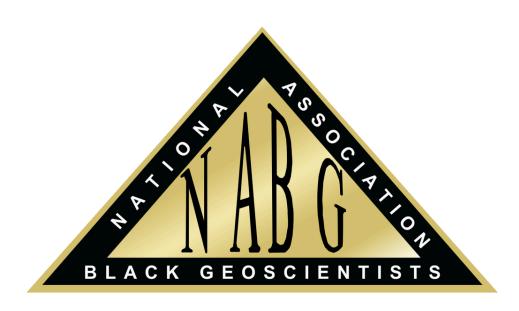


# Diverse Perspectives, Unified Solutions:

**BRIDGING COMMUNITIES THROUGH GEOSCIENCE** 

Atlanta, GA | September 4-7, 2024





# THANK YOU TO OUR 2024 CONFERENCE SPONSORS





CSAW: COMMUNITY, SOIL, AIR, WATER OF A STATE



# NABG42 by the



# NUMBERS

160
Attendees



Pre-Conference
Workshop Attendees



49

Institutions & Organizations Represented

68
Abstracts
Presented



Unique Themes Across the Geosciences

\$10K Awarded in Scholarships

\$3K

Presentation Awards Given



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# LETTER FROM THE PRESIDENT





#### **TRAMOND BAISDEN**

Dear NABG,

We are thrilled to welcome you to the National Association of Black Geoscientists (NABG) 43rd Annual Technical Conference, the premier event for Black geoscientists! This year, our conference brings the best and the brightest geoscientists to my hometown, Atlanta, Georgia, from September 4th though the 7th.

Over 200 students and professionals from across the country – and virtually, across the globe – will come together to network, attend personal and professional development sessions, technical presentations, and a culminating field trip to explore the geology of Stone Mountain. There is no other conference for Black geoscientists, by Black geoscientists, that provides this unparalleled experience.

We often refer to our conference as a family reunion - a chance to not only connect with old friends, but to expand networks. Conference attendees often leave having built personal and professional connections that facilitate growth in their career pursuits while also widening their view of the world. Perhaps even more importantly, attendees gain further appreciation of the crucial role we play in advocating for our communities thru effective communication of science.

Thank you for joining us at the NABG Annual Technical Conference, and becoming part of an empowering community dedicated to advancing the field of geoscience. Together, we can create a lasting impact, shape the future of Black geoscientists, and foster a more inclusive and dynamic environment!

I am so excited to meet you in Atlanta - a place very near and dear to my heart - to share science, network, further your personal pursuits, recruit students into your programs or organizations, and have a good time!

Welcome to the A!

Tramond Baisden

President, NABG

# **CONFERENCE CHAIR GREETINGS**





#### **DR. QUENTIN STUBBS**

Dear NABG Family,

On behalf of the Conference Planning Committee, organizational leadership, and members, it is with great pleasure that I welcome you to the 43rd Annual Technical Conference of the National Association of Black Geoscientists (NABG) in Atlanta, GA - the "City in the Forest." The Committee has dedicated extensive efforts to crafting a conference that not only informs but also empowers attendees with new ideas, meaningful interactions, and valuable opportunities.

For over 40 years, NABG has been a cornerstone in fostering collaborations across academia, industry, and government sectors. This year's conference takes an interdisciplinary approach, merging rigorous scientific research with policy and decision-making across various geospatial scales. Representatives from diverse fields will not only address pressing issues in Geosciences but also propose actionable solutions at the local level. Hence, our theme for this year is "Diverse Perspectives, Unified Solutions: Bridging Communities through Geoscience."

The conference agenda features a robust program encompassing a wide array of geoscience disciplines and topics, including technical sessions and social events. We have curated panels with experts from industry, government agencies, and academia who are leading innovative research initiatives. As in previous conferences, our aim is to provide students with career development opportunities while keeping professionals abreast of technological advancements in Geosciences. Exhibitors and a keynote speaker will further highlight the practical applications of research findings in decision-making processes concerning environmental justice, renewable energy, and sustainable development, among other topics.

In today's rapidly evolving job market, future geoscientists must be well-prepared with skills in geospatial analysis, technology like artificial intelligence, and effective global communication. We encourage you to seize every opportunity to network with fellow attendees, including students, educators, industry partners, government agencies, and sponsors. The conference will be conducted in a hybrid format, facilitating both virtual and in-person participation for our members and supporters.

Welcome to Atlanta, my hometown! I am thrilled that you have chosen to join us this year for what promises to be an informative, thought-provoking, and memorable conference experience. We look forward to welcoming you again next year.

Regards,
Quentin Stubbs
NABG43 Conference Chair & Member-at-Large

### NABG HISTORY



In 1979, there were rumblings from a number of minority professionals that they felt the need to connect, communicate, and network with other minority professionals in the geosciences. The voices of our colleagues became louder as time passed and on one given afternoon there was extensive conversation regarding the possibility of setting up an organization that would reach out and let others know that there was an opportunity for individuals with an aptitude in math and science to become Geoscientists. The people involved in these discussions were: Mr. Curtis Lucas, Mr. Allan Harris, Mr. James Briggs, Mr. James Davis, and Mr. Michael Carroll. Mr. Lucas was a dominant force at that point with a multiplicity of ideas of what he felt the direction of such an organization should be. In 1980, we met and compiled a list of geoscientists that we knew in the Houston area. This list was compiled with the intention of setting up an initial meeting to table our ideas and to at least contact other minority geoscience professionals. There was communication with Mr. Briggs in Dallas and Mr. Davis in Denver, and they were charged with establishing similar sessions in their respective cities.

In Houston, we needed a central location to meet, a willing host, and we also needed to have a figure that everyone knew and respected to get the organization off the ground. We found all of this at the home of Dr. Mack Gipson, who had been a college professor at Virginia State University.

Dr. Gipson was contacted and asked if he would host an Ice Breaker/Planning Session at his home. When the intent was discussed, he indicated that there had been a lot of conversations about doing this kind of thing in the past. At that point, we indicated to him that we were involved with a group of individuals who were planning to do more than talk about it. He agreed to host the session. Mr. Lucas and Carroll split a list of twenty-nine names and began calling and making an appeal to individuals to attend this meeting. A warm responses was received from the majority of people contacted and the promise from several to spread the word.

# NABG HISTORY



The meeting was a success. There was a room full of geoscience professionals buzzing with ideas, energy and enthusiasm. Dr. Gipson, along with Mr. Lucas, were central figures that evening. It became tremendously obvious that this was, at the least, a meeting that everyone there had been looking forward to for some time. Setting up an introductory session and getting people to attend was one thing; setting up an organization and getting everyone moving toward the same objectives would be quite another story. The meetings that followed were held at the homes of some of the charter members. The majority of the meetings were held at the home of Mr. Ken Yarbrough. He was gracious enough to allow us to meet at his home, which quickly became a forum for debate and conjecture on how the organization should be set up, what the objectives should be, who should compose the membership, should we incorporate, etc. At times, it seemed as though the discussions were endless.

Other prominent figures arose in these sessions. A fiery, young woman from Sierra Leone, Ms. Rachel Taylor who was at the time with Sohio, shared her passion and energy to chair a committee to establish the constitution and bylaws of the organization. Ms. Laverne Gentry, Mr. John Chance, Ms. Zelma Jackson, and Ms. Millicent McCaskill tore into building and established a foundation on which the organization could stand. Mr. Walter Alexander, an established independent at the time, became a strong advocate of the organization. Dr. John Leftwich and Mr. Reginald Spiller became champions of ideas to involve and inspire youth to consider careers in the geosciences. At a very early point in these series of meetings, we selected an organization name and a set of objectives that were reviewed, amended, and voted on by the charter members. The name that was agreed upon was The National Association of Black Geologists and Geophysicists. The objectives that we established were accepted and remain a focus of our organization today. Our programs of scholarship support, local interaction with schools and professional meetings work well to support the increased participation of Black Geoscientists. Through the years, the NABG has awarded over \$300,000 to over 130 students for undergraduate and graduate study. In the early 2000's, in acknowledgement of our inclusivity of earth scientists outside of geology and geophysics, the organization was renamed as the National Association of Black Geoscientists.

Since 1990, NABG has been recognized as a national professional organization by becoming a member society of the American Geological Institute (AGI) and the Geological Society of America (GSA). NABG has member representation on the National Petroleum Council (NPC) which reports to the Secretary of Energy. NABG is also affiliated with the American Association of Petroleum Geologists (AAPG), The Earth Day Network, and the Digital Library for Earth System Education (DLESE).

NABC was established and incorporated in 1981 in Houston, Texas and has been an active organization nationwide with members in the energy industry, academia, in government, and most importantly in colleges and universities.

# NABG LEADERSHIP



#### 2022 - 2024 NABG NATIONAL OFFICERS

PRESIDENT Tramond Baisden, Shell

VICE PRESIDENT Janelle Sherman-Randle

SECRETARY Dreadnaught Stubbs, ExxonMobil

ASSISTANT SECRETARY Dr. Karena Gill, Arizona State Univ.

TREASURER Dada Olamide, Carbonvert

**ASSISTANT TREASURER**Dalila De Jesus, Columbine Corp.

PARLIAMENTARIAN Dr. Sherilyn Williams-Stroud, Texas A&M

MEMBER-AT-LARGE Dr. Quentin Stubbs, NOAA

MEMBER-AT-LARGE Dr. Chven Mitchell, Sandia Nat'l Labs

IMMEDIATE PAST PRESIDENT

Jerome Murphy, ExxonMobil

#### 2024-2026 NABG NATIONAL OFFICERS

PRESIDENT Tramond Baisden, Shell

VICE PRESIDENT Dr. Karena Gill, Arizona State University

**SECRETARY** Tobi Ore, bp

TREASURER David Davis, Rutgers University

MEMBER-AT-LARGE Elizabeth Sunday, Iowa State University

MEMBER-AT-LARGE Kimbra Quezergue, ExxonMobil

# NABG LEADERSHIP



#### **ADVISORY BOARD**

Dr. Stephen Boss, University of Arkansas

Michael Carroll, Co-Founder, Retired, Hunt Oil

Dr. Isaac Crumbly, Fort Valley State University

Zelma Jackson-Maine, Co-Founder, Washington Dept. of Ecology, Retired

Dr. David Padgett, Tennessee State University

Reginal Spiller, Co-Founder, CEO Azimuth Energy

Dr. Wesley Ward, Retired, USGS

Elijah White, Retired, ExxonMobil

Darryl Willis, Microsoft

Ken Yarbrough, Co-Founder, Osyka Corp, Retired

#### 2024 CONFERENCE PLANNING COMMITTEE

CHAIR Dr. Quentin Stubbs, NOAA

CO-CHAIR Dr. Chven Mitchell, Sandia Nat'l Labs

SCHOLARSHIPS Roxanne Lamb, USGS

TECHNICAL ABSTRACTS Dr. Chven Mitchell, Sandia Nat'l Labs

SOCIAL MEDIA Jeannine Cody, USGS

WEBMASTER Tramond Baisden, Shell

**LOGISTICS** Dr. Karena Gill, Arizona State University

MEMBER AT LARGE Shirley Jackson, SUNY

FIELD TRIP Dr. Aditya Kar, Fort Valley State University

**REGISTRATION** JoAnn Kvamme, University of Arkansas

# 2024 SCHOLARSHIP RECIPIENTS



#### **CONGRATULATIONS!**

DEBORAH AGBAMU
ESTHER OYEDELE
FRANKIN OSEYEMI
KAYODE AGBOOLA
OLUWASEUN AKINYEMI
OLUWASEYI DASHO
SADIQ RIJIYA
SILAS SAMUEL
AMINAT ABDULSALAM
VICTOR AFIGBO

Virginia Tech
Illinois State University
Cornell University
University of Houston
Virginia Tech
Texas A&M University
Oklahoma State University
Penn State University
University of Idaho



2023 Presentation Awardees and Scholarship Recipients

# **CONFERENCE AGENDA**

Wednesday, September 4						
Session Time (EST)	Title	Presenter	Location			
9:00 AM - 4:00 PM	Navigating the NIW and EB1A	Dr. Karena Gill, Dr. Tobi Ore	Salon C			
10:00 AM - 2:00 PM	Pathways to Geoscience Careers: High School Leadership Event	The National Energy Education Development Program & Shell	Salon B			
2:00 - 4:00 PM	ExxonMobil Info Session & Low Carbon Solutions	ExxonMobil	Salon A			
6:00 - 8:00 PM	Welcome Reception / Check-in		College of Law Atrium			

# **CONFERENCE AGENDA**

Thursday, September 5						
Session Time (EST)		Speaker	Location			
7:30 - 8:00 AM	Check-in/Registration		Pre-Function Area, Knowles Conference Center			
8:00 - 8:20 AM	Conference Welcome and Opening Remarks	Tramond Baisden Katherine Hankins	Ceremonial Courtoom			
8:20 - 8:40 AM	Exhibitor Intros	All Exhibitors	Ceremonial Courtoom			
8:40 - 8:55 AM		Richard Asirifi	- Ceremonial Courtoom			
8:55 - 9:10 AM	Oral Presentations -	Chris Samakinde				
9:10 - 9:25 AM	Segment 1	Kwabena Poku-Agyemang				
9:25 - 9:40 AM		John Templeton				
9:40 - 9:50 AM		BREAK				
9:50 - 10:05 AM		Kashauna Mason	Ceremonial Courtoom			
10:05 - 10:20AM	Oral Presentations - Segment 2	Karena Gill				
10:20 - 10:35 AM	Segment 2	Bernard Hubbard				
	Lightning Talks - Segment 1	Kolawole Arowoogun	Ceremonial Courtoom			
		Asenath Kwagalakwe				
		Oluwaseyi Dasho				
10:35 AM - 11:10 AM		John Ogunleye				
		Riliwan Abioye				
		Joseph Mayala Nsingi				
		Olalekan Alamoh				
11:10 - 11:15 AM						
11:15 - 12:00 PM	Keynote Speech	Dr. Marshall Shepherd	Ceremonial Courtoom			
12:00 - 1:30 PM	LUNCH					
1:30 - 2:20 PM	Panel: Sustainability of the Geosciences	Shirley Jackson, Brandon Jones, Anika Knight, Katalina Salas, Savarria Parrish, Kayode Agboola	Ceremonial Courtoom			
2:20 - 2:30 PM						
2:30 - 3:20 PM	USGS By the Numbers	Dave Applegate, Director, USGS	Ceremonial Courtoom			
3:25 - 3:45 PM	AGU Mentoring365 Program Overview	Pranoti Asher, AGU	Ceremonial Courtoom			
3:45 - 4:00 PM						
4:00 - 6:00 PM	P	Salon C & College of Law Atrium				
4:00 - 6:00 PM	Exhibitor	Salons A & B				

# **CONFERENCE AGENDA**

Friday, September 6						
Session Time (EST)		Speaker	Location			
7:30 - 8:00 AM	Check-in/Registration		Knowles Conference Center			
8:00 - 8:05 AM	Welcome & Logistics		Ceremonial Courtroom			
8:05 - 8:50 AM	Developing Just Partnerships with the Community-Soil-Air- Water (CSAW) Learning Ecosystem	Katherine Hankins, Naurica Encarnacion, Na'Taki Osborne- Jelks, Sarah Ledford, Destinee Whitaker, Therese Kelly, Opal Baker, Alfred Tucker				
8:50 - 9:05 AM		Spencer Williams				
9:05 - 9:20 AM	Oral presentations	Makeda Mills				
9:20 - 9:35 AM	Segment 3	David M. Davis				
9:35 - 9:50 AM		Sadiq Rijiya				
9:50 - 10:00 AM		BREAK				
10:00 - 10:15 AM		Timothy L. Hawthorne				
10:15 - 10:30 AM	Oral presentations	Zantia King	Ceremonial Courtroom			
10:30 - 10:45 AM	Segment 4	Daphne Varmah				
10:45 - 11:00 AM		Reginald Archer				
11:00 - 11:15 AM	BREAK					
11:15 - 11:45 AM	Effective Science Communication: Bridging the Gap Between Scientists and the Public	Esther Oyodele	Ceremonial Courtroom			
11:45 AM - 1:05 PM		Lunch				
1:05 - 1:55 PM	Data Science Panel	Koya Brown (ESRI) Oronde Drakes (USGS) Tobi Ore (bp) Quentin Stubbs (NOAA)	Ceremonial Courtroom			
1:55 - 2:00 PM	BREAK					
	Lightning Talks Segment 2	Godwin Sunday	Ceremonial Courtroom			
		Rowann Remie				
		Kierra Wilk				
		Gael Nkwain				
2:00 - 3:00 PM		David Nworie				
		Chukwuma Mgbenu				
		Emanuel A. Murphy				
		Denzell Cross				
		David Padgett				
3:00 - 4:50 PM	Poster Session 2		Salon C			
3:00 - 4:50 PM	Exhibitor Booths + Networking		Salons A & B			
5:15 - 5:45 PM	Conference	Ceremonial Courtroom				

# PRE-CONFERENCE WORKSHOPS



# WEDNESDAY, SEPTEMBER 4TH - 9:00AM NAVIGATING THE NIW AND EB1A: A PATHWAY TO US PERMANENT RESIDENCY (INVITE ONLY)



KARENA GILL Arizona State



TOBI ORE

This workshop is specifically designed for international students and professionals in the geosciences who are considering building their careers in the United States. The session will focus on two critical immigration pathways: the National Interest Waiver (NIW) and the EB-1A Extraordinary Ability category. Attendees will gain a detailed understanding of the eligibility criteria for both categories, learning how to demonstrate the national importance of their geoscience work for the NIW or how to meet the extraordinary ability standards for EB-1A. The workshop will include expert insights from those who have successfully navigated these processes, along with practical guidance on compiling supporting documentation, crafting personal statements, and collaborating with immigration attorneys. Participants will leave with actionable steps to strengthen their applications and advance their careers in the U.S.

# PRE-CONFERENCE WORKSHOPS



# WEDNESDAY, SEPTEMBER 4TH - 10:00AM PATHWAYS TO GEOSCIENCE CAREERS: HIGH SCHOOL LEADERSHIP EVENT (INVITE ONLY)

The National Energy Education Development Project (NEED) designs and delivers teacher- tested educational materials, evaluation techniques and tools, recognition of student achievement, and professional development for educators. NEED materials and training programs provide comprehensive, objective information about the scientific concepts of energy and the sources of energy – their use and their impact on the environment, the economy and society. Together with Shell, NEED will expose high-school students to the earth sciences, including geology, geophysics, climate science, and sustainability, through hands-on activities with real-world applications.

# PRE-CONFERENCE WORKSHOPS



# WEDNESDAY, SEPTEMBER 4TH - 1:30PM EXXONMOBIL INFO SESSION (INVITE ONLY)

Join us for an information session focused on ExxonMobil's new Low Carbon Solutions business unit and internship and full-time job opportunities at ExxonMobil. During this session, you'll get to hear more about ExxonMobil's new Low Carbon Solutions business unit, which studies and executes carbon capture and sequestration. You'll learn about the larger ExxonMobil corporation and the key role that geoscientists play in the company strategy. We'll also have a career panel discussion with geoscientist lecturers, where they'll share their work history, experiences, and we'll get a chance to ask them your questions. Whether you're an experienced geoscientist or a newcomer to the field, this session will offer valuable insights and discussions that contribute to your professional growth. We hope to see you there on the 4th!



#### Bring your ideas to ExxonMobil

Be part of advancing climate solutions

ExxonMobil NABG Low Carbon Solutions and Recruiting Information Session with Career Panel Discussion

September 4th 1:00pm-3:30pm

What Is It?

Information Session and Career Panel Discussion presented by ExxonMobil Geoscientists

where you can learn about:

- Learn about what a career as a geoscientist at ExxonMobil might look like, and learn about our Low Carbon Solutions Business
- Hear tips and tricks on landing an internship / full-time job
- Hear about different career pathways and ask your questions to professionals working in the energy sector

# **KEYNOTE SPEAKER**



#### THURSDAY, SEPTEMBER 5TH - 11:15 AM

**Dr. Marshall Shepherd**Georgia Athletic Association
Distinguished Professor

Director, Atmospheric Sciences Program University of Georgia



Dr. Marshall Shepherd is a leading expert in weather and climate, serving as the Georgia Athletic Association Distinguished Professor of Geography and Atmospheric Sciences at the University of Georgia. He directs the university's Atmospheric Sciences Program and holds joint appointments in the College of Engineering. A former president of the American Meteorological Society, Dr. Shepherd's research focuses on urban climate, hydrometeorological extremes, and the intersection of atmospheric sciences with societal issues.

In 2021, he made history as the first University of Georgia faculty member to be elected to the National Academy of Sciences, the National Academy of Engineering, and the American Academy of Arts and Sciences in the same year. Dr. Shepherd is also known as the host of The Weather Channel's Weather Geeks and a senior contributor to Forbes. He has received numerous awards, including the Presidential Early Career Award and the AMS Helmut Landsberg Award. Dr. Shepherd is frequently sought by major media outlets and government leaders for his expertise on climate and weather.



#### THURSDAY, SEPTEMBER 5TH - 1:30 PM

#### **Sustainability of the Geosciences by Increasing Diverse Talent**



SHIRLEY JACKSON Moderator SUNY



KAYODE AGBOOLA Cornell University



BRANDON JONES AGU



ANIKA KNIGHT EarthScope Consortium



KATALINA SALAS UTEP - CIELO-G



SAVARIA PARRISH Virginia Tech

The geoscience field, regardless of the perspective you take, remains demographically homogenous, with a large majority of white, male, conservative, and more senior individuals. Additionally, more people are leaving the profession than entering it, leading to numerous job vacancies and raising serious concerns about the future of academic programs and the sustainability of the profession.

As geoscience educators, we are continually surprised and frustrated by how many students have never heard of geoscience, believe these fields only apply to those living in rural areas of the American West, have never taken an earth science class (K-12), or think that careers in geoscience require working outdoors exclusively.

This panel discussion aims to bring together geoscience educators, professionals, and students to address these challenges and explore potential solutions.

# PANEL DISCUSSION - SPEAKER BIOS

#### **SHIRLEY JACKSON**

York College/CUNY

Formerly a Stand-Up Comedian, Ms. Jackson reinvented herself by pursuing her passion for science. As a first- generation college student, she received a B.S. degree [Geology, 2013, York College/CUNY] and an M.S. degree [Sustainability, 2017, City College/CUNY]. This was no small accomplishment for a high school dropout living with a permanent painful disability.



Shirley is a part-time faculty member at York College/CUNY and College of Staten Island/CUNY, where she teaches Geology with enthusiasm and dedication, helping her students break barriers and exceed expectations. Ms. Jackson was a 2023 GSA Pardee Symposium Speaker and holds leadership roles in several Geosciences organizations including, AWG, AGI, IAGD, and NABG. She is also a contributor on the "Second National Conference of Justice in the Geosciences 2072 Report."

#### **KAYODE AGBOOLA**

PhD Student, Cornell University

Kayode Agboola is a PhD student in the Department of Earth and Atmospheric Sciences at Cornell University. His research in seismology focuses on understanding subduction processes, with a particular emphasis on earthquake and volcanic activities. Before joining Cornell,



he earned his B.S. in Applied Geophysics from Obafemi Awolowo University, Nigeria, in 2018, and his M.S. in Geological Sciences from the University of Alabama, Tuscaloosa, AL, in 2023. Currently, he is working on imaging magma chambers in the Cascades.

#### **BRANDON JONES**

AGU, President-Elect

Brandon Jones is the 2023-2024 AGU President-Elect. In this role, Jones is Chair of the AGU Council and a member of the AGU Executive Committee. He was elected to the AGU Board of Directors in 2017 and has volunteered on AGU's Talent Pool Task Force, Leadership Development and Governance



Committee and Strategic Plan Writing Team. Jones is the Program Director for Education and Broadening Participation in the Geosciences Directorate at the NSF. In this role, he is working to advance education and career preparation programs in the geosciences. Throughout his career, Jones has been a champion for increasing diversity and equity in science.

Before joining NSF, Jones served almost 13 years at the U.S. EPA, where he was a program officer for ecological sciences and the team leader for EPA's student support programs including the Science To Achieve Results (STAR) Graduate Fellowship and the Greater Research Opportunities (GRO) Undergraduate Fellowship. He was also the EPA's Agency Representative to The White House's Office of Science, Technology and Policy's Federal Committee on STEM (FC-STEM).

Jones holds a bachelor's degree in Biology from The Lincoln University, a Historically Black College and University (HBCU) in Pennsylvania. He also holds both a master's degree and a doctorate in Marine Sciences from the University of Delaware. He is a member of the National Association of Black Geoscientists (NABG), the Association for the Sciences of Limology and Oceanography (ASLO) and the Geological Society of America (GSA).

# PANEL DISCUSSION - SPEAKER BIOS

#### **KATALINA SALAS**

University of Texas at El Paso

Katalina holds a Ph.D. in Environmental Science and Engineering from the University of Texas at El Paso. She is currently a CIELO-G post-doc fellow and Assistant Research Professor at UTEP, where she focuses on geoscience education and transformation. Her passion for education and enriching her community has led her to serve on the Board of Directors for La Semilla and



the Association for Women Geoscientists. Katalina's goal is to continue sharing knowledge with her community and fostering curiosity and a sense of caring for Earth in future leaders. She wants them to connect to the bees, flowers, oceans, and mountains as much as she does!

#### **SAVARIA PARRISH**

Undergraduate Student, Virginia Tech

Savaria Parrish is a rising junior at Virginia Tech, pursuing a degree in Geosciences with a concentration in Geology and a minor in Astronomy. As a first-generation student, she is passionate about advancing diversity and inclusion in STEM. Her research interests include planetary



atmospheres, potential ocean worlds, and exoplanet detection. Savaria is the recipient of the Geoscience IDEA Scholarship, funded by the Association of Women Geoscientists. She is actively involved in the award-winning Diversifying Science Peer Mentor Program at Virginia Tech, which recently received the 2024 Inspiring Programs in STEM Award from Insight Into Diversity magazine. In this program, Savaria mentors underrepresented students in STEM. Additionally, she serves as a Geoscience Ambassador and a Peer Academic Coach at Virginia Tech.

#### **ANIKA KNIGHT** EarthScope Consortium

Anika Knight is a Geoworkforce and Diversity Specialist at EarthScope Consortium, where she manages a dynamic internship program and works on diversity, equity, accessibility and inclusion initiatives both within her organization and across the broader geoscience community.



Anika's commitment to increasing access, opportunities, and broadening participation-aimed at enhancing the diversity of scientists and retaining that diversity-is shaped by her own experiences in science, including her time as a participant of an NSF-funded Research Experience for Undergraduates (REU) program. This transformative experience was pivotal in her decision to pursue graduate studies and continues to influence her work.

In her current role, Anika leverages her background and expertise to enhance internship programs and advance Diversity, Equity and Accessibility efforts, creating a more inclusive environment that supports diverse talent in geosciences.

# PANEL DISCUSSION



#### FRIDAY, SEPTEMBER 6TH - 8:05 AM

# Developing Just Partnerships with the Community-Soil-Air-Water (CSAW) Learning Ecosystem



KATHERINE HANKINS Host GSU/CSAW



NAURICA ENCARNACION Facilitator GSU/CSAW



OPAL BAKER CSAW



THÉRÈSE KELLY GSU/CSAW



SARAH LEDFORD GSU / CSAW



NA'TAKI OSBORNE JELKS Spelman / CSAW



ALFRED TUCKER CSAW



**DESTINEE**WHITAKER
GSU / CSAW

The Community-Soil-Air-Water (CSAW) partnership is co-led by the Georgia State University Department of Geosciences and two community-based environmental advocacy organizations that focus on environmental justice - ECO-Action and the West Atlanta Watershed Alliance (WAWA). In collaboration with other community-based organizations and higher education institutions in Metro Atlanta, the partnership has grown and evolved over the past 10 years, with a focus on identifying and answering critical community-driven questions around soil, air, and water.

# PANEL DISCUSSIONS - SPEAKER BIOS

# **SARAH LEDFORD**GSU / CSAW

Sarah (she/her) is an Assistant Professor and urban hydrologist interested in the intersection of hydrology, biogeochemistry, and water quality in urban settings. Particularly interested in how sociology influences water in cities, her Urban Hydrology Lab is equipped to measure vital properties



of streams from discharge rate to dissolved oxygen, and water quality analysis including E. Coli and nitrate measurements. At CSAW, she leads the M.S. application and Champions the Watershed Monitoring Project.

#### **NA'TAKI OSBORNE JELKS**

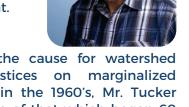
Spelman College / CSAW

Na'Taki is an Assistant Professor at Spelman College and is co-founder and Executive Director of the West Atlanta Watershed Alliance (WAWA). Her expertise in environmental health, environmental injustice, infrastructure and health equity, has been instrumental in the establishment of CSAW. She continues to be a visionary for the entire team.



# ALFRED TUCKER CSAW

Mr. Tucker (he/him) is a retired customer service and sales and marketing professional, who is an Atlanta native and currently lives in East Point. He describes being involved in environmental justice organizing as "a stroke of serendipity". After being offered a place in the Atlanta



Watershed Learning Network in 2020, he quickly embraced the cause for watershed mismanagement that has perpetrated environmental injustices on marginalized communities. Having lived through the Civil Rights Movement in the 1960's, Mr. Tucker considers the new wave of environmental advocacy another phase of that which began 60 years ago.

# **DESTINEE WHITAKER**GSU / CSAW

Destinee Whitaker, a 2023 graduate of Spelman College with a BS in Environmental Science, is dedicated to addressing the global water crisis through research and her non-profit "puripHied." Joining CSAW as the postbac for West Atlanta Watershed, she seeks tools and networks to



advance her mission. Engaging in research and collaborative projects on community science, soil, air, and water, she aims to deepen her expertise and drive for change. Post-CSAW, Destinee plans to pursue a Ph.D. in Hydrology and Water Resource Management while expanding "puripHied" into a global platform for advocacy and action.

# PANEL DISCUSSIONS - SPEAKER BIOS

# **KATHERINE HANKINS**GSU / CSAW

Katherine (she/her) is an urban geographer, qualitative researcher, archival analyst, and Chair of the Geosciences Department. She has extensive knowledge of urban geography, urban history and Atlanta neighborhoods, with research examining how the city is produced and navigated by individuals, groups, and organizations. Considered the helm of the CSAW ship, she provides guidance and leadership for many of CSAW's projects and initiatives.

# **NAURICA ENCARNACION**GSU/ CSAW

Naurica (she/her) graduated from Emory University in 2023 with a BS in Environmental Science and Chemistry. She gained experience with community-based participatory research while working in the Saikawa Lab, focusing on issues of soil contamination. Within CSAW, Naurica works at GSU, coordinating projects and facilitating effective collaboration across community partners, higher-ed institutions (HEIs) and between team members. After CSAW, Naurica

plans to continue engaging with JEDI-focused approaches to environmental challenges.



A community advocate and environmental justice activist, Opal Baker (she/her) works at the intersection of voting rights, racial justice, and social justice. Her core belief is that everyone deserves a healthful life, with access to fresh, nutritious, and affordable food within their own community as a fundamental right. Opal believes that voting is a critical tool for driving change toward a more just and equitable food system for all. The founder of a community-based organization, Forward Together East Point, and a board member for Market 166 Grocery & Kitchen Co-op in East Point, Georgia, Opal brings decades of experience to organizing.

#### THÉRÈSE KELLY GSU / CSAW

Thérèse (she/her) has extensive experience in hydrology field work and data analysis, as well as a background in middle and high school education. She is interested in a critical approach to addressing urban water quality issues through interdisciplinary community-engaged research that can inform policy action. Currently, Thérèse is collaborating with South River Watershed Alliance on the co-creation and dissemination of maps and reports of the South River. After graduating from GSU, Thérèse is considering a return to teaching or non-profit work.

# PANEL DISCUSSION



#### FRIDAY, SEPTEMBER 6TH - 1:05 PM

#### **Data Science in the Geosciences**



QUENTIN STUBBS Moderator NOAA



KOYA BROWN ESRI



ORONDE DRAKES USGS



TOBI ORE bp

Recent technological innovations, such as Artificial Intelligence (AI), have amplified the significance and impact of geosciences on real-world issues. This data science panel will explore key questions like, "How does AI intersect with geosciences from various perspectives: common, academic, defense, and economic?" To fully address this, it's essential to consider the narratives being told and the data used to shape those narratives.

The discussion will also delve into how geoscientific data is perceived by a diverse range of stakeholders, from the public and private sector.

Other critical topics include data management and sharing, particularly in the context of climate change, natural hazards, and emergency management. The panel will examine the current state of data in the geosciences, the future integration of AI into geoscientific research, and the application of modeling tools.

Lastly, the panel will tackle the issue of social equity. They will discuss whether the application of geosciences and AI will promote or hinder equity, while also considering the influence of social media on the communication of scientific information.

# PANEL DISCUSSIONS - SPEAKER BIOS

#### **QUENTIN STUBBS**

#### NOAA

Quentin serves as a Regional Navigation Manager for the NOAA Office of Coast Survey. He has also served as a Geographer and Regulatory Specialist with the Army Corps of Engineers in Galveston, TX, where he managed projects and applications related to dredging, aquatic structures,



hydrographic surveying, and GIS/remote sensing. He also has 6 years of experience as a Geographer with the US Geological Survey - Chesapeake Bay Program in Annapolis, MD. He holds a Ph.D. in Geographical Sciences from UMD - College Park, a MPA from Columbia University, and a BBA from Mercer University. He looks forward to maintaining productive relationships between NOAA, USACE, USCG, pilots and the community. His areas of concentration include land use/land cover change, natural hazards, and environmental justice.

#### KOYA BROWN ESRI

Koya serves as a facilitator and connector for techies and equity enthusiasts as the global Technical Lead for racial equity and social justice and product engineer, focusing on applied GeoEquity principles. As an urban geographer, she has worked with public and private entities to develop and apply conceptual frameworks to solve real business problems



across industries like utilities, transportation, and human capital management. She has presented at numerous conferences and led hands-on exercises on how to utilize mapping tools to support mission-driven projects around the world.

#### **ORONDE DRAKES**

#### **USGS**

Oronde Drakes is a physical scientist in the Decision Support Branch of the Integrated Information Dissemination Division (IIDD) in the USGS Water Resources Mission Area. Oronde's research interrogates the intersections among natural hazards and society, focusing on social



vulnerability in multiple hazard contexts, and its implications for disproportionate hazard exposure, impacts, and recovery. His current work assesses socioeconomic indicators of water insecurity for the Social Dimensions Program, and he leads stakeholder engagement for the Water Hazards Program. He co-chairs the USGS Human Dimensions Community of Practice and is a member of the USGS Environmental Justice Task Force.

### TOBI ORE

bp

Tobi Ore is a Geophysicist at BP. Previously, he served as a Reservoir Geophysicist at Resermine, where he specialized in quantifying the communication between multi-stage injectors and producers, as well as optimizing injection placement. Tobi earned his B.Sc. in Geophysics from



the University of Lagos, Nigeria, and holds a Graduate Certificate in Applied Statistics, an M.S. in Geology, and a Ph.D. in Geophysics, all from West Virginia University. He has been awarded several research grants and merit-based scholarships from reputable institutions, and his research has been published in leading journals and presented at major conferences. Tobi is a founding member of the Association of Nigerian Scholars in America and is an active member of the SEG Research Committee, NABG, GSA, and AAPG, among other professional organizations.



#### THURSDAY, SEPTEMBER 5TH

2:30 PM

#### **USGS By The Numbers**

Dr. Dave Applegate, Director of the USGS

The U.S. Geological Survey (USGS) invites attendees to learn about the scope and scale of the USGS today. As the science arm of the Department of the Interior, the USGS brings a wide range of scientific expertise to bear on complex environmental, natural resource, and public-safety issues facing the nation and the world. We monitor, assess, map, and conduct targeted scientific research on the natural hazards that threaten lives and livelihoods; the water, energy, minerals, and other natural resources we rely on; the health of our ecosystems and environment; and the impacts of climate and land-use change. Our scientists develop new methods and tools to enable timely, relevant, and actionable information about the Earth and its processes.



At this town hall, USGS Director Dave Applegate will present examples of how the USGS and its partners are working together to help address real-world problems with objective, unbiased science. The USGS seeks to recruit undergraduate and graduate students and post-docs to join our dynamic work environment, and the town hall will highlight the full range of available internship, fellowship, and employment opportunities and offer tips for applying for Federal jobs.

#### THURSDAY, SEPTEMBER 5TH

3:20 PM

#### **AGU MENTORING365 - PROGRAM OVERVIEW**

Dr. Pranoti Asher, AGU

<u>Mentoring365</u> is a global opportunity that allows individuals who are interested in the Earth and space sciences (ESS) to connect one-on-one with other professionals for advice. Mentees and mentors can engage in one-time meetings or long-term connections to help move their careers and education forward.



# **INVITED TALKS - SPEAKER BIOS**

#### **DAVE APPLEGATE**

**Director, United States Geological Survey** 

David Applegate is the 18th Director of the U.S. Geological Survey, sworn in by Secretary of the Interior Deb Haaland on Aug. 15, 2022. Prior to assuming his official role, he exercised the delegated authority of the USGS Director beginning on Jan. 20, 2021. He served as the Associate



Director for Natural Hazards since 2011, leading USGS emergency response activities and overseeing the bureau's geologic hazards and coastal and marine programs. He co-chairs the interagency Science for Disaster Reduction working group and chairs the interagency Civil Applications Committee.

Applegate is a fellow of the American Association for the Advancement of Science and the Geological Society of America and is a past president of the Geological Society of Washington. Applegate joined the USGS in 2004 as the first Senior Science Advisor for Earthquake and Geologic Hazards. Prior to that, he spent eight years with the American Geosciences Institute (AGI) federation of geoscience societies, where he directed science policy and served as the editor of Geotimes, AGI's news magazine for the earth sciences. Applegate has also served with the U.S. Senate Committee on Energy and Natural Resources as the American Geophysical Union's Congressional Science Fellow and as a professional staff member. He has taught at Johns Hopkins University and served as an adjunct professor at the University of Utah.

Applegate has a B.S. in geology from Yale University and a Ph.D., also in geology, from the Massachusetts Institute of Technology.

# **PRANOTI ASHER**American Geophysical Union

Pranoti M. Asher is the Assistant Director for Grants and Education Programs at the American Geophysical Union (AGU), a professional society of the Earth and space sciences. She is the Project Director for the AGU Bridge Program, a component of the National Science Foundation



(NSF)-sponsored Inclusive Graduate Education Network – a program initiated in 2019 to develop, adopt, and share inclusive practices for recruiting, admitting, and retaining historically marginalized students in physical science graduate programs. She also manages AGU's mentoring and career programs including oversight and responsibility for AGU's job board and associated assets. She has helped expand AGU's engagement with its members and their science through many programs as well as assured the appropriate AGU voice and participation in STEM and geoscience programs and reports at the national level.

Pranoti is deeply interested in the intersection of education, outreach, DEI, and workforce development for the Earth and space sciences and works across AGU to help stand up and support new initiatives to support members. She is also a fellow of the Geological Society of America. Prior to joining AGU, Pranoti spent 18 years as a geoscience faculty member. In her last faculty position, she was a tenured member of the geology and geography department at Georgia Southern University in Statesboro. She received her Ph.D. in the geological sciences from the University of Connecticut.

# **INVITED TALKS**



#### FRIDAY, SEPTEMBER 6TH - 11:15 AM

# **Effective Science Communication: Bridging the Gap Between Scientists and the Public**



ESTHER OYEDELE PhD Student Virginia Tech

#### **Session Objectives:**

- Provide strategies for effectively communicating complex scientific concepts to diverse audiences.
- Highlight the importance of science communication in fostering public understanding and support for geosciences.
- Engage participants in interactive activities that enhance their communication skills.

The presentation will begin with an introduction on the importance of science communication, particularly in geosciences, emphasizing its role in fostering public understanding and support. This will be followed by a discussion on strategies and best practices for effectively communicating complex scientific concepts, including tips on simplifying ideas, tailoring messages to diverse audiences, and using storytelling to enhance engagement. An interactive activity will engage participants in practicing a communication technique, such as translating scientific concepts into layperson's terms. The session will conclude with a Q&A and wrap-up to reinforce key takeaways and address audience questions.

# **INVITED TALKS - SPEAKER BIOS**



#### **ESTHER OYEDELE**

PhD Student, Virginia Tech

Esther Oyedele is a PhD student in the Geosciences department at Virginia Tech, where she focuses on the integration of remote sensing data and models to predict groundwater response to anthropogenic drought. She is a 2024-2025 American Geophysical Union (AGU) Voices for



Science Fellow. As a member of the coordinating team for Science on Tap - New River Valley in Virginia, Esther facilitates monthly scientific talks that promote public access to key research findings. She is deeply involved in outreach activities, engaging diverse audiences, including underrepresented communities in STEM, K-12 students, and amateur geologists. Esther's work in science communication has been recognized with the AGU Voices for Science Most Dynamic Multimedia Project award for her team's innovative project. Her dedication to promoting science communication, literacy, and public engagement is reflected in her outreach efforts across various platforms and communities.







































#### **AMERICAN GEOPHYSICAL UNION**

Our Mission: To support and inspire a global community of individuals and organizations interested in advancing discovery in Earth and space sciences and its benefit for humanity and the environment.

Our Programs: No matter your career stage, professional and career development are important to advancing yourself and helping guide others. AGU provides career and educational resources, webinars, mentoring services, and support for students and professionals at all levels in Earth and space science. At AGU, we're especially committed to inspiring and educating present and future generations of diverse, innovative, and creative Earth and space scientists. Continue to explore our <u>website</u> and our <u>career center</u> to learn more about all the programs AGU has to offer.

We want to bring your attention to three specific programs:

<u>AGU Bridge Program</u> - Advancing the Earth and space sciences through increased representation of Hispanics, African Americans, American Indians, Pacific Islanders, Alaska Natives, and Native Hawaiians in geoscience graduate programs. Opens in mid-December for student applications. Only open to US citizens and permanent residents.

<u>Mentoring365</u> - Mentoring365 is a virtual, global mentoring program developed among Earth and space science organizations to facilitate an exchange of professional knowledge, expertise, skills, insights, and experiences through dialogue and collaborative learning. Open year round for seeking mentors. Open to all students and professionals.

Student and Early Career Conference – (at the AGU annual conference <u>AGU24</u> formerly known as the Fall Meeting). The 2024 AGU Student and Early Career Scientist Conference will provide attendees with valuable learning and discussions geared around professional development and skills-building and a chance to meet and interact with their peers from across the Earth and space sciences. Open now for registration. Open to all students and early career professionals.

Contact Pranoti Asher (pasher@agu.org) or Ashanti Edwards (aedwards@agu.org) with your questions about AGU programs.



#### **UNIVERSITY OF ALABAMA**

The Department of Geological Sciences (DGS) at The University of Alabama (UA) offers MS and PhD degrees, providing students with focused research opportunities in a range of Earth science specialties including hydrology, climatology, geochemistry, geophysics, and critical resources, among others.

Selected students, both domestic and international, are guaranteed two years of support for the MS and five years of support for the PhD. Funded students are provided with either a teaching assistantship, research assistantship, graduate fellowship, or a combination of these throughout their degree program, which includes a monthly stipend, tuition, health insurance, and coverage of college fees.

The DGS is a partner institution in the AGU Bridge Program.

#### **UNIVERSITY OF ARKANSAS**

**Mission Statement:** The University of Arkansas is determined to build a better world by providing transformational opportunities and skills, promoting an inclusive and diverse culture, nurturing creativity, and solving problems through research and discovery, all in service to Arkansas.

Geosciences and Environmental Dynamics have been participants at NABC for over 17 years and hosted the conference in 2009 and 2019. NSF awards to Dr. Stephen K. Boss since 2009 supported over 300 unique students from over 100 institutions over 600 times. The Geosciences Department offers BS through PhD and has 26 full-time and research faculty. The department hosts a variety of specialties including hydrology, oil and gas exploration, climate modeling, GIS. For more information please visit website and our at: https://fulbright.uark.edu/departments/geosciences/

The Environmental Dynamics Program is an interdisciplinary program offering a MS or PhD. We host over 80 faculty from all across campus who mentor our students. Our focus on human-environment interactions looks into deep time recreating paleoclimates and how this affected human development and into the present researching natural and social impacts of global climate change, impacts of rapid economic development on environmental quality, landscape evolution and degradation,



#### BP

bp is re-imagining energy for people and our planet. As a leading global energy company, we provide heat, light and mobility to customers worldwide. Across the bp landscape, we're home to a range of brands that touch all areas of our industry – from petrol stations to liquid engineering. Explore our offering and browse our brand portfolio at www.bp.com. We're fundamentally transforming what we do so we can reach net zero by 2050 or sooner. By working hard to decarbonize and diversify our business, over the next decade we'll become a different kind of energy company. It's an exciting time to join bp. As a global business, it's paramount to us that the differences we see in the world around us are reflected in our workplace. Because we know that diversity in all its forms is great for bp and its people. Different perspectives, life experiences and backgrounds create an environment rich in new ideas and smart solutions – exactly what we need to complete our transformation and achieve our net zero ambition. Who you are is what counts, not where you're from or how you live your life. That's why, to help our people thrive, we nurture a culture that values everyone and ultimately benefits all of us. Go to www.bp.com/uscampus to explore early career opportunities.



#### **CLEMSON UNIVERSITY - NUWADI**

NuWaDi is a DOE-funded Consortium, led by Clemson researchers and SCUREF staff, designed to empower collaborative governance through open nuclear waste dialogue (NuWaDi). With an emphasis on deliberative and reciprocal two-way communication, the research team aims to facilitate public engagement in an effort to cogenerate knowledge around public perceptions and values for decision-making on issues of management, transportation, and disposal of nuclear materials. Much of the cogenerated knowledge will ultimately be synthesized and disseminated through ArcGIS Online applications to communicate community insights and values. To support the public engagement, content modules will be developed including an updated Nuclear Waste Primer publication and teaching modules on interdisciplinary topics combining the technological, historical, social, and ethical aspects of nuclear energy and the environment. The NuWaDi Consortium sponsors public funding opportunities ranging from \$10,000 Community Action and Engagement awards to \$100,000 Implementation Grants. See the virtual hub for more details: https://nuwadi-clemson.hub.arcgis.com.

This project is being funded in part by the U.S. Department of Energy (DOE). The DOE Nuclear Awardee logo was developed by DOE to indicate receipt of DOE funding. Not an endorsement by DOE. DOE's Consent-based Siting for Interim Storage Program: DE-FOA-0002575

NuWaDi Representatives:

Lindsay Shuller-Nickles, Clemson University

Cassandra (Sandy) Hicks-Brown, South Carolina University Research and Education Foundation (SCUREF)



#### **EARTHSCOPE CONSORTIUM**

EarthScope Consortium is a university consortium dedicated to supporting transformative global geophysical research and education. Our vision is an engaged society, resilient to geohazards, informed by geophysical discovery and global collaboration. EarthScope Consortium operates NSF's GAGE and SAGE Facilities previously operated by UNAVCO and IRIS. EarthScope offers paid summer internships for undergraduate and graduate students and recent graduates. For more information, and to see the work of our previous internship cohorts, please visit: www.earthscope.org/internships/

#### **EXXONMOBIL**

ExxonMobil is an energy company that works around the world, utilizing the most advanced technology to safely and responsibly deliver the energy needed for economic and social progress. We know that science, technology and engineering in the hands of people with integrity are keys to the global energy challenge: to expand supplies of energy to meet growing demand, while increasing efficiency and reducing emissions. We are working to provide the energy needed for progress ... for today and tomorrow.

The Geoscience Recruiting team will be interviewing candidates for both internships and full-time employment opportunities, while at NABG. They're looking for candidates with a strong fundamental background in geoscience (geology and/or geophysics) and scientific curiosity that are pursuing a MS or PhD. Candidates must have the permanent right to work in the US.

If that's you please stop by the ExxonMobil booth!



# GEOLOGICAL SOCIETY OF AMERICA

The Geological Society of America helps a diverse community of geoscientists find the tools, confidence, and connections they need to navigate the complexity involved in advancing our science and driving their careers to fulfilling new heights. Our mission is to advance geoscience research and discovery, service to society, stewardship of Earth, and the geosciences profession. We offer numerous grants, fellowships, and awards to students and early career scientists to support them in their education, research, and conference attendance. We encourage NABG attendees and members to consider nominating a colleague (or themselves!) for one of our Awards!

#### **GEORGIA STATE UNIVERSITY**

Designated a Predominantly Black Institution by the U.S. Department of Education, Georgia State University (GSU) graduates more African American students than any other public or nonprofit higher education institution. Having doubled external research funding in the past five years, GSU is recognized as having one of the fastest-growing research portfolios in the United States. Between 2014 and 2023, the Geoscience Department awarded the third highest number of bachelor's degrees to Black students across all geoscience departments in the United States. Grants awarded to faculty in our department support deepening, expanding, and promoting a sustainable model for training diverse cohorts of baccalaureate, post-baccalaureate (postbac), and Master's students. Our funded opportunities range from domestic and international REU programs to fully funded master's degrees.



# MINERALOGICAL SOCIETY OF AMERICA

The Mineralogical Society of America promotes the science and appreciation of minerals (mineralogy) and crystals (crystallography), and their uses in science, industry, and the arts. The MSA encourages and supports researchers from students to established professionals, teachers from K-12 to college, and gem and mineral enthusiasts ranging from museum visitors to collectors. With members from across the globe, the MSA represents the U.S. internationally. Membership in the MSA (including student membership) includes Elements magazine and the American Mineralogist, and discounts on all MSA publications, Short Courses, workshops, and events.

# NATIONAL SCIENCE FOUNDATION

Research and education programs supported by the Directorate for Geosciences (GEO) at the National Science Foundation (NSF) help to provide a comprehensive understanding of the Earth that spans billions of years—from how the planet formed to how its primary components (air, ice, land, and water) affect our lives today. Among its educational opportunities, GEO supports undergraduate, post-baccalaureate, and graduate students, postdoctoral researchers, early career investigators, research experiences for teachers, K-12 projects, veterans, interns, and principal investigators working on individual or collaborative projects. Program details can be found at <a href="https://www.nsf.gov/geo/adgeo/education.jsp.">https://www.nsf.gov/geo/adgeo/education.jsp.</a>



# PALEONTOLOGICAL SOCIETY OF AMERICA

The Paleontological Society is an international nonprofit organization devoted exclusively to the advancement of the science of paleontology: invertebrate and vertebrate paleontology, micropaleontology, and paleobotany. The Society was founded in 1908 in Baltimore, Maryland, and was incorporated in April 1968 in the District of Columbia. The Society has several membership categories, including regular, student, and retired. Members, representing 40 countries, consist of professional paleontologists, academicians, science editors, earth-science teachers, museum specialists, and undergraduate and graduate students and post doctoral scholars, as well as avocational paleontologists.

The Paleontological Society has five geographic Sections - Pacific Coast Section (March 1911), North-Central Section (founded May 1974), Northeastern Section (March 1977), Southeastern Section (November 1979), Rocky Mountain Section (October 1985), and the South-Central Section (November 1988) - and a number of working groups. The Society holds an Annual Meeting, which is ordinarily in the fall at the same time and place as the Annual Meeting of The Geological Society of America (GSA). The Sections also hold meetings, which are usually in the spring at the same time and place as comparable Sections of the GSA. At the meetings, members present volunteered papers and poster sessions; the Society normally hosts an invited speaker symposium. Field trips are occasionally offered. At the Annual Meeting, a short course is presented, and the Society has its Annual Luncheon, Awards Ceremony, and Business Meeting.

#### PENN STATE UNIVERSITY

The Department of Geosciences pursues fundamental, cutting-edge and strategic research in areas of the geosciences that have great societal impact and educates students for careers that advance the forefront of knowledge in the geosciences. The College of Earth and Mineral Sciences advances knowledge, talent and leadership to understand Earth processes and history, harness and sustain natural resources and materials, and develop novel solutions to major challenges in energy, environment and well-being. Strong departmental and college communities, alumni networks, and industry and government connections provide a foundation for learning and research that prepares students for rewarding careers that have an impact on the world. We offer funded undergraduate research (REUs) and graduate (MS and PhD) programs



# SOCIETY OF EXPLORATION GEOPHYSICISTS

The Society of Exploration Geophysicists supports its members worldwide throughout their careers, beginning with scholarships and other student programs and continuing with networking and leadership opportunities, publications resources, educational offerings, and career-center access. Visit us at our booth to learn how SEG can help connect you with these resources and with the world of applied geophysics.

#### STONY BROOK UNIVERSITY

The Department of Geosciences of Stony Brook University, New York offers undergraduate and graduate programs. We sponsor international students. We are currently hiring for two full-time tenure-track Assistant Professor faculty positions. One position is in high-temperature experimental geochemistry. The other is in computational geophysics.

Undergraduate degree programs include a B.S. and a minor in Geology in addition to a B.A. in Earth and Space Science. Teaching focused degrees that are offered include a B.A. in Earth and Space Sciences/Science Education and a combined B.A. and a Masters of Arts in Teaching Earth Sciences.

Graduate students may choose among degree programs with emphasis in different areas in Geosciences. Ph.D. programs are offered with areas of emphasis that include seismology and tectonics, mineral and rock physics, crystal chemistry, geochemistry, petrology, and sedimentary geology, planetary geosciences and hydrogeology. New Ph.D. students in these programs are typically supported with a full tuition waiver and a competitive annual salary. Other graduate student fellowship opportunities offered by Stony Brook University are another means of support. The department sponsors international students.

The department also offers a non-thesis M.S. program in hydrogeology focused primarily on training professionals in environmentally related fields. In addition, there is a Masters of Arts in Teaching Earth Sciences, which leads to initial certification for teaching Earth Science in secondary schools of New York State. There is also a M.S. in Geosciences with concentration in Earth and Space Sciences. These programs generally do not provide tuition waivers or salary support.

Stony Brook University serves as the academic base affiliated with the Turkana Basin Institute (TBI), whose primary research focus is human prehistory.



# UNIVERSITY OF TEXAS AT AUSTIN

The Jackson School of Geosciences has opportunities for geoscientists at all career and educational stages. Undergraduates and postbaccalaureate students from geoscience and STEM majors are encouraged to apply to the JSG Research Traineeship Experience (RTX), a paid, 9-week summer internship focusing on preparation for graduate school and the workforce. Prospective graduate students can pursue MS and PhD degrees in Geoscience through the Department of Earth and Planetary Sciences. The Energy & Earth Resources program offers interdisciplinary Masters degrees and dual degrees in policy and business. We encourage interested domestic students to apply to attend the Gateway to Graduate Studies (G2S2), a free and expenses paid two-day graduate preview at UT Austin, October 24-25, 2024.



# UNIVERSITY OF TEXAS EL PASO - CIELO-G

The Community-driven Inclusive Excellence and Leadership Opportunities in the Geosciences (CIELO-G) project, supported by the NSF's Cultural Transformation in the Geoscience Community (CTGC) program, is focused on transforming the culture of the geosciences by fostering meaningful and organic connections with the local community. Its primary goals are to support a diverse team of graduate students and postdoctoral researchers addressing climate change and Earth system challenges, provide training and collaborative learning for local educators, promote diversity in the geosciences, and engage underprivileged communities with hands-on research experiences.

To accomplish these objectives, CIELO-G applies the Collective Impact model, enhancing ongoing initiatives and institutional changes at The University of Texas at El Paso. The project forms cohorts that blend community-oriented research with engagement, offering professional development and encouraging a culture of innovation, inclusion, and responsibility among its members. Each cohort comprises 6-8 graduate students, 6-8 high school and community college educators, 2-3 postdoctoral fellows, and 6-8 faculty research mentors, working together with various, local non-governmental organizations. They design and conduct geoscience research projects that encompass four key components: 1) a fundamental science question related to climate change and Earth system issues affecting the Paso del Norte Region (west Texas, southern New Mexico, and northern Mexico), 2) research that leads to practical community solutions, 3) socially relevant outcomes that raise awareness of the importance of geosciences, and 4) strong community engagement that fosters a sustainable geoscience learning ecosystem. Additionally, CIELO-G collaborates with community partners to organize local public events that integrate geoscience with community interests.

Opportunities: Graduate Student Fellowship (tuition, salary, travel) for students studying at The University of Texas at El Paso - Spring 2025



# UNITED STATES GEOLOGICAL SURVEY

The U.S. Geological Survey (USGS) is the science arm of the U.S. Department of the Interior and is a primary Federal source of science-based information on ecosystems, land use, energy and mineral resources, natural hazards, water use and availability, and updated maps and images of the Earth's features available to the public.

The mission of the USGS is to monitor, analyze, and predict current and evolving dynamics of complex human and natural Earth-system interactions and to deliver actionable information at

scales and timeframes relevant to decision makers. As the Nation's largest water, earth, and biological science and civilian mapping agency, the USGS collects, monitors, analyzes, and provides science about natural resource conditions, issues, and problems. Our diverse expertise enables us to carry out large-scale, multidisciplinary investigations and provide impartial scientific information, data, and tools to resource managers, planners, educators and students, and communities.

Explore internship, fellowship, and career opportunities for scientists, engineers, technicians, and many other professionals at the USGS at <a href="https://usgs.usajobs.gov/">https://usgs.usajobs.gov/</a>.

# POST-CONFERENCE EVENTS



SATURDAY, SEPTEMBER 7TH

7:30 AM

#### **GEOLOGY OF STONE MOUNTAIN**

Dr. Aditya Kar, Fort Valley State University

Delve into the complex geology of this iconic granite dome. Formed during the late Paleozoic era, Stone Mountain's quartz monzonite composition offers an excellent case study in plutonic rock formations and the subsequent erosion that exposed it. Participants will have the chance to examine the mountain's unique textural and mineralogical features, discuss its geological history in the context of the Appalachian orogeny, and explore the processes that led to its current prominence. This trip is a valuable opportunity to visit a significant site and share insights with peers.

**SATURDAY, SEPTEMBER 7TH** 

11:00 AM - 7:00 PM

#### **HBCU GREENFEST @ TRULY LIVING WELL FARM**

Presented by the HBCU Green Fund

The HBCU Green Fund is proud to announce GreenFest 2024, a vibrant celebration of sustainability, culture, and the power of unity within the Black community on Saturday, September 7, at Truly Living Well Farm in Atlanta, from 11 a.m. to 7 p.m. The free, public event will feature food, live performances, eco workshops, activities for children, and an opportunity to meet V-103s Big Tigger who will broadcast live from the event.

GreenFest 2024 is not just an event – it's a movement. As an integral component of the HBCU Green Fund's commitment to environmental justice and sustainability, GreenFest offers attendees a chance to enjoy delicious plant-based, zero-waste food options and engage in demonstrations that highlight sustainable living practices. Whether you're working on environmental, climate, or democracy issues, eager to learn, or simply looking for a great time, GreenFest has something for everyone.

NABC will support HBCU GreenFest through hands-on activities for kids and remarks at the opening.

