



The Hydrogeologist

Newsletter of the GSA Hydrogeology Division

Winter 2024 Issue 110

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GSA Connects 2023 Review

Pittsburgh

GSA Connects 2023 was held in October in Pittsburgh, Pennsylvania. The 2023 meeting was GSA's first fully in-person annual meeting since COVID.

A big thanks to all our Hydrogeology Division Management Board Members and others who helped make the Hydrogeology Division events at the meeting a success. GSA's official attendance statistics for the meeting will not be available until the January edition of GSA Today is published, but the Hydrogeology Division's events were well attended. Approximately 60 people joined us for the Division Awards Ceremony (photos on pages 5-6). More than 80 students attended the Student Reception (photos on page 9 and article on page 10). Approximately 40 students participated in the Mentoring Session (photo on page 9), and this year's Student Poster Session included presentations from 10 undergraduate students (photos on p. 4).

Planning is already underway for [GSA Connects 2024](#) which will be held September 22-25 in Anaheim, California. Stay tuned to future editions of The Hydrogeologist for details about abstract submission and registration deadlines. We encourage our division members to help make GSA Connects 2024 a success by submitting a proposal for a [technical session](#). Questions about proposals for technical sessions can be directed to Marty Frisbee (mdfrisbee@purdue.edu), the Division's Joint Technical Program Committee representative.

Important deadlines in February 2024

GSA has several important deadlines in early February. These deadlines are listed below.

- February 1st deadlines:
 - [Short course proposal](#) deadline for GSA Connects 2024
 - [Technical session proposal](#) deadline for GSA Connects 2024
 - Awards nominations deadline
 - Please submit nominations for the [O.E. Meinzer Award](#), [Kohout Early Career Award](#), [George Burke Maxey Distinguished Service Award](#), [Schwartz Award for Excellence in Mentoring and Education](#), and the [Birdsall-Dreiss Distinguished Lecturer and LaMoreaux International Lecturer](#) to gsa.hydro.nominations@gmail.com
- February 2nd deadline:
 - Deadline for [GSA Graduate Student Research Grant applications](#)

Chair's Corner

Chris Carlson,
Chair,
GSA
Hydrogeology
Division



Dear Hydrogeology Community,

I hope that you found the 2023 GSA Connects meeting in Pittsburgh a great opportunity to connect with friends and colleagues, learn about some of the great work happening in the world of water, and build some new relationships. If you were not able to join us this year, I hope to see you at the 2024 meeting in Anaheim in September. Our Division Management Board worked hard on the program, the Student Research Poster Session and Awards, the Division Awards, the Annual Career Networking Event (joint this year with the Engineering and Environmental Geology Division), and the Student Reception (everyone's favorite, thanks to our amazing emcee, Todd Hallihan, and our super student prize conjuror, Tara Root). All were well attended and well

received. Our annual Birdsall-Dreiss/LaMoreaux (Ken Belitz) and Darcy (Alicia Wilson) Lectures and the GSA Halbouty Lecture (Susan Brantley) helped showcase groundwater work to broader audiences. This annual meeting was the first time GSA organized Division and Section tables around the GSA HQ area near the center of the exhibit hall. Our Division had a great location directly at the end of one of the booth corridors, giving us great exposure. GSA also helped develop brochures and a popup banner for each table. Big thanks to all members who helped staff the Division table during peak hours.

Looking ahead to the Anaheim meeting, there are two themes: Life on an Active Margin, and Water in our Changing World. Both of these themes connect well with our Division. We are looking forward to a robust hydro technical program. Technical session and short course proposals are due February 1, 2024. Please keep these themes in mind when thinking about technical session proposals, but other hydro-related proposals are welcome.

The past year was a busy one for your Management Board. Under the leadership of now Past Chair Chris Gellasch, the Division added a second student representative, a diversity, equity and inclusion officer, and a section representative coordinator to the Board and with the Division's support through a vote added those positions to the Division Bylaws. In addition, based upon feedback from Division members, the Birdsall-Dreiss/LaMoreaux Distinguished Lectureship was modified to reduce the time away from home by allowing two collaborators to share in the opportunity to deliver presentations on their work across North America and the world. Big thanks to the 2022-23 Board: Chris Gellasch, Chair; Chris Carlson 1st Vice Chair; Don Rosenberry, 2nd Vice Chair; Cara Peterman, Secretary; Desire Phipps and Jobel Villafane, Student Representatives; Sue Swanson, DEI Officer; Marcia Schulmeister, Section Representative Coordinator, and Yu-Feng Forrest Lin, Past Chair. The management board could not have functioned without a number of other key people, including (but not limited to) Mike Sukop and Martina Rogers (webmasters), Tara Root (newsletter editor), and Paul Stackelberg and Marty Frisbee (JTPC representatives).

Big thanks to this year's Birdsall-Dreiss/LaMoreaux Distinguished Lecturer, Ken Belitz from the Water Resources Mission Area of USGS. The 2024 Birdsall-Dreiss/LaMoreaux Distinguished Lecturer is Ben Rostron, Professor Emeritus of Earth & Atmospheric Sciences at the University of Alberta. If you would like to learn more about Ben's lecture topics or request a visit in 2024, please use follow link: <https://community.geosociety.org/hydrodivision/awards/birdsall/about2024b-d>.

Continued on page 3.

Stay current on developments in the Hydrogeology Division by joining our Facebook group, following us on Instagram, and tweeting us @GSAHydrogeology!

Facebook: <https://www.facebook.com/groups/93897080123/>

Instagram: https://www.instagram.com/gsa_hydrogeology/

Twitter: <https://twitter.com/GSAHydrogeology>

LinkedIn: <https://www.linkedin.com/in/gsa-hydrogeology-division-4981b2263/>

Chair's Corner, continued

At GSA Connects, we welcomed two new Board members - Richelle Allen-King from the University at Buffalo as 2nd Vice Chair, and Megan Jones from Missouri State University as 1st year Student Rep. Additionally, I moved into the Chair position, Don Rosenberry became 1st Vice Chair, and Chris Gellasch was elevated to Past Chair. Yu-Feng Forrest Lin rotated off the Board. Within the Society, your Division is seen as a leader - forging relationships with current students who will be tomorrow's leaders, fostering diversity, equity, and inclusion so that people in our community feel welcomed and their perspectives valued, and engaging with the Sections to showcase hydro-related work at the regional scale. Your new Board is looking forward to identifying improved ways to showcase our community's important work both within the Society and with the larger society. We are open to your ideas on helping your Division serve you better. Please reach out to me (christopher.carlson@usda.gov) or anyone else on the Board with your ideas, suggestions, or concerns. I look forward to working with you this year.

Chris Carlson

New Hydrogeology Division Newsletter Assistants

A big thanks goes out to Rakesh Kumar and Riliwan Damilola Abioye who have volunteered to assist with the Division's newsletter, starting with this edition!



Rakesh Kumar

Dr. Rakesh Kumar is a postdoctoral fellow at Auburn University, Auburn, USA. His academic background in Hydrology Engineering and Environmental Hydrology and professional experience in hydrology and ecological engineering, combined with a fervent drive for innovation and knowledge dissemination, positions him well to actively engage in shaping the scientific programs. He is passionate about soil and water pollution and has a commitment to advancing the field of emerging pollutants in the environment. Dr. Rakesh is working on understanding the fate and transport of contaminants in the environment and has published research findings in several high-impact journals in the remediation of fluoride, chromium, and arsenic.



Riliwan Damilola Abioye

Riliwan Damilola Abioye is a Nigerian and a graduate student at the School of the Earth, Ocean, and the Environment, University of South Carolina, Columbia. He obtained his bachelor's and master's degrees in geology and another master's degree in marine geosciences from the University of Ibadan, Nigeria, and the University of Haifa, Israel, respectively. For his Ph.D., he is currently working on the impact of the rising water tables on septic systems in low-lying communities in Beaufort County, South Carolina. He applies Python programming skills to simulate the wells' hydraulic heads and predicts periods of septic system impairment due to the rising water tables. He also teaches Introduction to Geology and Environmental Science as an instructional assistant at the University of South Carolina.

Riliwan (Dami) has worked as a project officer at Water Initiatives Nigeria, where he championed advocacy campaigns for water education, environmental issues, sanitation, and hygiene. He has also worked with Waterwokx Borehole Services, Nigeria, as a geologist, where he led several drilling operations and borehole installations across Nigeria's sedimentary and basement complex. He has also engaged in several community services ranging from the cleanup of the Anacostia River in Maryland to Sunset Park in South Carolina and feeding people without housing in South Carolina.

It's now easier to donate to the GSA Hydrogeology Division than ever!

Check out the new **Donate!** button at the top of the division's [webpage](#).

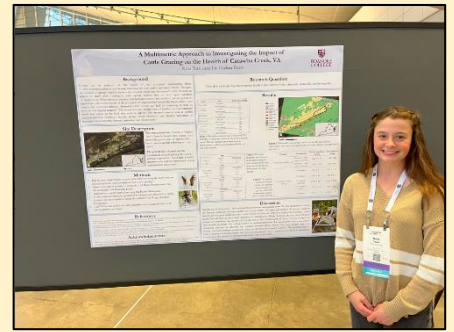
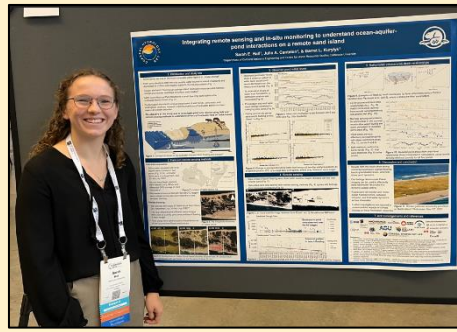
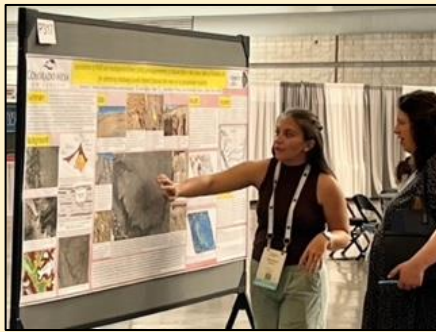


GSA Hydrogeology Division

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GSA Connects 2023 in Photos – Student Poster Session



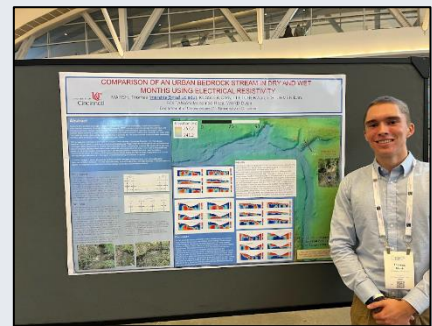
Congratulations to the 2023 Undergraduate Student Poster Competition Winners!!!

- 1st Place – KennaLee Rowley (Colorado Mesa University): Application of RGB And Multispectral Drone (SUAS) Photogrammetry of Alluvial Fans in The Grand Valley of Colorado USA for Detecting Shallowly-Buried Channel Features That May Act as Groundwater Conduits (left). Photo by Greg Baker.
- 2nd Place – Sarah Hall (Dalhousie University): Integrating Remote Sensing and In-Situ Monitoring to Understand Ocean-Aquifer-Pond Interactions on a Remote Sand Island (center). Photo by Miguel Valencia.
- 3rd Place – Nora Terrill (Roanoke College): Multimetric Approach to Investigate the Impact of Cattle Grazing on The Health of Catawba Creek, Virginia, USA (right). Photo by Miguel Valencia.

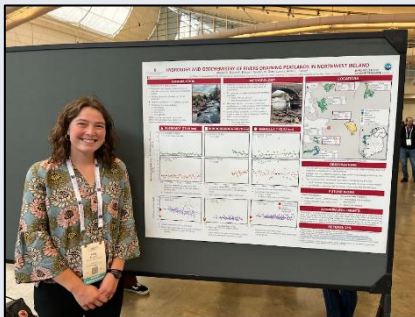
Thanks to all the students that shared their research during the Showcase of Undergraduate Research in Hydrogeology poster session.

It was a great session!

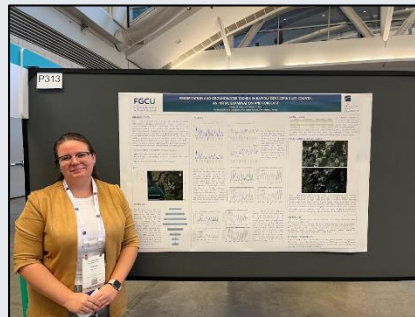
Photos by Miguel Valencia and Chris Gellash



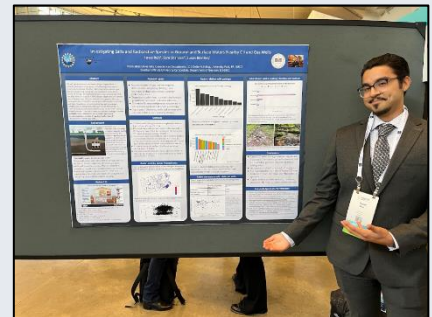
Thomas Marsh (University of Cincinnati)



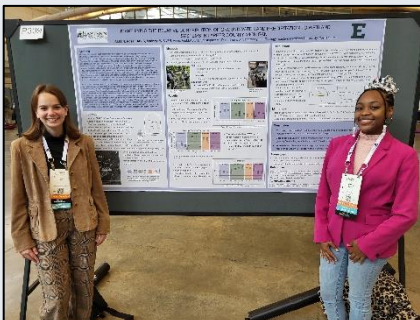
Abigail Dietrich (The Ohio State University)



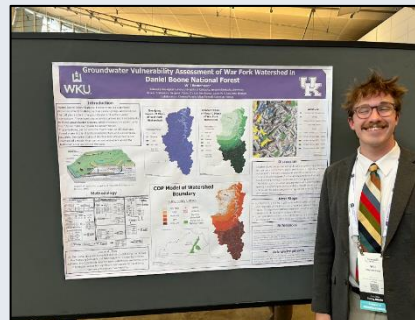
Hanna Grimm (Florida Gulf Coast University)



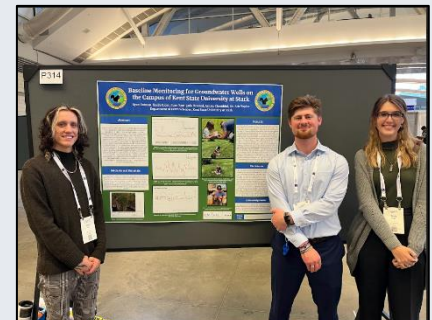
Israel Ruiz (Pennsylvania State University)



Rose Allen and Sydney Davis
(Eastern Michigan University)



Will Hemenover
(Western Kentucky University)

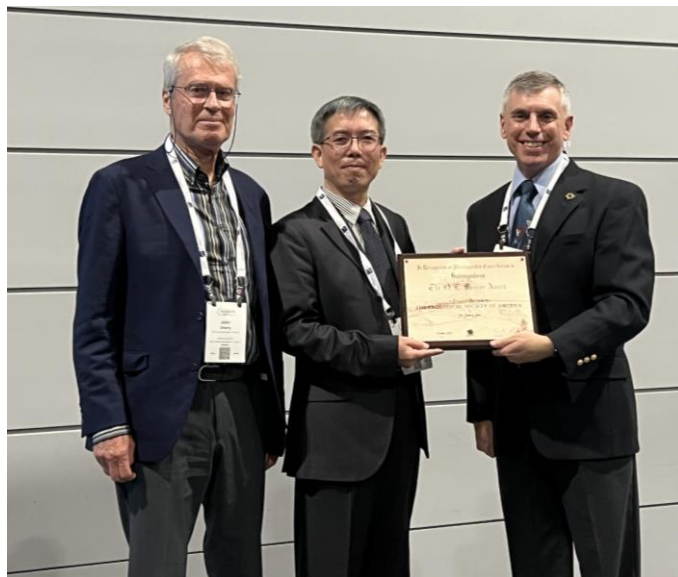


Mero Yant, Ryan Oatman, and Emily Rider
(Kent State University)

GSA Connects 2023 in Photos - Award Ceremony



Ken Bradbury (2nd from right) receiving the Schwartz Award with Maureen Muldoon (left), Sue Swanson (2nd from left), and Chris Gellasch (right). Photo by Chris Carlson.



Jiu Jimmy Jiao (center) receiving the Meinzer Award with John Cherry (left) and Chris Gellasch (right). Photo by Chris Carlson.



Ben Rostron announced as the 2024 Birdsall-Dreiss/LaMoreaux Lecturer. Photo by Chris Carlson.

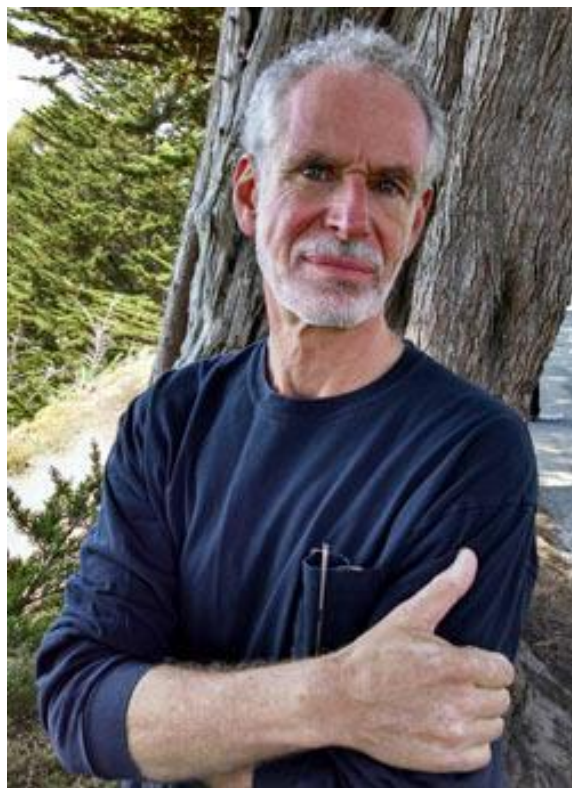


Ken Belitz (left) receiving plaque for the 2023 Birdsall-Dreiss/LaMoreaux Lectureship with Chris Gellasch (right). Photo by Chris Carlson.

GSA Connects 2023 in Photos – Award Ceremony, cont.



Dr. Margaret Zimmer awarded with the 2023 Kohout Early Career Award



Dr. Clifford Voss awarded with the 2023 George Burke Maxey Distinguished Service Award



Jennifer Abel (left), Northern Illinois University, receiving Graduate Student Research Grant Award with Chris Gellasch (right). Photo by Chris Carlson.



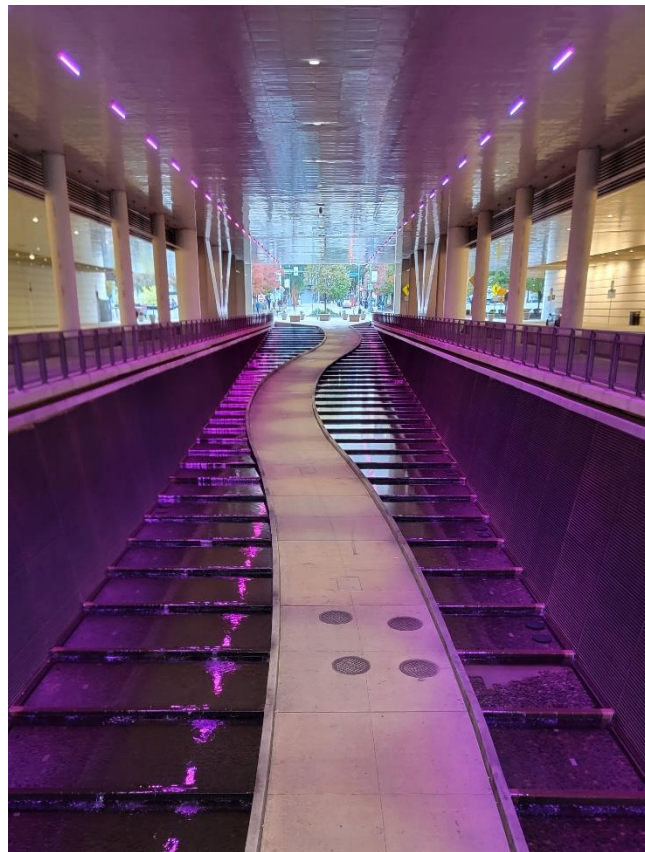
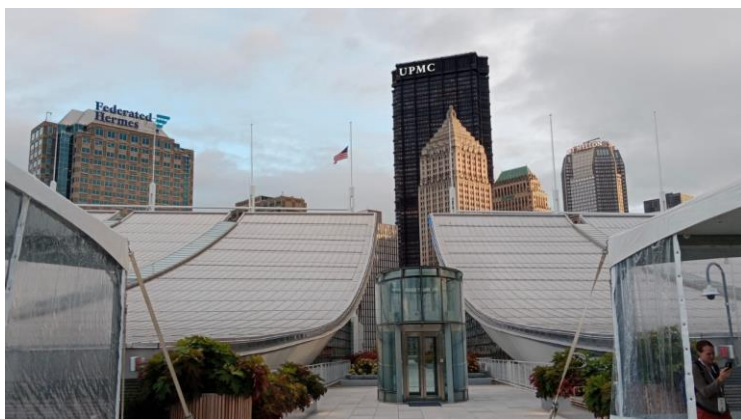
Benedicta Akrofi (left), Illinois State University, receiving Graduate Student Research Grant Award with Chris Gellasch (right). Photo by Chris Carlson.



Hesham Elhaddad (left), Western Michigan University, receiving Graduate Student Research Grant Award with Chris Gellasch (right). Photo by Chris Carlson.

The Hydrogeology Division also congratulates the following additional Graduate Student Research Award winners who were not able to attend GSA Connects 2023: Rachel Kozloski, University of Nevada – Reno, Vy Le (University of Wisconsin – Madison), and Matthew Tippet-vannini (Oregon State University).

GSA Connects 2023 in Photos



David L. Lawrence Convention Center

Photos by Mike Sukop (upper left and upper right) and Rakesh Kumar (middle left and bottom)

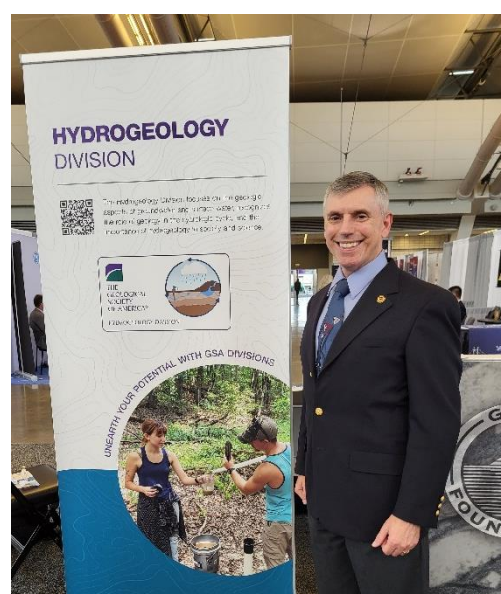
GSA Connects 2023 in Photos



Hydrogeology Division Booth
Photos by Chris Gellasch (left) and unknown

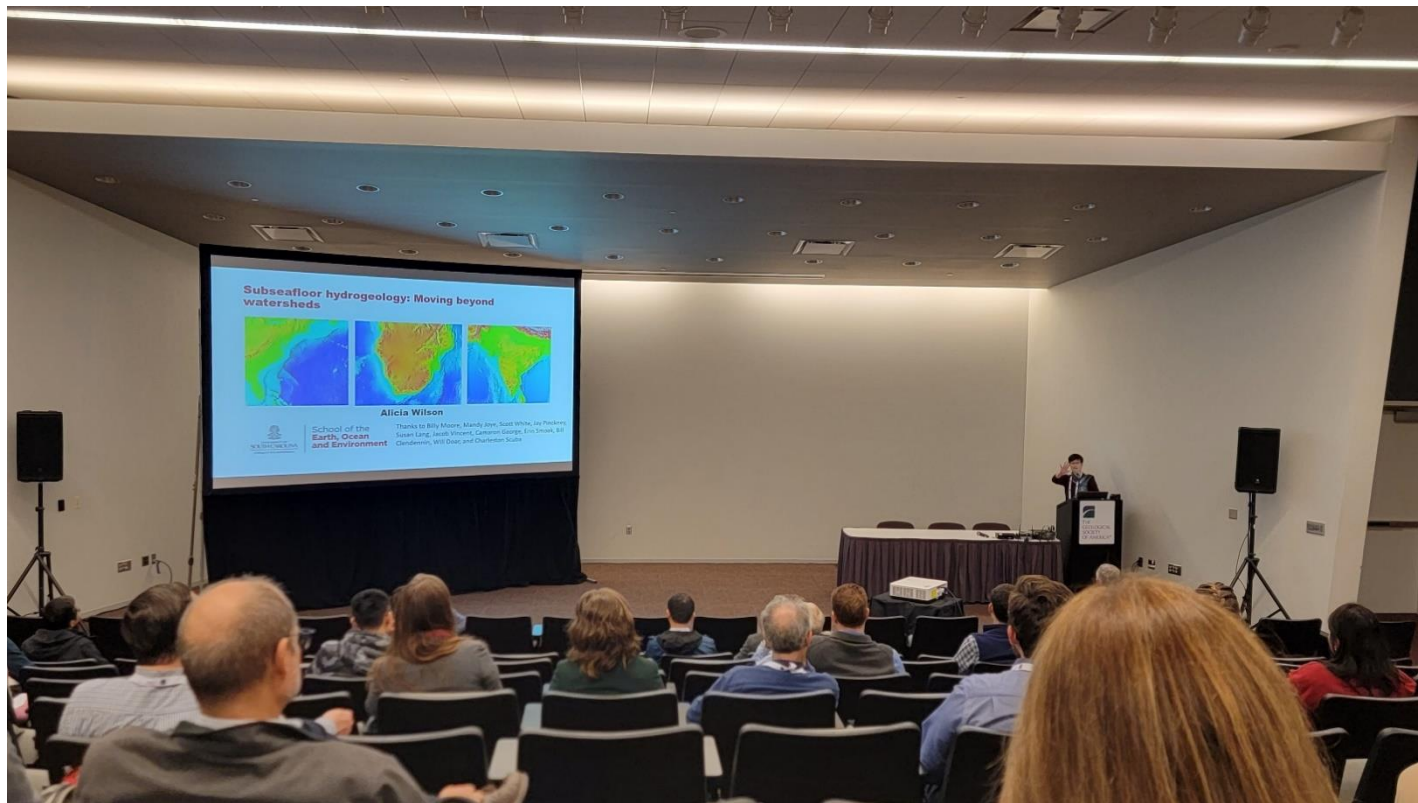


Hydrogeology Division Cake
Photo by Marcia Schulmeister



Chris Gellasch - Past
Hydrogeology Division Chair
Photo by unknown

GSA Connects 2023 in Photos



Henry Darcy Lecture
Photo by Mike Sukop



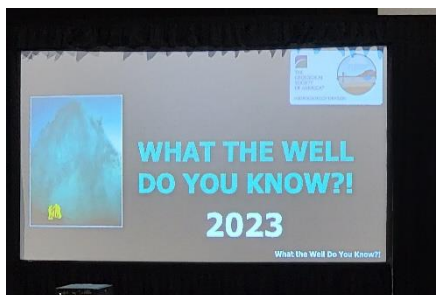
Ken Belitz - 2023 Birdsall-Dreiss/LaMoreaux Lecturer,
Don Rosenberry - Division 1st Vice Chair, and Alicia
Wilson - Henry Darcy Lecturer. Photo by Mike Sukop.



Division members gather outside a technical session
Photo by Rakesh Kumar



Mentoring Session
Photo by Marcia Schulmeister



Student Reception
Photo by Mike Sukop



Student Reception
Photo by Mike Sukop

Donors for the 2023 Hydrogeology Division Student Reception

A big thank you goes out to all the donors who helped make the Hydrogeology Division's 2023 Student Reception a success. Over 80 students participated in the 2023 "What the Well Do You Know?" trivia contest, and, thanks to our generous donors, all of them went home with a prize of either a textbook, a software license, a voucher for sample analyses, a professional society membership, or swag.

Donations of prizes for next year's student reception can be made at any time during the year. If you would like to donate or suggest a potential donor for us to reach out to, please contact Tara Root at hydrogeology.division.gsa@gmail.com.

The GSA Hydrogeology Division thanks the following donors for their generous contributions to the 2023 Student Reception:

The following logos represent the donors who supported the 2023 Student Reception:

- THE GEOLOGICAL SOCIETY OF AMERICA® HYDROGEOLOGY DIVISION
- CRC Press Taylor & Francis Group
- esi Environmental Simulations Incorporated GROUNDWATER MODELING SPECIALISTS
- Waterloo HYDROGEOLOGIC
- PC-PROGRESS Engineering software developer
- THE GEOLOGICAL SOCIETY OF AMERICA® Mann Mentor Award
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- ELSEVIER
- Bob Sterrett
- The Geologic Society of London

2024 Birdsall-Dreiss Distinguished and LaMoreaux International Lecture Tour

Dr. Ben Rostron will be offering three talks during his lecture tour:

- 1) Lithium in brines (Duperow aquifer) in southeast Saskatchewan: a modern-day gold rush
- 2) Geology and hydrogeology at AQUISTORE: Canada's first CO₂ storage project associated with a commercial-scale coal-fired power plant
- 3) Groundwater and native orchids: Is there a link (and why might anyone care)?

For abstracts of these talks and additional details about the lecture tour visit, [About 2024 Lecture - Hydrogeology Division \(geosociety.org\)](https://www.geosociety.org/about-2024-lecture-hydrogeology-division)

GSA Section News

By Marcia Schulmeister, GSA Hydrogeology Division Section Representative Coordinator

As part of the Division's goal of supporting GSA's Geographic Sections, the Hydrogeologist will feature a new column in which activities taking place at the Section level can be shared. Upcoming Spring 2024 Section Meetings are the theme of this quarter's column. Section meetings will take place next spring in Springfield MO, Spokane WA, Manchester NH and Ashville, NC and feature some excellent hydrogeology-themed sessions. Details are included below, along with meeting dates and deadlines. More information on the meetings and submission portals can be found at: [GSA Geographic Sections \(geosociety.org\)](https://www.geosociety.org)

Meeting Date	Section	Deadlines	Hydrogeology-themed sessions
May 15 – 17	Rocky Mtn./Cordilleran	Abstracts: Feb. 6 Registration: Apr. 8	<ul style="list-style-type: none"> • Geothermal Resources of the Pacific Northwest and Intermountain West • Faults, Fractures, and Fluids: Structural Control of Fluid Flow, Fault Zones and Hydrothermal Processes • Geochemistry, Hydrology, and Microbiology in the Yellowstone and other Western North American Hydrothermal Systems • The Highest and the Deepest: the U.S. Frontier of Cave and Karst Research • Management of Hydrologic and Geologic Resources • The Transport and Fate of Contaminants in Aquatic Systems
Apr. 21 -23	North Central/South Central	Abstracts: Jan. 16 Registration: Mar. 18	<ul style="list-style-type: none"> • Agricultural Impacts on Hydrology and Water Quality in the Midwest • Analysis of Long-Term Water-Level Changes in the Oklahoma Panhandle and Other Regions of the High Plains Aquifer. • Recent Trends in Environmental Geology • Case Histories of Practicing Environmental and Engineering Geologist Investigations • Phosphorus Contributions to Cyanobacteria Blooms by Groundwater, Surface Water, and Internal Sediment Loading in Northeastern Lakes
Mar 17 - 19	Northeastern	Abstracts: Dec. 12 Registration: Feb. 19	<ul style="list-style-type: none"> • Groundwater-Surface Water Interactions: Hydrological and Chemical Processes Across Interfaces • Advances in Hydrologic Modeling of Groundwater and Surface Water • The Functions of Floodplains and Wetlands • Watershed Processes and the Fluvial Forms and Dynamics They Produce • Estuary and Tidal Marsh Dynamics, Resiliency, and Restoration

Table continued on page 12.

GSA Section News, Cont.

Table continued from page 11.

Meeting Date	Section	Deadlines	Hydrogeology-themed sessions
Apr. 15-16	Southeastern	Abstracts: Feb 6 Registration: Apr. 8	<ul style="list-style-type: none"> • Water Quality Issues in the Southeast U.S. • Wetlands, Springs, and Streams: Hydrologic Studies at the Groundwater-Surface Water Interface • River Systems of the Eastern U.S.: Dynamics and Evolution from the Pleistocene to the Anthropocene • Progress Towards Geologic CO₂ Storage in the Eastern United States • Short Course: Fluorescent Dye Tracing: Putting Principles into Practice

Where in the World is This?



*Think you know where this is?
Email your guess to troot@usgs.gov.*

From the Editor

Welcome to the Winter 2024 edition of the Hydrogeologist. Historically, the winter edition has come out in January, but we decided to publish in December this year to make information about GSA's Section meetings (pp. 11-12) available sooner. Unfortunately, we did not manage to publish before the deadline for abstracts for the Northeastern Section meeting – my apologies about that.

I am excited about this edition of the newsletter, which includes contributions from our two new newsletter assistants who are introduced on page 3. The Division also has a new website assistant, Natajah Fuller, and a new Junior Student Representative, Megan Jones. They will both be introduced in the Summer 2024 edition of the newsletter. The current edition features our inaugural GSA Section News piece (pp. 11-12), which will be a recurring part of the newsletter moving forward. Be sure to check out Alan Fryar's article about his Fulbright experiences on pages 14-16, and Desire Phipus' summary of the Division's recent webinar. And finally, I hope you enjoy all the photos of the Division's events at GSA Connects 2023 on pages 4-9.

Tara Root

Where in the World was That?



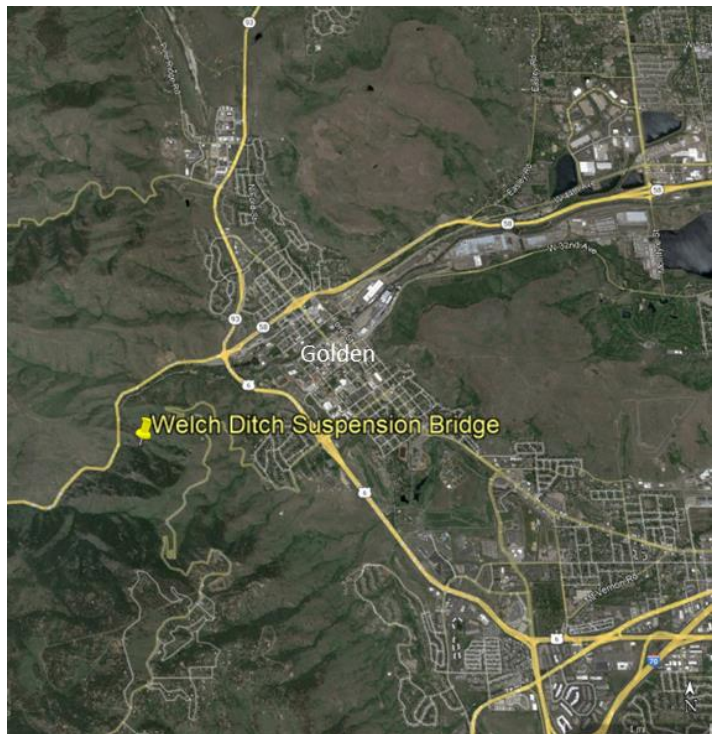
The "Where in the World" in the Summer 2023 edition of the Hydrogeologist was the Welch Ditch section of the Peaks to Plains Trail in Jefferson County, Colorado. When completed, the Peaks to Plains trail will extend 65 miles from the Continental Divide on Loveland Pass to the City of Denver. The 1.5-mile Welch Ditch section of the trail is in Clear Creek Canyon just west of the city of Golden, Colorado.

The Welch Ditch was constructed in 1871 as an irrigation ditch that consisted of wooden flumes. Over time, some of the wooden flumes were replaced with concrete. It was named after Charles Clark Welch, who was a prominent businessman and a member of the Territorial Legislature. He was influential in establishing the Territorial School of Mines, which would later become the Colorado School of Mines. Water was first turned into the Welch Ditch on July 2, 1871, to provide irrigation for parts of the city of Golden and for the campus of the Territorial School of Mines. In 1873, the ditch was extended to also deliver water to areas east of Golden.

The Welch Ditch continued to deliver water for 130 years, at one time providing irrigation for more than 4,000 acres. Water last flowed through Ditch in 2001. In 2003, the Golden Historic Preservation Board listed the Welch Ditch as one of Golden's most endangered historic sites. To preserve the ditch's legacy, Jefferson County Open Space has restored the wooden flumes and incorporated the Welch Ditch into the Peaks to Plains trail. The Welch Ditch section of trail opened for use in 2021. A newly built suspension bridge connects the western end of the Welch Ditch with the hiking trail on the north side of Clear Creek.

On a personal note, one of the first activities I ever did with my now husband of 23 years was a hike along the Welch Ditch when we were undergraduate students at the Colorado School of Mines (I'm dating myself, but the ditch was still flowing then!). So, it was fun to walk along the restored flumes when I recently visited Golden.

Tara Root



Fulbright Opportunities Are for Hydrogeologists, Too



Alan Fryar at field site in Ifrane, Morocco, February 2014.

Photo by Lahcen Benaabidate.

By Alan Fryar, Department of Earth and Environmental Sciences, University of Kentucky

The Fulbright Program was established by the U.S. Congress in 1946 to promote mutual understanding between people of the USA and other countries. Administered by the U.S. State Department, Fulbright is the U.S. Government's premier international exchange program. It has components that support study, research, and teaching by U.S. students and professionals abroad and by foreign students and professionals in the USA. I've been involved as a host (four times), participant (four times), and reviewer for U.S. and international applicants. I'm aware of eight other U.S. professionals in hydrogeology who have been Fulbrighters (in Canada [two people], Belize, India, Norway, Romania, Slovenia, and South Africa) during the past 30 years. As GSA seeks to broaden its international reach, I want to share my knowledge and experiences of the program to encourage more people to participate.

The main Fulbright opportunities for U.S. professionals abroad are the Scholar Program and the Specialist Program. The Scholar Program (<https://fulbrightscholars.org/>) offers more than 400 awards annually in more than 135 countries. These typically involve research and/or teaching; most Scholars hold PhDs, and host institutions typically are colleges, universities, and research institutes. However, there are also

opportunities for professionals without a terminal degree, and hosts can include non-academic organizations such as government agencies and other non-profits. Local language proficiency and/or a letter of invitation from the proposed host institution may be required or recommended. The award duration is typically 3–10 months but can be as short as 2 or as long as 12 months. Some awards offer a Flex option of two to three shorter visits over a 2-year period. Round-trip airfare, a stipend, housing allowance, and supplemental health insurance for the Scholar are included; many awards offer dependent benefits. The award catalog opens in February each year, and the application deadline is in September; grantees are notified by the following May and awards can begin as early as June.

The Specialist Program (<https://fulbrightspecialist.worldlearning.org/>) was created in 2001 to enable shorter (2- to 6-week) visits by professionals, who need not be academics or hold a terminal degree. Specialists engage in projects such as delivering seminars and workshops, lecturing, developing curricula and training materials, consulting on faculty or workforce development, conducting needs assessments or evaluations, and engaging in strategic planning. Research projects generally are not included. Specialist applications can be submitted at any time and are reviewed six times per year; approved candidates are placed on a roster and are eligible to be selected for one project during a 3-year period. Institutions interested in hosting a Specialist submit a project application to the Fulbright office in their country. Projects can either be "named" (i.e., the host institution requests a specific individual on the roster) or "open," for which a Specialist is selected from a list of suggested candidates. Roster candidates can be matched with approved projects, but placement is not guaranteed. Specialists have their travel expenses covered and receive a daily honorarium and supplemental health insurance.

Continued on page 15.

Fulbright Opportunities Are for Hydrogeologists, Too, continued



Alan Fryar at field site in Mawmluh Cave, Meghalaya, India, February 2023. Photo by Devesh Walia.

Continued from page 14.

Among other Fulbright opportunities, the U.S. Student Program (<https://us.fulbrightonline.org/>) offers awards for graduating college seniors, recent graduates, graduate students, and early-career professionals to conduct research or pursue graduate study. Similarly, the Foreign Student Program enables graduate students and early-career professionals to study and conduct research in the USA. Through the Visiting Scholar Program, foreign faculty and professionals conduct research and teach in the USA. Application timelines for these programs vary, and foreign participants apply through the Fulbright commission/foundation or public affairs section of the U.S. Embassy in their home countries.

My experiences with Fulbright began in summer 2005, when I hosted my colleague Lahcen Benaabidate from Morocco as a Visiting Scholar at the University of Kentucky. I subsequently hosted two other Moroccan colleagues (Nour-Eddine Laftouhi and Ahmed Fekri) in summers 2008 and 2011 and a colleague from Niger (Ali Moumouni) for 6 months in 2016–2017. Each one conducted collaborative research, interacted with my graduate students, presented a seminar in my department, and did a deep dive into American culture. Our collaborations have resulted in journal articles, grants from the State Department and NSF, and multiple conference presentations. I was a Specialist in Environmental Science to Pakistan for 2 weeks in 2009–2010 and to India for 4 weeks in 2017. During those visits, I spoke at multiple institutions, went to the field with graduate students and colleagues, met government officials, and participated on review panels for the Pakistani Fulbright commission and the Indian Ministry of Water Resources. I've also been a reviewer for the U.S. Scholar, Specialist, and Student programs. My PhD co-advisee Elizabeth Avery was a U.S. Student researcher in Ukraine for 10 months in 2019–2020.



Ali Moumouni (Visiting Fulbright Scholar from Niger, left) and Amanda Sherman (University of Kentucky MS student, right) doing field work in Knox County, Kentucky, January 2017. Photo by Alan Fryar.

Continued on page 16.

Fulbright Opportunities Are for Hydrogeologists, Too, continued

Continued from page 15.

My most substantive Fulbright experiences have been my two Scholar awards, both of which involved studies of how springs in mountainous regions respond to precipitation over various time scales. From January to May 2014, Lahcen Benaabidate hosted me as a Research Scholar in Geology at Université de Sidi Mohamed Ben Abdellah in Fez, Morocco. From January to May 2023, I was a Fulbright-Kalam Climate Fellow hosted by Devesh Walia at North-Eastern Hill University in Shillong, India. I planned each application more than a year before submitting it. In each case, after being selected, I had to find furnished housing near the university, get a local cell phone, sort out banking, familiarize myself with my neighborhood and transportation, obtain supplies, and identify field sites. In addition, I had to overcome cultural dislocation and, because I lived alone, periods of feeling isolated. I dealt with these challenges by reading, journaling, socializing with my hosts and their colleagues, mentoring students, participating in cultural activities, attending church, and traveling. I went to conferences, gave lectures, and interacted with other U.S. Fulbright Scholars and Students, who were doing a fascinating variety of things. I also obtained Fulbright Regional Travel Grants to spend several days visiting universities in Algeria (while in Morocco) and Kyrgyzstan (while in India). I'm grateful for the opportunities to conduct relevant research with local partners and to learn more about my host communities and countries.

Participating in the Fulbright program as a host, Scholar, Specialist, or Student advisor can be a deeply fulfilling way to expand one's professional and personal horizons. At a time of significant geopolitical tensions, it's also an exceptional way to promote international understanding. If you're interested in exploring Fulbright opportunities further, feel free to contact me (alan.fryar@uky.edu).

2022 Hydrogeology Division Student Research Grant Award Winners Webinar

By Desire Phipus, Senior Student Representative on the Hydrogeology Division Management Board

In November 2023, the GSA Hydrogeology Division hosted a student showcase webinar highlighting research in hydrogeology. The webinar consisted of three presentations from 2022 Hydrogeology Division Student Research Grant Awardees:

- Mohammad Kohorrami, a Ph.D. student at Virginia Tech, discussed Constraining Groundwater Change in Mexico City using GRACE and InSAR Observations and Elastic Load Models.
- Sarah Newcomb, a Ph.D. student at Idaho State University, presented Seasonal Patterns of Stream Flow and Riparian Plant Water Use Sourcing across a Dynamic Non-perennial Reach.
- Will Larsen, a Ph.D. student at Rice University, discussed Isotopic Assessment of Hydrologic Flow Path Activation in Tropical Landscapes Under High-Flow Conditions.

There were a lot of people in attendance despite the webinar being announced on short notice. Participants asked lots of great questions and the presenters all did an amazing job!

GSA's Hydrogeology Division Serves the Profession by

- bringing together scientists interested in hydrogeology to facilitate presentation and discussion of hydrogeologic problems,
- fostering, aiding, furthering, and promoting research in hydrogeology,
- supporting and mentoring students with interests in hydrogeology.

We hope you will consider contributing to the success of the Division by [volunteering](#) to help with the division's operations and encouraging your colleagues to join the Division.

Important Dates

[Student Research Grant](#)

program opens to applications

Jan. 15, 2024

Deadline for [NPS Scientists in Parks \(SIP\)](#)

applications for summer positions

Jan. 21, 2024

Deadline for [GeoCorps™ America](#)

applications for summer positions

Jan. 28, 2024

GSA [Connects 2024 technical session](#)

and short course proposal deadline

Feb. 1, 2024

GSA [awards](#) and [fellowship](#) nominations deadline

Feb. 1, 2024

Deadline for [AGeS3](#) (Advancing Geochronology Science, Spaces, and Systems) program applications

Feb. 1, 2024

Deadline for GSA Graduate Student Research [Grant applications](#) (and previous year's progress reports)

Feb. 2, 2024

[Northeastern Section Meeting](#) in Manchester, New Hampshire, USA

Mar 17-19, 2024

[J. David Lowell Field Camp Scholarships](#) deadline

Mar. 22, 2024

[Southeastern Section Meeting](#) in Asheville, North Carolina, USA

Apr 15-16, 2024

[Joint North-Central and South-Central Section Meeting](#) in Springfield, Missouri, USA

Apr 21-23, 2024

[Earth Day](#)

Apr. 22, 2024

[Joint Cordilleran and Rocky Mountain Section Meeting](#) in Spokane, Washington, USA

May 15-17, 2024

10th International Geosciences Conference of Young Researchers, Kyiv, Ukraine.

May 23-24, 2024

[Attend online—registration is free.](#)

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THE HYDROGEOLOGIST

The Hydrogeologist is a publication of the Hydrogeology Division of the Geological Society of America. It is published electronically three times a year to communicate news of interest to members of the Hydrogeology Division and can be accessed at: <https://community.geosociety.org/hydrodivision/home>. Members of the Hydrogeology Division who have electronic mail will receive notification of all new issues. Other members will receive paper copies.

Contributions and material are most welcome and should be directed to the Editor. The deadline for the summer issue is June 15, 2024.

Tara Root, Editor
The Hydrogeologist
US Geological Survey
Caribbean-Florida Water Science Center
3321 College Ave.
email: troot@usgs.gov
Davie, FL 33314
phone: 561-400-7719

Hydrogeology Division Contacts

2023-2024 Management Board

- **Chair:** Chris Carlson (christopher.carlson@usda.gov)
- **First Vice-Chair:** Don Rosenberry (rosenber@usgs.gov)
- **Second Vice-Chair:** Richelle Allen-King (richelle@buffalo.edu)
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- **Junior Student Representative:** Megan Jones (megan_jones2003@yahoo.com)
- **Diversity, Equity, and Inclusion (DEI) Officer:** Sue Swanson (sue.swanson@wisc.edu)
- **Section Representatives Coordinator:** Marcia Schulmeister (mschulme@ku.edu)

Standing Committees

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- **Nominating Committee:** Andrea Brookfield (andrea.brookfield@uwaterloo.ca), Chris Gellasch (chris.gellasch@emich.edu), Yu-Feng Lin (yflin@illinois.edu)
- **Meinzer Award Committee:** Mark Person (mark.peterson@nmt.edu), Holly Michael (hmichael@udel.edu), Beth Parker (bparker@uoguelph.ca), Carl Mendoza (carl.mendoza@ualberta.ca), Jimmy Jiao (jijiao@hku.hk)
- **Kohout Early Career Committee:** Sam Zipper (samzipper@ku.edu), Margaret Zimmer (mzimmer1@ucsc.edu), Chen Zhu (chenzhu@indiana.edu), Christa Kelleher (ckellehe@syrr.edu)
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- **Schwartz Award Committee:** Alan Fryar (alan.fryar@uky.edu), Rachel Rotz (rotz@fau.edu), Ken Bradbury (ken.bradbury@wisc.edu)
- **Archives:** Jim Thomas (Jim.Thomas@dri.edu)

GSA Councilor/Division Liaison Representative

Brian Katz (bg_katz@hotmail.com)

Ad Hoc Committees

Section Representatives:

Cordilleran, Paul Stackleberg (pestack@usgs.gov)
 Northeastern, Todd Rayne (trayne@hamilton.edu)
 North-central, Peter Riemersma (riemersp@qvsu.edu)
 South-central, Marcia Schulmeister (mschulme@ku.edu)
 Rocky Mountain, William Sanford (William.Sanford@colostate.edu)
 Southeastern, Jeffrey Wilcox (jwilcox@unca.edu)
 International, Prosun Bhattacharya (prosun@kth.se)

Representatives to Other Societies:

American Geophysical Union, Barbara Bekins (babekins@usgs.gov)
 American Geosciences Institute, David Wunsch (dwunsch@udel.edu)
 CUAHSI, Holly Michael (hmichael@udel.edu)
 National Groundwater Association, Bill Alley (walley@ngwa.org)
 International Association of Hydrogeologists, Jack Sharp (jmsharp@mail.utexas.edu)
 SEPM, Gary Weissman (weissman@unm.edu)
 American Institute of Professional Geologists, Chris Gellasch (chris.gellasch@emich.edu)
 Soil Science Society of America, Michael Young (Michael.young@beg.utexas.edu)

Communications:

Website Administrator, Mike Sukop (sukopm@fiu.edu)
 Website Administrator Assistant, Natajah Fuller
 Newsletter Editor, Tara Root (troot@fau.edu)
 Newsletter Assistants, Rakesh Kumar and Riliwan Damilola Abioye
 Social Media Manager, Desire Piphus (piphusdm@gmail.com)
 Social Media Manager, Megan Jones (meganjones2003@yahoo.com)

