.F., Brookfield, A.E., Huang, B. and Schillig, P.C., 2012. Using the Domenico Solution to Teach Contaminant Transport Modeling, *Journal of Geoscience Education*, Vol. 60 No. 2 pp 123-132.
- 8) *Kenward, P., Goldstein, R.H., Brookfield, A.E., Gonzalez, L.A. and Roberts, J.A., 2012. Model for how Archaeal Methanogenesis Can Preserve Early Porosity in Dolomite and Limestone Reservoirs, *AAPG Bulletin*, Vol. 96 pp 399-413.
- 7) Park, Y.-J., Sudicky, E.A., Brookfield, A.E. and Jones, J.P., 2011. Hydrologic Response of Catchments to Precipitation: Quantification of Mechanical Carriers and Origins of Water, *Water Resources Research* vol. 47, doi: 10.1029/2011WR010075.
- 6) Brookfield, A.E., Sudicky, E.A., Park, Y.-J., and Conant Jr., B., 2009. Thermal Transport Modelling in a Fully-Integrated Surface/Subsurface Modeling Framework, *Hydrological Processes*, vol. 23, no. 15 pp 2150-2164.
- 5) Brookfield, A.E., Sudicky, E.A., and Park, Y.-J., 2008. Thermal Transport in a Fully-Integrated Surface-Subsurface Modelling Environment, *IAHS-AISH Publication*, vol. 321, pp 117-123.

- 4) Sudicky, E.A., Park, Y.-J., Sykes, J.F., Jones, J.P., Brookfield, A.E. and Colautti, D., 2008. Simulating Complex Flow and Transport Dynamics in an Integrated Surface-Subsurface Modelling Framework, *Geosciences Journal* vol. 12, no. 2, pp 107-122.
- 3) Sudicky, E.A., Jones, J.P., Brookfield, A.E., and Park, Y.-J., 2007. Reply to Comment by J.-P. Renaud, H.L. Cloke and M. Weiler on “An assessment of the tracer-based approach to quantifying groundwater contributions to streamflow”, *Water Resources Research* vol 43.
- 2) Brookfield, A.E., Blowes, D.W. and Mayer, K.E., 2006. Integration of Field Measurements and Reactive Transport Modelling to Evaluate Contaminant Transport at a Sulfide Mine Tailings Impoundment, *Journal of Contaminant Hydrology*, vol. 88, pp 1-22.
- 1) Jones, J.P., Sudicky, E.A., Brookfield, A.E. and Park, Y.-J., 2006. An Assessment of the Tracer-Based Approach to Quantifying Groundwater Contributions to Streamflow, *Water Resources Research*, vol. 42.

B). Other Refereed Contributions

I) Book Reviews

- 1) Brookfield, A.E., 2016. Water is for Fighting Over and Other Myths about Water in the West. *Groundwater*, Vol 55:1, doi: 10.1111/gwat.12485.

II) Abstracts

- 44) Brookfield, A.E., and Wilson, B.B., 2018. A modeling approach for making conjunctive water management decisions in the Lower Republican River Basin, USA. Presentation with abstract. 9th International Conference on Environmental Modelling and Software, Fort Collins, Colorado, June 24-28.
- 43) Brookfield, A.E., Wilson, B.B., and Bohling, G., 2018. Incorporating reservoir management into watershed models. Presentation with abstract. 2018 GSA North-Central Section meeting, Ames, Iowa, April 16-17.
- 42) Brookfield, A.E., 2017. Simulating how to decrease water shortages in the Lower Republican River Basin using new management options. Presentation with abstract, Governor’s Conference on the Future of Water in Kansas, Manhattan, Kansas, November 8 – 9.
- 41) Brookfield, A.E., Hill, M.C., Rodell, M., Loomis, B.D., Stotler, R.L., Porter, M.E., and Bohling, G.C., 2017. In-Situ and GRACE-based Groundwater Observations: Similarities, Discrepancies, and Evaluation in the High Plains Aquifer in Kansas. Presentation with abstract, GSA Annual Meeting, Seattle, Washington, October 21-25.

- 40) *Vero, S.E., Macpherson, G.L., Sullivan, P.L., Brookfield, A.E., Kirk, M.F., Datta, S. and Kempton, P., 2016. The Konza Prairie, Northeast Kansas, USA: The hydrologic evolution of a merokarst landscape. Poster with abstract, AGU Fall Meeting, San Francisco, California, December 12-16.
- 39) Brookfield, A.E., Hill, M.C., Stotler, R.L. and Porter, M.E., 2016. Interpreting satellite-based data from the GRACE mission using in-situ measurements from the High Plains Aquifer in Kansas. Presentation with abstract, Governor's Conference on the Future of Water in Kansas, Manhattan, Kansas, November 14-15.
- 38) Brookfield, A.E., Macpherson, G.L., and Covington, M.D., 2016. Effects of changing meteoric precipitation patterns on groundwater temperature in karst environments. Presentation with abstract, GSA Annual Meeting, Denver, Colorado, September 25-28.
- 37) Brookfield, A., and Gnau, C., 2015. Simulating the Effects of Climate Change and Water Management Strategies on Water Availability in the Lower Republican River Basin. Presentation with abstract, AEG Kansas Hydrology Seminar, Topeka, Kansas, November 20.
- 36) Brookfield, A., Reboulet, E. and Wilson, B., 2015. Variability of Groundwater/Surface Water Interactions Along the Arkansas River. Presentation with abstract. Governor's Conference on the Future of Water in Kansas, Manhattan, KS, November 18-19.
- 35) Gnau, C. and Brookfield, A., 2015. Evaluating Future Water Management Strategies in the Lower Republican River Basin. Presentation with abstract. Governor's Conference on the Future of Water in Kansas, Manhattan, KS, November 18-19.
- 34) Brookfield, A. and Gnau, C., 2015. Simulating Integrated Water Management for Irrigation in the Lower Republican River Basin, Kansas. Presentation with abstract. IAH-CNC 2015, Waterloo, ON, Canada, October 27-30.
- 33) Brookfield, A., Reboulet, E. and Wilson, B.B., 2015. Characterizing Temporal Variability at the Groundwater/Surface Water Interface. Presentation with abstract, NovCare 2015, Lawrence KS, May 19-21.
- 32) Macpherson, G.L., Brookfield, A.E., and Long, J., 2014. Negative Feedback to Climate Warming: How Shifts in Recharge Timing Can Affect Shallow Groundwater Temperature, Konza Prairie LTER Site, Northeastern Kansas. Presentation with abstract, GSA Annual Meeting, Vancouver, BC October 19-22.

- 31) Brookfield, A.E., Stover, S., Gnau, C. and Beightel, C., 2014. Evaluating Water Management Improvement Strategies in the Kansas Lower Republican River Basin. Presentation with published abstract. Midwest Groundwater Conference, September 30-October 2.
- 30) Stover, S., Brookfield, A., and Gnau, C., 2014. Water Management Improvement Strategies for the Kansas Lower Republican River Basin. Presentation with published abstract. NGWA Groundwater Summit, Denver, CO, May 4-7.
- 29) Brookfield, A., Wilson, B., Stover, S., Gnau, C. and Beightel, C. 2013. A Modeling Approach for Assessing Water Management Alternatives in the Lower Republican River Basin. Presentation with abstract, AEG Kansas Hydrology Seminar, Topeka, Kansas, November 22.
- 29) Liu, G., Knobbe S., Reboulet E., Whittemore D., Brookfield A., and Butler Jr. J.J. 2013. Development of a new artificial recharge approach for aquifer storage and recovery in near-surface aquifers: the performance of a surface basin in the Lower Republican River Basin. Presentation with abstract, AEG Kansas Hydrology Seminar, Topeka, Kansas, November 22.
- 28) Liu, H., Macpherson, G.L. and Brookfield, A.E. 2013. Carbon Dioxide Efflux from a Groundwater-Fed Stream, Konza Prairie LTER Site, Northeastern Kansas USA. Poster with published abstract, GSA Annual Meeting, Denver, CO, October 27-30.
- 27) Brookfield, A.E. 2013. Evaluating Future Water Management Strategies in the Lower Republican River Basin: A Progress Report. Presentation with abstract, Governor's Conference on the Future of Water in Kansas, Manhattan, KS, October 25.
- 26) Brookfield, A.E., Ensz, A., Stover, S., Wilson, B., Lyon, A. and Beightel, C., 2013. Simulating Integrated Water Management in the Lower Republican River Basin, Kansas, USA. Presentation with published abstract, HGS User's Meeting, Neuchatel, Switzerland, April 3-5.
- 25) Brookfield, A.E. and Sudicky, E.A., 2012. Implications of Hyporheic Flow on Temperature-based Estimates of GW/SW Interactions. Presentation with published abstract, AGU 2012 Fall Meeting, San Francisco, CA Dec 3-7.
- 24) Brookfield, A., Wilson, B., Stover, S., Ensz, A., Beightel, C. and Lyons, A., 2012. Managing the Water Resources of the Lower Republican River Basin. Presentation with published abstract, GSA 2012 Annual Meeting, Minneapolis Minnesota, November 4-7.
- 23) Brookfield, A., Ensz, A., Stover, S., Wilson, B., Lyon, A. and Beightel, C., 2012. Republican River Basin Study: The Start of a Multi-State Research Effort. Presentation with abstract, Governor's Conference on the Future of Water in Kansas, Manhattan, Kansas, October 30-31.

- 22) Brookfield, A.E., 2011 (Invited). Pairing Temperature Data with Fully-Integrated Hydrologic Models to Provide Insight into Groundwater-Surface Water Interactions. Presentation with published abstract, GSA 2011 Annual Meeting, Minneapolis Minnesota, October 9-12.
- 21) Brookfield, A.E., Liu, G., Sophocleous, M, 2011. Simulating the Effects of a Changing Climate on Water Resources in Kansas. Presentation with published abstract, Water and the Future of Kansas Conference, Topeka, Kansas, September 30.
- 20) Matanga, G., Brookfield, A., Sudicky, E., Therrien, R. and DeMarco, D., 2011. Challenges of Evaluation of Water Supply, Water Quality, and Ecosystem-Health Issues in Fully-Integrated Surface/Subsurface Framework. Presentation with published abstract, ASCE/EWRI World Environmental & Water Resources Congress, Palm Springs, California, May 22-26.
- 19) Brookfield, A.E. and Wilson, B.B., 2010. Fully Integrated Surface/Subsurface Modeling – Preliminary Results from Lower Republican River Basin Simulations. Presentation with published abstract, AIH/AEG 19th Annual Kansas Hydrology Seminar, Topeka, Kansas, November 19.
- 18) Brookfield, A.E., Wilson, B.B. and Sudicky, E.A., 2010. Simulating the Effects of Land Use and Climate Change on Hydrologic Flow and Transport Using Fully-Integrated Surface/Subsurface Model. Presentation with published abstract, GSA 2010 Denver Annual Meeting, Denver, Colorado, October 30 – November 4.
- 17) Brookfield, A.E., Sudicky, E.A. and Park, Y. -J., 2009. Investigating the Importance of Streambed Properties on Hydrologic and Thermal Conditions of a Stream Using an Integrated Surface/Subsurface Model. Presentation with published abstract, GSA 2009 Portland Annual Meeting, Portland, Oregon, October 17-21.
- 16) Brookfield, A.E., Sudicky, E.A. and Park, Y.-J., 2009. A Holistic Analysis of the Effects of Discrete Precipitation and Temporal Atmospheric Energy Inputs on the Spatio-Temporal Patterns of Temperature in a Streambed. Presentation with published abstract, AGU 2009 Joint Assembly, Toronto, Ontario, May 24-27.
- 15) Jones, J.P., Park, Y.-J., Sudicky, E.A., Brookfield, A.E., 2009. Groundwater Contributions to Streamflow in Response to Storm Events. Presentation with published abstract, AGY 2009 Joint Assembly, Toronto, Ontario May 24-27.
- 14) Brookfield, A.E., Sudicky, E.A., Park, Y.-J. and Conant Jr., B., 2008. The Importance of Maintaining a Total System Energy Balance for Predicting Stream Temperatures Using a Fully-Integrated Surface/Subsurface Modeling Framework. Presentation with published abstract, GSA 2008 Houston Annual Meeting, Houston, Texas, October 5-9.

- 13) Sudicky, E.A., Brookfield, A.E., Park, Y.-J. and Conant Jr., B., 2008. Simulation of Thermal Stream Loadings Using a Fully-Integrated Surface/Subsurface Modeling Framework. HydroPredict 2008, Prague, Czech Republic, September 15-18.
- 12) Brookfield, A.E., Sudicky, E.A., Park, Y.-J. and Conant Jr., B., 2008. Simulation of Thermal Stream Loadings Using a Fully-Integrated Surface/Subsurface Modeling Framework. Presentation with published abstract, EGU 2008, Vienna, Austria, April 13-18.
- 11) Brookfield, A.E., Sudicky, E.A., Park, Y.-J. and Conant Jr., B., 2007. Simulation of Streamwater Thermal Loadings Using a Fully-Integrated Surface/Subsurface Modeling Framework. Presentation with published abstract , GSA 2007 Denver Annual Meeting, Denver, Colorado, October 28-31.
- 10) Brookfield, A.E., Sudicky, E.A. and Park, Y.-J., 2007. Analysis of Contaminant and Thermal Stream Loadings in a Fully-Integrated Surface/Subsurface Modeling Framework. Presentation with published abstract, IUGG XXIV General Assembly, Perugia, Italy, July 2-13.
- 9) Sudicky, E.A., Brookfield, A.E., Colautti, D., Jones, J.P. and Park, Y.-J., 2006. Simulating Flow, Heat and Contaminant Transport in Integrated Surface-subsurface Flow Systems. Presentation with published abstract , HydroEco2006; International Multidisciplinary Conference on Hydrology and Ecology, The Groundwater/Ecology Connection, Karlovy Vary, Czech Republic, Sept 11-14.
- 8) Sudicky, E.A., Lemieux, J.-M., Jones, J.P., Brookfield, A.E., Colautti, D., Park, Y.-J., Therrien, R. and Graf, T., 2006. Simulating Complex Flow and Contaminant Transport Dynamics in an Integrated Surface-subsurface Modelling Framework. Presentation with published abstract, IAHR International Groundwater Symposium on: Groundwater Hydraulics in Complex Environments, Toulouse, France, June 12-14.
- 7) Sudicky, E.A., Therrien, R., Park, Y.-J., Jones, J.P., Lemieux, J.-M., Brookfield, A.E., Colautti, D., Panday, S. and Givanasen, V., 2005. On the Challenge of Integrated Surface-Subsurface Flow and Transport Modelling at Multiple Catchment Scales. Presentation with published abstract, Geological Society of America Annual Meeting, Salt Lake City, Utah, October 16-19.
- 6) Sudicky, E.A., Jones, J.P. and Brookfield, A.E., 2005. Quantifying Groundwater Contributions to Streamflow Generation: The Reliability of Tracer-Based Hydrograph Separation Techniques. Presentation with published abstract, MODEL CARE 2005, The Hague, Netherlands, June 6-9.

- 5) Sudicky, E.A., Therrien, R., Jones, J.P., Park, Y.-J., Lemieux, J.-M., McLaren, R.G., Brookfield, A. and Panday, S., 2004. Modeling Flow and Contaminant Transport in Integrated Surface-subsurface Flow Systems: Numerical Solution Strategy and Application. Presentation with published abstract, GSA 2004 Denver Annual Meeting, Denver, Colorado, USA, November 7-10.
- 4) Sudicky, E.A., Di Iorio, T.A., Jones, J.P., Park, Y.-J., Lemieux, J.-M., Brookfield, A., McLaren, R.G., Therrien, R. and Panday, S., 2004. Flow and Contaminant Transport in Integrated Surface-subsurface Flow Systems at the Catchment Scale. Presentation with published abstract, International Conference on Finite-Element Models, MODFLOW and More 2004, Karlovy Vary (Calsbad), Czech Republic, September 13-16.
- 3) Sudicky, E.A., Jones, J.P. and Brookfield, A.E., 2004. Quantifying Groundwater Contributions to Streamflow Generation: The Reliability of Tracer-based Hydrograph Separation. Poster with published abstract. Connecting Water Resources, Canadian Water Network Symposium, Ottawa, ON, Canada, June 20-22.
- 2) Jones, J.P., Brookfield, A.E. and Sudicky, E.A., 2004. Quantifying Groundwater Contributions to Streamflow Generation: The Reliability of Tracer-based Hydrograph Separation. Presentation with published abstract. AGU/CGU 2004 Joint Assembly, Montreal, QC, Canada, May 17-21.
- 1) Brookfield, A.E., Mayer, K.U. and Blowes, D.W., 2003. Reactive Transport Modelling of the Generation of Acid Mine Drainage: Encouraging Results and Limiting Factors. Presentation with published abstract. GSA 2003 Seattle Annual Meeting, Seattle, Washington, USA, November 2-5.

C). Unreviewed Materials

- 4) Brookfield, A.E., 2016. Minimum Saturated Thickness Calculator: Method Overview and Spreadsheet Description. KGS OFR No. 2016-3, 7p.
- 3) Brookfield, A., and Wilson, B., 2015. Integrated Groundwater/Surface Water Model for the Lower Republican River Basin, Kansas: A Progress Report. KGS OFR No. 2015-1, 27p.
- 2) Brookfield, A., and Gnau, C., 2015. Integrated Groundwater/Surface Water Model for the Lower Republican River Basin, Kansas. Technical Report for US Bureau of Reclamation, 43p.
- 1) Brookfield, A., and Gnau., 2015. Republican River Basin Study – Kansas Modeling Results Tech Memo. Technical Report for US Bureau of Reclamation, 31 p.

INVITED TALKS

- 11) Brookfield, A.E., 2017. The Food, Energy, and Water Nexus: Research in Kansas. Aquanty Seminar, Waterloo, ON, Canada, April 24.
- 10) Brookfield, A.E., Hill, M. and Porter, E., 2016. Developing Tools for Data-Model Integration in Fully-Coupled Hydrologic Models. NASA Goddard Terrestrial Water Cycle Seminar Series, Greenbelt, MD, January 13.
- 9) Brookfield, A.E. 2015. Groundwater/Surface Water Interactions at Konza: Flow and Thermal Transport in N4D. Konza LTER Workshop, Manhattan, KS, May 29.
- 8) Brookfield, A.E. 2014. Simulating Integrated Water Management in the Lower Republican River Basin, Kansas. IRTG Integrated Hydrosystem Modeling, Department of Geosciences, University of Tübingen, Germany, July 1.
- 7) Brookfield, A.E. 2013. Simulating Flow and Thermal Energy Transport in Fully-Integrated Surface/Subsurface Hydrologic Framework. M2F2 Seminar Series, Department of Aerospace Engineering, University of Kansas, March 25.
- 6) Brookfield, A.E., 2013. Integrated Hydrologic Models: Building New Tools for Water Management, University of Nebraska-Lincoln Spring 2013 Water Seminar Series, January 16.
- 5) Brookfield, A.E., 2011. Critically Assessing Numerical Model Results, Kansas Department of Health and Environment, Topeka, Kansas, December 12.
- 4) Brookfield, A.E., 2010. Fully-Integrated Surface/Subsurface Flow and Transport Modeling, Kansas Water Office Brownbag Seminar Series, Topeka, Kansas, May 4.
- 3) Brookfield, A.E., 2010. Simulating Flow and Thermal Energy Transport in a Fully-Integrated Surface/Subsurface Hydrologic Framework, KU Department of Geology Colloquium, Lawrence, Kansas, January 28.
- 2) Brookfield, A.E., Sudicky, E.A., Park, Y.-J. and Conant Jr., B., 2008. Fully-Integrated Surface/Subsurface Thermal Energy Modeling, HydroGeoSphere Workshop, Sacramento, California, November 12-14.
- 1) Brookfield, A.E., Sudicky, E.A., Park, Y.-J. and Conant Jr., B., 2007. Analysis of Thermal Stream Loadings in a Fully-Integrated Surface/Subsurface Modeling Framework, Geomatrix Technical Summit, Lake Tahoe, California, October 7.

HONOURS AND SCHOLARSHIPS

2009	University of Waterloo Ph.D. Completion Award
2005-2006	Ontario Graduate Scholarship in Science and Technology – Geomatrix Consultants
2003-2005	Natural Science and Engineering Research Council (NSERC) Post-Graduate Scholarship B
2003-2005	University of Waterloo Graduate Incentive Award
2003-2004	University of Waterloo Graduate Scholarship
2002	University of Waterloo Acid Rain Scholarship
2000-2002	NSERC Post-Graduate Scholarship A
2000-2001	University of Waterloo Graduate Scholarship
2001	Provost’s Graduate Women’s Incentive Fund Scholarship
2000	Sir Sandford Fleming Foundation Co-Op Proficiency Medal
1999	Faculty of Engineering Upper Year Scholarship
1997	Sir Sandford Fleming Award for Most Outstanding Work Report

PROFESSIONAL SERVICE ACTIVITIES

November 2009 – Present	Geological Society of America Hydrogeology Division Newsletter Editor
December 2011 – Present	Groundwater Journal Associate Editor
October 24, 2017	Geological Society of America Hydrogeology Division Student Mentor
September 29, 2017	Douglas County, KS Water Festival Volunteer
March 22, 2017	Hill’s Pet Nutrition World Water Day Workshop Volunteer
May 2013 – Present	Kansas WRAPS Working Group Representative
July 2014 – Present	University of Kansas Center for Science and Research Support KGS Representative

PROFESSIONAL ASSOCIATIONS

Member of:

Geological Society of America, American Geophysical Union, International Association of Hydrogeologists, Association for Women Geoscientists, Professional Engineers of Ontario (Engineer in Training)