This year’s GSA Annual Meeting will be held in Baltimore, Maryland. Be sure to make your plans now to attend! There are 29 proposed topical sessions and one field trip sponsored or co-sponsored by the Hydrogeology Division for the 2015 meeting. See the listing of sponsored sessions and a listing of the hydro-related field trips on Page 3.

As usual, the Hydrogeology Division will host several other events throughout the conference providing attendees with ample opportunity to meet new, and reconnect with old, colleagues and
I hope that you are enjoying your summers and hopefully taking a bit of a break! We are looking forward to seeing all (or many) of you at this year’s GSA Annual Meeting in Baltimore MD from Nov 1-4. There are great field trips and short courses, in addition to the excellent technical program. Thanks very much to our Joint Technical Program co-chairs Chris Gellasch and Mark Engle for this accomplishment. The abstract deadline is August 11. Please encourage your colleagues and students to contribute!

Note to students: There are many professional development opportunities at the Annual and Regional GSA meetings, including mentor programs, career discussions, the women in geology reception, student networking programs, and the GSA Geocareers program. Please take these opportunities, as they are designed especially for you!

Thanks to those of you who put together nominations for Hydrogeology Division awards, and to those of you on the awards committee who evaluated the nomination packages. The result is that we have a tremendous group of Hydrogeology Division awardees, listed in this edition of the Hydrogeologist (full citations will be included in the Fall edition).

In addition to regular business, the Management Board has been working over the past six months on several things: 1) fundraising for the Birdsall-Dreiss lectureship; 2) other fundraising activities; and 3) evaluating the use of GSA’s Connected Community for connecting with our student members. If you have ideas for ways to improve the Hydrogeology Division, please let us know! (see contact info at the end of the newsletter).

Best,

Maddy Schreiber

Lenny Konikow - National Academy of Engineering

Congratulations to Dr. Leonard (Lenny) F. Konikow, a Division member, on being elected to the National Academy of Engineering “for modeling of coupled ground-and surface water flow and of solute transport in groundwater.”
Topical Sessions: [http://www.geosociety.org/meetings/2015/sessions/topical.asp](http://www.geosociety.org/meetings/2015/sessions/topical.asp)

T20. Embedded Research Projects in Upper Level Undergraduate Courses: A Plausible Panacea for the Dwindling Science and Engineering (S&E) Researchers Community (Posters)

T29. Restoring the Nation’s Largest Estuary: Lessons Learned from Efforts to Address Changes in Water Quality and Ecosystem Structure and Function within the Context of Landscape Change and Climate Variability in the Chesapeake Bay and Its Watershed

T33. Using Long-Term Research in the Baltimore Urban Environment in Scientific Decision Making and Education

T35. Honoring the Diverse Career of Dr. W. Berry Lyons: Geochemistry from Polar Deserts to Tropical Watersheds

T40. Tracing Biogeochemical and Hydrological Processes in Urban Landscapes

T47. Geology and Health: A Decade of Progress

T50. Microbial Hydrocarbon Formation and Biodegradation: Organisms, Pathways, Environmental Limitations, and Isotope Signatures

T70. Digital Technology in Real and Virtual Geoscience Experiences (Posters)

T77. Geology and Hydrology in the National Parks: Research, Mapping, and Resource Management

T79. Geoscience Career Planning in the Classroom and Beyond


T96. Geologic Maps and Their Derivatives (Posters)

T99. A Showcase of Undergraduate Research in Hydrogeology

T100. Advances in Groundwater Modeling

T101. Arsenic: Source to Sustainability

T102. Characterization and Remediation of Fractured Rock

T103. Contaminant Transport, Fate, and Remediation in Fractured Rocks

T104. Delivery of Nutrients and Contaminants by Groundwater to Estuaries and Their Watersheds

T105. Fate and Remediation of Organic and Metal Contaminants in Wetlands and Sediments

T106. From Green Roofs and Gutters to Urban Streams: Advancing Urban Watershed Hydrology through Innovative Field and Modeling Approaches

T107. In Situ Technologies for Energy Resource Extraction: The Role of Water

T108. Nanomaterials in Hydrogeology


Please see [Sessions](#) on Page 7
**Chair:**

**Alicia Wilson**, Ph.D. 1999, Johns Hopkins University, is an Associate Professor in the Department of Earth and Ocean Sciences in the School of the Earth, Ocean and Environment at the University of South Carolina, where she has been since 2001. She teaches courses in environmental science, hydrology, hydrogeology, and numerical modeling. She has graduated one Ph.D. and five M.S. advisees, and she currently advises three Ph.D. students. Her research has focused on transient groundwater flow and transport in large sedimentary basins and coastal systems, with a particular focus on submarine groundwater discharge. She has served as an associate editor for Hydrogeology Journal (2005-2009) and Water Resources Research (2014-present); she has also served on the Integrated Ocean Drilling Program Scientific Steering and Evaluation Panel (2005-2008). She is a member of AGU and AWG; she served on the GSA Joint Technical Program Committee as a Hydrogeology Division representative from 2010-2012 (lead organizer for the Hydrogeology Division technical program, 2012 meeting).

**Statement of Interest:** The GSA Hydrogeology Division supports the hydrogeology community in a way that no other organization does. It would be an honor to contribute to the traditions and growth of the division.

**1st Vice Chair:**

**Abe Springer**, Ph.D. 1994, The Ohio State University, is Professor of Hydrogeology and was the Inaugural Director of the School of Earth Sciences and Environmental Sustainability at Northern Arizona in Flagstaff, AZ. At NAU, he has taught courses in hydrogeology, applied geology, groundwater modeling, contaminant transport modeling, and springs ecohydrology, advised 35 graduate students, and published 23 peer-reviewed publications. He is a fellow of GSA and member of Sigma Xi, NGWA, AGU, AHS, and IAH. He has served as the GSA representative to the editorial board of Environmental and Engineering Geoscience (2007-2011), Meinzer Award Committee (2001-2003), the NAU campus rep for GSA (2001-present), and has organized six division theme sessions and taught one short course at GSA annual meetings.

**Statement of Interest:** In my 20 year career as a professor, my students and I have significantly benefited from engaging in the professional networking opportunities of the division through national and regional meetings, field trips, and workshops. My experiences supporting the division's journals, Environmental and Engineering Geology and Hydrogeology, through publishing, reviewing, and advising will be leveraged on the management board to enhance their missions. I will work to enhance the outreach of the division through the Birdsall-Dreiss lecture series and other mentoring activities.

Please see Elections on Page 9
Obituaries

The Division is saddened to pass along the following obituaries for members who have recently passed.

Mike Edmunds passed away on the morning of 28th April in Oxford UK. Mike unfortunately succumbed to cancer of the upper stomach that had spread to other organs.

In 2009 Mike Edmunds received the O.E. Meinzer Award from the GSA Hydrogeology Division. The following words about Mike are from Ian Cartwright, President of IAGC.

Mike was one of the most influential figures in hydrogeochemistry, especially in the application of major ions, stable, and radioactive isotope tracers to understand groundwater processes and flow in aquifers. Mike had a long and distinguished career at the British Geological Survey (1961 to 2001) and was a leader in their water group for many years. Following retirement from the BGS, Mike held visiting professor and researcher positions at Oxford University.

A strong supporter of IAGC via the Water-Rock interaction group, Mike was ever-present at WRI meetings. He was enthusiastic and ever-willing to discuss ideas and to provide advice and encouragement to up-and-coming researchers. Mike also was involved in Applied Geochemistry as a reviewer, associate editor, and author. Mike worked across the world, lending his talents in geochemistry to solve pressing issues in groundwater.

Ralph Carr Heath, 89, of Raleigh, North Carolina, died January 12, 2015. He was born on July 10, 1925, in Lenoir County, North Carolina, the son of William Curt and Lucy Daugherty Heath.

Ralph entered UNC Chapel Hill on July 1, 1943, as a member of the first U.S. Navy V-12 program and was commissioned as an Ensign at the New York Midshipman School at Columbia University on April 23, 1945. His naval career included serving as navigator, gunnery, and supply officer on Yard Minesweeper 218 during minesweeping operations at Pusan, Korea, and at Bikini Atoll in the Marshall Islands in preparation for the Operation Crossroads atomic-bomb tests.

After discharge from the Navy he returned to UNC Chapel Hill, receiving a BS degree in geology in 1948. During a career as a hydrogeologist with the U.S. Geological Survey from 1948 to 1982, he worked in Florida, New York, Connecticut, Rhode Island, and North Carolina. His positions in the Geological Survey included that of Acting District Engineer in Tallahassee, District Geologist in Albany for New York and southern New England, District Chief of New York, and District Chief in Raleigh for North Carolina. While serving as District Chief in Albany he taught courses in groundwater hydrology at Rensselaer Polytechnic Institute at Troy, NY.

Following retirement from the Geological Survey, Mr. Heath began a second career as a consulting hydrogeologist. He also became an Adjunct Professor of Civil Engineering at NC State University, Lecturer in the Department of Forestry and Environmental Studies at Duke University, and Adjunct Professor of Geology at East Carolina University. He taught courses in groundwater hydrology at NC State and Carolina in the 1980’s.

Want to know what’s going on within the Division?
Then visit our website at: <http://gsahydrogeology.org>
OR
Join the GSA Hydrogeology Division facebook group to catch up on the latest events or find out how you can become more involved with our activities.

Please see Heath on Page 6
Mercer, an NGWA member, co-founded GeoTrans (now part of Tetra Tech) in 1979, and in 1980 began working on hazardous waste issues at Love Canal.

In 1985, he received the Wesley W. Horner Award of the American Society of Civil Engineers for the work performed at Love Canal.

Prior to that, Mercer spent eight years with the U.S. Geological Survey in the Northeastern Research Group working on contaminant and heat transport issues, including multiphase flow.

He received a B.S. from Florida State University and an M.S. and Ph.D. from the University of Illinois; all of his degrees are in geology.

His research appeared in many publications, including NGWA's Groundwater®. He also authored the book, DNAPLSite Evaluation, in 1993.

Mercer, who presented papers at NGWA conferences and taught courses for the Association, served on the National Research Council’s Water Science and Technology Board and was a member of the U.S. Environmental Protection Agency Science Advisory Board. He also was on the Scientific Advisory Board of SERDP.

In 1994, he received the American Institutes of Hydrology's Theis Award for contributions to groundwater hydrology.

In recent years, he added fiction to his writing as he authored three thrillers that combine geology and biblical history: The Scrolls: The Missing Eighteen Years, published in 2010, The Volcano That Changed the World (2013), and The Tsunami That Altered America (2014).

Mercer was the subject of a feature article in Water Well Journal in 2014 where he said of his novels, “I’ve received great feedback on my work. In the end, I’m trying to teach through an interesting story. Hopefully I’m able to do it in a way that grabs the reader’s attention.”

From: http://waterwelljournal.org/?p=6522

James W. Mercer, Ph.D., executive vice president and principal hydrogeologist with Tetra Tech in Sterling, Virginia, died on March 11 after battling cancer for several months.

James Mercer passed away on March 11, 2015 after battling cancer for several months. He was the topic of a recent Hydrogeologist article (Summer 2014) highlighting his most recent novel. The following is from NGWA's Water Well Journal:

Mr. Heath was the author or co-author of more than 70 scientific publications, including an introductory groundwater textbook and hydrogeologic maps of the United States and of North America. His Geological Survey publication entitled Basic Ground-water Hydrology has been printed 10 times, and translated versions have been printed in both Germany and Brazil.

His professional honors include both Distinguished Lecturer and the Henry Darcy Distinguished Lecturer of the National Ground Water Association, the first Founders Award of the American Institute of Hydrology, Award for Distinguished Service in Hydrogeology of the Geological Society of America, and the Meritorious Service Award of the U.S. Department of the Interior.

He was preceded in death by his beautiful and ever-loving wife of 65 years, Martha, whom he met in Miami, Florida in 1945 while attending the Navy's Advanced Line Officers School and whom he married in 1947. Survivors include his son, William Curt Heath of Raleigh; daughter, Susan Ann Heath Johnson of Chapel Hill; and four grandchildren, Sarah of Raleigh, Matthew of Chapel Hill, David of Manassas, Virginia, and Samuel of Purcellville, Virginia.

Mr. Heath was the author or co-author of more than 70 scientific publications, including an introductory groundwater textbook and hydrogeologic maps of the United States and of North America. His Geological Survey publication entitled Basic Ground-water Hydrology has been printed 10 times, and translated versions have been printed in both Germany and Brazil.

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Do you have an interesting idea for a short scientific article? Perhaps an opinion on a new policy or technique? Any exciting news in your professional life? Upcoming conference? An announcement of interest to the hydrological community? If so, why not publish it in The Hydrogeologist? Send your submission ideas to andrea@kgs.ku.edu

STUDENTS, WE WANT TO HEAR FROM YOU TOO!

Sessions from page 3
T110. Satellite Remote Sensing Applications in Hydrology and Geology
T111. Sustainability and Resilience in Major Urban Areas: The Need for Earth and Environmental Science Information in Formulating Plans, Policies, and Programs
T112. Understanding Saline Fluid Flow Systems: From Saltwater Intrusion to Geologic-Scale Brine Migration
T113. Urban Groundwater Effects beyond Impervious Surface Cover
T115. Cave Exploration, Survey, and Science: Historical to Modern Perspectives, Methods, and Techniques
T116. Contamination in Karst: Beyond the Case Study
T117. Enhancing the Toolkit for Karst Investigations
T118. Extreme Karst: Exploring the Limits of Karstification on Earth and throughout the Solar System
T119. Geological Interactions within the Global Carbon Cycle
T120. Karst Processes and Speleogenesis: Advances in Monitoring, Modeling, and Measurements
T122. Remote Sensing and Geophysical Imaging in Karst
T200. Hillslope Dynamics: Integrating Soils, Hydrology, and Climatic Processes to Understand Weathering and Sediment Transport on Drainage Basin Slopes
T203. Soil Water in the Hydrosphere and Biosphere

GSA Hydrogeology Related Field Trips


Where in the World?

This edition’s photo comes from the site that inspired one of Ed Harvey’s songs on his recently released CD (details on page 10).

Hint: If you happen to travel by here, be sure to check out Carhenge as well (see small inset photo).

Submit your guesses to andrea@kgs.ku.edu

I also welcome any and all photos for upcoming newsletters. Show off your field site or your most recent hydro-related vacation pictures to all our members!

Rocky Mountain National Park
Colorado

Congratulations to Guy Swenson of O’Brien & Gere on being the first to identify the location of this photo. Joe Donovan also correctly identified the photo as being from Rocky Mountain National Park (RMNP).

This year marks the 100th anniversary of the RMNP located in Colorado and includes some of the highest mountains in the continental US. From September 2014 through September 2015 the park will host a series of events celebrating its first 100 years.

The RMNP has a continental divide running the length of the park (north to south). The waters on the west are the headwaters of the Colorado River, and the waters to the east are part of the Mississippi drainage. The park contains over 450 miles of rivers and streams, and almost 150 lakes. Groundwater-fed wetlands are also present in some areas of the lower altitude regions.

Information from www.nps.gov/romo/

This is the view from the end of the Alpine Ridge Trail in Rocky Mountain National Park, near the Rocky Mountain National Park Alpine Visitor’s Center. Photo by Ed Harvey.
Congratulations to the following 2015 Hydrogeology Division Awardees. More information will follow in the Fall Edition of the Newsletter.

2016 Birdsall-Dreiss Lecturer:
Shemin Ge, University of Colorado at Boulder

2015 Meinzer Award:
Brian Berkowitz, Weizmann Institute of Science, Israel

2015 George Burke Maxey Distinguished Service Award:
Bill Simpkins, Iowa State University

2015 Kohout Early Career Award:
Michael Cardiff, University of Wisconsin-Madison

2015 Graduate Research Grants in Hydrogeology Division:

| George Allen | Marisa Earll |
| Rebecca Frus | Alec Gierzynski* |
| Tiffany Jebson | Joseph Kennedy |
| Zacharay Kisfalusi | Deon Knights |
| Travis Nielson | Michael O’Connor* |
| Madeyn Percy* | Jonathan Reeves* |
| Sydney Ruhala | Frances Sayler |
| Pin Shuai | Tamru Taye |
| Taylor Upole | Sarah Vitale |
| Oliver Wigmore | Alyssa Witt |
| Hector Zamora | Brady Ziegler* |

* special recognition awards; students also received travel grants to attend GSA

Elections from Page 4

2nd Chair:
Steve Van der Hoven, Ph.D. 2000, University of Utah, is a Senior Hydrogeologist at Genesis Engineering & Redevelopment, Inc. in Lodi, California, where he is the principal scientist on a variety of projects, with an emphasis on sites contaminated by chlorinated solvents. As an Associate Professor at Illinois State University from 2000-2010, his research interests included using dissolved noble gases to quantify hydrogeologic processes and nutrient cycling between surface water and groundwater, and he taught courses in aqueous geochemistry, contaminant transport, hydrogeologic and geochemical field methods. He is a member of NGWA, served as an Associate Editor for Hydrogeology Journal, was the Kohout Early Career Award Committee Chair (2012-2015), organized the Hydrogeology Division Student Reception at annual meetings (2009-2013), and has organized theme sessions at annual meetings.

Statement of Interest: I have attended GSA meetings since I was an undergraduate, and have been a GSA and Hydrogeology Division member since 1995. One of my main goals as a professor was to prepare the next generation of hydrogeologists, and the Hydrogeology Division supported both my personal goals and those of my students. As an environmental consultant, the Division provides me with access to new ideas and techniques that I can apply to the remediation of contaminated groundwater. As a member of the Management Board, my main objective would be to foster greater interaction between the research and applied hydrogeologist to improve practice of hydrogeology and provide opportunities for students to interaction with non-academic professionals.
Many of our members have talents outside of the scientific realm. This includes past-chair Ed Harvey who is also a songwriter and performer. Ed’s first album of original bluegrass music, Stories Seldom Told, was recently released. This album includes several songs with hydrogeologic inspiration. The CD will be available at the Hydrogeology Division booth at the upcoming GSA Annual meeting, in addition to several opportunities to meet with the artist and get an autograph. With any luck, a live performance will also occur.

If you can’t wait until November to get your hands on this CD you have several other options:

1) For an autographed physical copy, email Ed at edharveymusic@gmail.com
2) For an un-autographed physical copy go to www.cdbaby.com
3) Digital copies (MP3) are available from CDbaby, iTunes or Amazon.

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New Opportunities for Publishing Your Research in Environmental and Engineering Geosciences

The journal *Environmental and Engineering Geoscience* (E&EG) is published quarterly by the Geological Society of America (GSA) and the Association of Environmental and Engineering Geologists (AEG). Both GSA and AEG are looking to increase the visibility and impact factor of E&EG. One of the ways that we can accomplish this goal is to publish special issues on timely and relevant topics in the environmental and engineering geosciences (including hydrogeology, low-temperature geochemistry, water-energy nexus, geomorphology, and other Earth surface processes). We would like to encourage organizers and conveners of topical sessions at GSA and other scientific meetings to serve as guest editors of special thematic issues that would include high-quality papers presented in their respective topical sessions. The session organizer/convener may want to consider writing a review paper on the special topic and invite other authors to contribute manuscripts based on their presentations. Please contact the co-editors for more information and to discuss possible special issue topics: Brian G. Katz (eegeditorbkatz@gmail.com) and Abdul Shakoor (ashakoor@kent.edu). Thanks for your support of E&EG!
**IAHS Dooge Medal 2015 Awardee:**
**Dr. Mary Hill**

Earlier this summer Dr. Mary Hill received the 2015 Dooge Medal from IAHS. In the words of her citationist, IAHS President Hubert Savenije, Dr. Hill was awarded this medal for her “significant and long lasting contributions to groundwater modeling, particularly in inverse modeling, sensitivity analysis, uncertainty analysis and investigating the importance of existing and new data.”

We are proud to have Mary as a Division member, and wish to extend her a warm congratulations from the Division. Congratulations Mary!
From the Editor....

Welcome to the Summer 2015 edition of the Hydrogeologist. This edition focuses on many of the things to come this year within the Division, including the upcoming Division elections. Please watch your inbox for the digital ballots. This edition also includes information about the upcoming Annual meeting in Baltimore, including a list of technical sessions and Division awardees. As usual, if you have any comments or article ideas please pass them on to me at andrea@kgs.ku.edu.

Hydrogeology Division Contacts

2014 Management Board
Chair: Maddy Schreiber: mschreib@vt.edu
First Vice-Chair: Alicia Wilson: awilson@geol.sc.edu
Second Vice Chair: Abe Springer: Abe.Springer@nau.edu
Secretary-Treasurer: Eric Peterson: ewpeter@ilstu.edu
Past Chair: Alan Fryar: alan.fyar@uky.edu

Standing Committees

Technical Program Committee: Chris Gellasch (2015 - Baltimore)
Nominating Committee: Steve Ingebritsen (Chair), Todd Halihan, Alan Fryar

Meinzer Award Committee:
David Parkhurst (Chair), Chunmiao Zheng, Karen Johannesson, Charles Harvey, Mike Cardiff

Birdsall-Dreiss Lecturer Committee:
Dani Or (Chair), Larry Band, Cliff Voss, Lenny Konikow, Kip Solomon

Maxey Distinguished Service Award Committee: Brian Katz (Chair), Scott Bair, Robert Ritzi

Kohout Early Career Award: Steve Van der Hoven (Chair), Kent Keller, Laurel Larson, Peter Knappett, Ward Sanford

Ad Hoc Committees

Section Representatives:
Cordilleran - Beth Weinman
Northeastern - Todd Rayne
North Central - Sue Swanson
South Central - Marcia Schulmeister
Rocky Mountain - Andrew Manning
Southeastern - Jeff Wilcox
International: Prosun Bhattacharya

Representatives to other Societies:
American Geophysical Union - Barbara Bekins
American Geological Institute - David Wunsch
Consortium of Universities for the Advancement of Hydrologic Science - Holly Michael
National Ground Water Association - Bill Alley
International Assoc. of Hydrogeologists - Jack Sharp
Society for Sedimentary Geology - Gary Weissman
Soil Science Society of America - Michael Young

Newsletter Editor: Andrea Brookfield: andrea@kgs.ku.edu
Web Administrator: Mike Sukop
GSA Hydro. Division Liaison: Janet Herman

Hydrogeology Division Website: <http://gsahydrogeology.org>