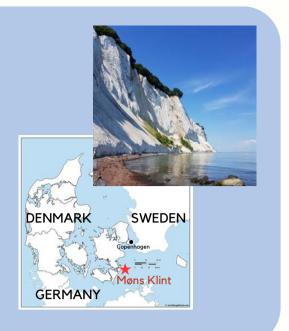


#### On the Cover - Møns Klint, Sjælland, Denmark

Most of us have heard of the White Cliffs of Dover on the southwestern coast of England, but across the North Sea are similar and arguably just as stunning cliffs in Denmark. The cliffs owe their appearance to millions of years of chalk deposition during the late Cretaceous. Offshore in the North Sea, these formations have been found to be a reservoir for oil and gas, owing their secondary porosity mostly to redeposition, possibly following distant tectonic activity of the Alpine orogeny.



#### **Photo source**

#### From the Editor...

#### Greetings Everyone,

The most intense summer heat in Louisiana is upon us, and it feels like it's not letting up anytime soon. We've had our fair share of days with highs of over 100 degrees, so I hope everyone is keeping cool until fall reaches us.

I am excited to announce we have some new and exciting things coming to NOGS LOG, including items that will be more geared toward our environmental and student members. We're still in the phase of figuring out how to roll these items out, but be on the lookout for changes in the

Brittany

next few months. Also, congratulations to the 2023-24 NOGS scholarship

recipients from Tulane, LSU, and UNO. Y'all rock (pun intented)!

We also have some exciting events coming up, including our September meeting that dives into chemostratigraphy in the Gulf of Mexico, our joint charity golf tournament with PLANO on October 2nd, as well as several volunteer events.

If you have any suggestions about content or would like to contribute to the Log, please reach out to me at editor@nog.org!





#### MARK WOJNA

#### A MESSAGE FROM THE 2023/2024 NOGS PRESIDENT

I hope this finds everyone doing well. It's hard to believe that summer has already come to an end. Hopefully this summer's extended heat wave hasn't impacted you too much. Since moving to New Orleans in 1984, I've spent several Labor Day weekends dodging hurricanes and evacuating to hotels along the Gulf Coast. Fortunately, the tropics have been quiet so far and hopefully remain that way for the remainder of hurricane season.

Our personal and professional lives have been disrupted the past few years due to the Covid pandemic. My thoughts and prayers go out to all our members who lost loved ones during this difficult time. Our professional lives have also been impacted. Some of us now work remotely from home. Business travel has been reduced. More meetings and presentations are now conducted virtually online. NOGS now offer an online option to participate in our monthly meetings at a significantly reduced cost to accommodate those members who can't attend in person. Personal interaction continues to play an important role in our professional lives. After a threeyear hiatus due to Covid, I'm pleased to announce that NOGS will host not one but two Fall Kickoff/Membership Drive parties in late September. To accommodate our members who, live and or work on the Northshore, NOGS will be hosting a party at Pat's Rest Awhile on the Mandeville lakefront on Thursday, September 21. Stratagraph has generously agreed to sponsor the north shore event. To accommodate our south shore members, NOGS will host a 2nd fall party at Wrong Iron in New Orleans the following Thursday, September 28. Leaaf Environmental will sponsor the New Orleans event. On behalf of the New Orleans Geological Society I'd like to personally acknowledge and thank Stratagraph and Leaaf Environmental for sponsoring and supporting these two events. Please plan on attending one or both events. It's an opportunity to renew old friendships and make new ones. I'm extending an invitation to all geologists in the metro area to join us at these functions and consider becoming a member of the New Orleans Geological Society. Flyers with details and registration for both events will be coming out any day now.

Beginning with the September NOGS LOG, we're launching a new monthly column called Louisiana GeoNews. The name is considered fluid and may evolve as the column develops. NOGS has historically focused on the oil and gas industry in Louisiana. Geology is a dynamic and vibrant science here in South Louisiana. In addition to oil and gas, we have geologists working on solutions for coastal restoration, sediment diversion projects, carbon sequestration, salt dome storage, geohazards and geotechnical issues and many others that I hope to learn about in the near future. My goal with this column is to invite geologists from our current membership as well as outside of NOGS to share their work and to educate us on geologically oriented projects and topics going on within the state of Louisiana. Look for Chris McLindon's letter in the inaugural column of this month's Louisiana GeoNews. It's a topic I'm excited about and would like to see NOGS embrace this project.

I firmly believe that Geology is one of the most relevant sciences and plays an important role in our state and country. I realize I'm biased because I'm a geologist. By bringing more geoscientists together with diverse backgrounds and from various industries, I'm confident it will make NOGS a stronger and more relevant professional society as we move forward. If you have any questions or suggestions feel free to reach out to me by email at <a href="markw@llox.com">markw@llox.com</a>.

Mark Wojna

# N LOVING MEMORY ROBERT "BOB" DOUGLASS

1929 - 2023

Former President and Honorary Life Member Bob Douglass passed away on August 6, 2023 at a nursing facility in Brookhaven, MS.

Bob was born in Lawrence, Kansas on June 22, 1929. He grew up in Pittsburgh, PA but returned to Lawrence to attend college. He received a B.S. in Geological Engineering in 1953 and a Masters in 1954 under the tutelage of R.C. Moore.

Bob went to work for Texaco in Farmington, NM in 1954 working the Paradox and Permian Basins. His work was instrumental in the discovery of Aneth Field. In 1958 Bob was transferred to the Texaco office in New Orleans. Bob worked the Texaco South Louisiana fields and was responsible for their participation in the Blackjack Creek Field discovery in Florida.

In 1973, Bob left Texaco to become regional manager for Ashland Exploration where he remained for five years drilling successful wells in LA and MS. In 1978, Bob joined Moseley Petroleum drilling six successful wells before moving on to Westover Oil in 1981 where he drilled four successful wells. In 1987, Wacker Oil hired him as V.P. for the Southeastern U.S. They were responsible for discovering Grays Creek Field in Louisiana. In 1990, Bob went back to generating and selling prospects in South LA. He ended his career consulting for Jim Moore's Liberty Oil and Gas in Port Allen LA.

Bob joined AAPG in 1952. He served as a delegate on two Occasions.

Bob was given NOGS Outstanding Member Award in 1982. He served as President in 1987-88 when membership was at a record level of 1500. In 1992 he received Honorary Life Membership. He was chairman of numerous committees and during his tenure as trustee of the Memorial Foundation was instrumental in getting scholarships awarded to students for three years instead of one year. Bob was a Contributing Editor of the NOGS-HGS publication "Productive Low-Resistivity Well Loss of Offshore Gulf of Mexico" and was chairman of an Ad hoc committee to aid the Louisiana Department of Natural Resources in setting up an oil data repository which lead to SONRIS.

Bob was a member of SIPES having been Secretary, Vice Chairman and Chairman of the local chapter and Chairman of the 1994 National Convention.

Bob served GCAGS as Exhibition Chairman, was NOGS Representative in 1988 and was Program Chairman for the 1997 Convention in New Orleans. He was awarded the Distinguished Award in 1997 and Honorary Member in 2003.

Bob had two children, a son Rae and daughter Jennifer Myers and granddaughter Raven. He was predeceased by his wife Corinne and granddaughter Ella.

Written by Charles Corona

# UPCOMING EN PROPERTY OF THE P



#### MONTHLY MEETING

Simon Hughes - Diversified 11:30 am - ZEA Northshore

### NORTHSHORE KICK OFF & MEMBERSHIP DRIVE

Pat's Rest A While 4:00 pm -Northshore

21 SEP

28 SEP

#### SOUTHSHORE KICK OFF & MEMBERSHIP DRIVE

Wrong Iron 5:00 pm - Southshore

#### GOLF TOURNAMENT

Bayou Oaks, City Park (NOLA) 9 am 02 OCT



#### MONTHLY MEETING

Matt Mcshee - Shell Global Ops Geology Hypercare Team 11:30 am - Southshore

for more information visit www.nogs.org

# advertising rates

The New Orleans Geological Society was organized on October 3, 1941, as a nonprofit organization for the purpose of facilitating the development of the profession
and science of Geology, with specific emphasis to exploration and production of
petroleum and natural gas. Secondary related objectives include the dissemination
of pertinent geological and environmental technological data, and the maintenance
of a high standard of professional conduct of its members. The full history of the
Society can be found at nogs.org.

The NOGS LOG is now a digital magazine with live links to your site to reach NOGS Members and support your Society. Please contact Christy Himel admin@nogs.org for placement availability. Full page NOGS LOG advertisers will have their Company LOGO posted on the NOGS Website front page. All advertisers are included on the Society's monthly PowerPoint and listed on the website with a link to their home page. Please check out our website www.nogs.org

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# NOGS SEPTEMBER MEETING

MONDAY

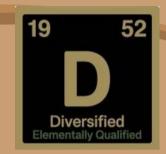
September

11:30 AM

A Dive into the Applications of Chemostratigraphy in the Gulf of Mexico, with a focus on the use of real-time chemostratigraphy to reduce geological and drilling uncertainty: Case studies from the Gulf of Mexico in the USA and Mexico.



# Guest speaker SIMON HUGHES



Simon Hughes is currently Chief Geoscience Advisor and Chemostratigrapher for Diversified Well Logging. He has over 25 years industry global experience, including in the Middle East, Europe, Brazil, West and North Africa, FSU, Canada, and North America in both conventional and unconventional reservoirs.

Much of his time has been spent pioneering the research and development, deployment, and integration of multiple wellsite technologies, including LIBS (Laser Induced Breakdown Spectroscopy analytical system) to improve industry understanding of oil and gas reservoirs, drilling, stimulation and completion of more efficient wells.

The focus of his time has been the application of chemostratigraphy in real-time while drilling to aid in geo-positioning (identifying casing, core points, faults, missing and expanded sections and TD), geosteering, detection of bit wear, drilling optimization, input to pore pressure models and engineered completions. Understanding while optimizing sample and data quality and uncertainty are one of his particular passions.

Current research efforts include development of a LIBS analysis to perform real-time elemental analysis of drilled cuttings collected by a automated robotic sample collection system.

NOGS Members: \$30 Guests/Non Member: \$35

Students: \$15



#### PHOTO RECAP





# Deep Mexico Technical Symposium

#### **NOGS Geosciences Seminar**

with Dr. Michael R. Hudec

"Introduction to Salt Tectonics"

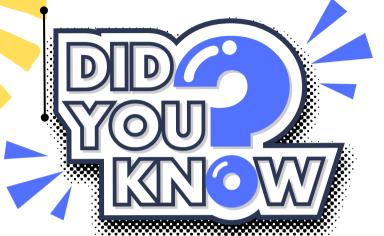
July 24, 2023











NOGS.org has a Member Directory available online!

Log in TODAY and UPDATE
your profile with your current
information and even add
your PHOTO!

This is a great Member's Only Tool and a great networking and resource option for you!



Volunteers are needed for the Girl Scouts Believe in Girls BIG event September 23rd 9:30 am - 2 pm at Southern University in New Orleans

NOGS members will demonstrate "How an oil field forms". Women roles models are particularly encouraged to join this great STEM career event.

To volunteer contact

Tom Bergeon at

Tombergeon.geo@gmail.com







# NOGS 2023 Kick-Off Party AND MEMBERSHIP DRIVE

#### THURSDAY, SEPTEMBER 21, 2023 4:00 pm - 7:00 pm



2129 LAKESHORE DRIVE MANDEVILLE, LA 70448



MEMBERS/GUESTS: \$10 (INCLUDES 2 DRINK TICKETS & APPETIZERS)
NEW MEMBERS: FREE WITH 1ST YEARS DUES

MEMBERSHIP DUES -ACTIVE & ASSOCIATES - \$35/YEAR

STUDENTS: FREE 1ST YEAR SPONSORED BY SOCIETY \$15.00 RENEWAL BRING YOUR COLLEAGUES! INVITE NEW MEMBERS!





#### THURSDAY, SEPTEMBER 28, 2023 5:00 pm - 7:00 pm



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MEMBERS/GUESTS: \$10 (INCLUDES 2 DRINK TICKETS & APPETIZERS)
NEW MEMBERS: FREE WITH 1ST YEARS DUES

MEMBERSHIP DUES -ACTIVE & ASSOCIATES - \$35/YEAR

STUDENTS: FREE 1ST YEAR SPONSORED BY SOCIETY \$15.00 RENEWAL BRING YOUR COLLEAGUES! INVITE NEW MEMBERS!

# Let's Play GOLF

#### MONDAY, OCTOBER 2, 2023 BAYOU OAKS AT CITY PARK

New Orleans, LA **9:00 AM SHOTGUN START** 

All Proceeds Benefit
Northshore Food Bank



501(c)(3) nonprofit

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Sunday, October 1
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vs Buccaneers



Volunteers Needed!

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October 7, 2023





Volunteers needed for Super Saurus Saturday
October 7th 11 am -3 pm
The dinosaurs will roam the

Louisiana Children's Museum in City Park.

Join in on this fun-filled event!



To volunteer contact
Tom Bergeon

Tombergeon.geo@gmail.com



# Coniziana GeoXeus

A New Orleans Geological Society Publication

SEPTEMBER 2023

# IS IT TIME FOR NOGS TO PUBLISH A NEW ATLAS?

by Chris McLindon



**Above:** University research projects that have used oil and industry seismic data to study faults that extend to the surface.

One of the most enduring legacies of the New Orleans Geological Society has been the set of 15 geological atlases published between 1960 These have provided detailed and 2010. geological interpretation on nearly 400 oil and gas fields across south Louisiana and offshore. The atlases have been invaluable tools in oil and gas exploration for over 60 years, and are now finding new life in carbon capture and storage. CCS operators use them to explore for and evaluate potential storage sites, and Class VI permit applications for CO2 injection require assessments of oil and gas accumulations in the vicinity of the storage site. Expect to see a lot more citations of the NOGS atlases in CCS permit applications in the coming years.

I suggest that it is time to think about the publication of a new NOGS geological atlas the South Louisiana Fault and Salt Atlas. The fault atlas project actually had its beginnings almost 10 years ago. Ed Picou, Art Johnson and I agreed to begin to pursue the concept of pulling together university research on faults into a comprehensive atlas. I had recently begun working to provide access to industry seismic data for area universities to study faults, and it was clear that seismic could be used to map faults that appeared to extend to the surface, and may be having impacts on surface morphology and ecology. The idea was that if we could get enough university research going through seismic donations and internships, we

# Conisiana GeoReus

could get enough interpretation to begin to assemble an atlas for publication.

About a year later I was approached by Dr. "Chip" Groat of the Louisiana Geological Survey. Chip Groat had previously been director of the USGS and CEO of the Water Institute of the Gulf. He was aware of the capabilities of mapping faults with seismic data, and of their potential impacts at the surface. Groat, who was working cooperatively with Woody Gagliano, proposed that NOGS and LGS join in an atlas project that he called the Louisiana Coastal Geohazards Atlas. believed that characterizing faults as potential geohazards could help to bring funding to the project. LGS already had a sizable body of work to contribute in the surface escarpments they had mapped with LIDAR digital elevation models. LGS assembled an atlas committee that included Chip Groat and Woody Gagliano, Paul Heinrich, Rick McCulloh and John Johnston of LGS,myself, Liz McDade and Mike Merritt of NOGS, and university professors Jeff Hanor of LSU, Gary Kinsland and Raphael Gottardi of ULL, Mark Kulp of UNO and Nancye Dawers of Tulane.

In the ensuing years we were able to provide access to seismic data for 11 university fault research projects at UNO, Tulane, ULL and LSU. Progress was slow, and it became increasingly difficult to get access to data. In the latter part of the 2010s, the retirement of Chip Groat and Paul Heinrich and the deaths of Woody Gagliano and Rick McCulloch were major setbacks for the project. Then COVID hit, and the Coastal Geohazards went into a full hiatus. The scope of the projects that were completed was simply not enough to construct an atlas. I still believe that the results of this research are significant. Take a minute to browse the resulting theses and dissertations to get a sense of the quality of the work. I think this body of work provides a solid foundation on

which to reinitiate the process of constructing an atlas.

There are two potential ways to move forward. and they are not mutually exclusive. One is to seek industry funding to purchase research licenses for seismic data. I think that if seismic licenses were to be used for university research only and it the licenses terminated at the end of the research, it would be possible to negotiate a favorable cost structure with the seismic companies. NOGS could attempt to coordinate funding, but it would be very helpful to have the cooperation of groups like LOGA and LMOGA. option second would be to accept interpretations from industry geologists. There is actually precedent for this in Oklahoma. After the number of earthquakes began to rise in the state in the early 2010s, it was determined that wastewater being injected near to faults that extended to the basement was the primary cause. It became necessary to map faults in order to guide waste water injection regulation. The Oklahoma Geological Survey put out a call to industry to contribute fault interpretations, preferably from 3-D seismic. The industry responded, many contributing anonymously, and OGS compiled a state-wide fault atlas, which is available on their website.

A similar atlas for south Louisiana would have wide-ranging applications including planning and execution, coastal sustainability planning, flood protection and infrastructure management and subsidence studies. I suggest that the first step for NOGS would be to form an atlas committee. The group would initially meet to discuss strategy, but it could eventually act as an expert panel to certify interpretations for inclusion in the atlas. NOGS arguably has some of the best in the business at subsurface and seismic fault interpretation, and certification by an expert panel could lead to that atlas being accepted for publication by LGS or USGS.







Calling for donations for the upcoming

#### AAPG Caughey-Zimmermann Energy Library

LSU AAPG is developing a library that will provide a **wealth of valuable resources** to students. Our goal is to foster a **collaborative environment** where students can **explore** topics in petroleum geology, **empowering** them to **pursue careers** in the energy sector... **BUT WE NEED YOUR** <u>HELP!</u>

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- ✓ Physical book donations
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Follow the link to learn how to donate!

https://bit.ly/3 WfLuGa



### **DRILL BITS**



### OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES BY AL BAKER

During July 2023, the **Bureau of Safety and Environmental Enforcement (BSEE)** approved 69 Gulf of Mexico (GoM) drilling permits. Seven of the permits were for shelf wells, and the remaining 62 permits were for deepwater wells. There were 2 new well permits issued in deep water.

The 2 deepwater new well permits were for 1 exploration well and 1 development well. **Kosmos Energy Gulf of Mexico Operations** received the exploratory well permit for their Keathley Canyon 964 #4 well (Tiberius Prospect) in Hadrian South Field. **Anadarko Petroleum** obtained the development well permit for their Green Canyon 563 #2 well (Warrior Prospect). This well will test Miocene objectives and is an offset to K2 Field.

On July 28th, **S&P Global Petrodata** indicated that the GoM mobile offshore rig supply stood at 49, which is 2 greater than last month. The marketed rig supply consisted of 36 rigs, of which 30 were under contract. The marketed rig supply and the contracted rig supply numbers are also 2 greater than last month. The marketed contracted versus total rig supply utilization rate stood at 73.5%, and the marketed contracted versus marketed supply utilization rate stood at 83.3%. By comparison, the July 2022 total fleet utilization rate stood at 82.4% with 34 rigs under contract out of the 46 rigs in the fleet.

On July 28th, **Baker Hughes** reported that there are 19 active mobile offshore rigs in the GoM, which is 1 more than last month and 63.3% of the rigs under contract mentioned above. Currently, 3 rigs are drilling on the shelf, and 16 rigs are drilling in deepwater. Two shelf rigs are located in the Vermilion Area, and 1 shelf rig is situated in the Eugene Island Area. The deepwater rigs include 6 rigs in the Mississippi Canyon Area, 2 rigs each in the Walker Ridge, Green Canyon, Alaminos Canyon and Alaminos Canyon Areas and 1 rig each in the Garden Banks and Ewing Bank Areas.

On July 28th, the **Baker Hughes** total U.S. rig count stood at 664 rigs, which is 10 <u>less</u> than reported at the end of June 2023. Of the 664 rigs, 529 (79.7%) are oil rigs and 128 (19.3%) are gas rigs. Seven rigs are listed as miscellaneous. A year ago, there were 767 rigs working in the U.S. inferring that the current rig figure represents an 13.4% decrease in rigs year over year. Presently, Texas continues to have the largest number of rigs with 322, which is 48.5% of the total number of rigs in the U. S. Louisiana currently has a total of 51 rigs, which is 8 greater than last month. Louisiana ranks third behind New Mexico, which has 111 rigs.

On June 26th, the **Bureau of Ocean Energy Management (BOEM)** finalized the Phase 2 acceptance of bids received at GoM OCS Sale 259 held on March 29, 2023. A total of 299 bids were accepted, and 14 bids were rejected as insufficient. All of the rejected bids were on deepwater tracts.

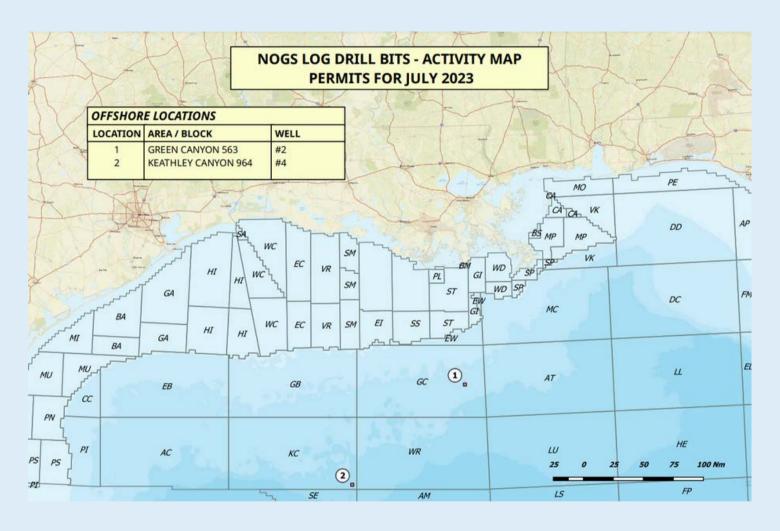
#### The next proposed offshore lease sale, Sale 261, is scheduled for September 27, 2023.

On July 26th, **Hess** announced that it made an oil discovery at the Pickerel-1 exploration well located in Mississippi Canyon Block 727. The well found approximately 90 feet of net pay in a high quality, oil-bearing Miocene reservoir. Hess plans to tie back the discovery well to the Tubular Bells production platform. They anticipate first production in mid-2024.

### **DRILL BITS**



#### NEW WELL PERMITS OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES MAP BY KEVIN TROSCLAIR







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PHOTOGRAPHY BY ARTHUR

Arthur F. Christensen

arthur\_shalimar@yahoo.com

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# 2023 Scholarships Recipients

#### Cirus Kalugana

Cirus Kalugana is a first-year PhD student and teacher's assistant at Tulane University. He grew up surrounded by the volcanic mountains of Eastern Uganda, where geologic hazards such as landslides, flooding and volcanic eruptions constantly disrupted his and his family's lives. He became interested in the Earth Sciences so he could better understand these types of natural disasters. Cirus is currently working with Professor Cynthia Ebinger to understand the dynamics and evolution of the Kivu rift, part of the East African rift system, using observational seismology.

Cirus's hobbies include learning new techniques in Python and MATLAB, as well as reading history and fiction books. Once he graduates, his plans are to become a prominent seismologist. He aspires to work with educational and research organizations to develop new and advanced techniques for studying the Earth's subsurface. In the long run, he would like to study with other related fields to assess the impacts of these Earth processes on human life.

#### Kayla Willis

Kayla Willis is a junior and research assistant at Tulane University. She grew up in Missouri, where she began collecting rocks at a young age. This and a fascination with rock formations led her to take AP Environmental Science in high school and join the Outdoor Youth Corps. Her main research interest is carbon sequestration in coastal Louisiana.

Kayla's hobbies include gardening, attending rock and mineral conventions, reading, hiking, and baking. Her plans following graduation include modeling and studying the response of Louisiana's coast to climate change and anthropogenic impacts such as from levees and sediment diversions. She also plans to use her coordinate major in computer science to better understand the modeling programs to assist her in graduate school, with the ultimate goal of becoming a research assistant.



#### **Emily Kraus**

Emily Kraus is an environmental earth science senior at Tulane University while minoring in marine biology. Emily grew up just outside of New Orleans, where coastal land loss was a constant theme throughout her life. She became motivated to study geology and environmental studies after witnessing her family's personal impacts of climate change on Louisiana's coast, such as Hurricanes Katrina and Ida. Her current focus at Tulane is preserving and restoring the place she calls home, the coast of Louisiana.

Emily enjoys hiking, swimming, and yoga with friends and family. She also enjoys cooking and watching television programs like "Chopped" and "Planet Earth." After graduation, she plans on pursuing a PhD in Oceanography. Her future research interests include coastal science, erosional and depositional processes, methods of wetland reconstruction, and natural and anthropogenic subsidence processes.

#### Mikey Sison

Mike Sison is a senior and research assistant at Tulane University studying environmental science and computer science. He grew up in Cleveland, Ohio, where he first became interested in geology while playing football with his father when he tripped over a rock, picked it up and discovered the beauty that it displayed on the side that was unexposed to the elements. Since then, he has been an avid rock collector. Mike's educational interests include machine learning and modeling for environmental systems. He is a member of Tulane's Earth and Environmental Science Club, Chess Club, and Theta Tau Professional Engineering Fraternity.

During his free time, Mike enjoys fishing, surfing, chess, hiking and camping. Once he gets his degree, his future plans are to either join ESRI or another remote sensing company where his unique talents in computer science will mesh well with an environmentally-focused group, or explore entrepreneurship in New Orleans in a potential startup focused on carbon sequestration and rewilding.



#### Mary (Mae) Roach

Mary Roach is a senior geology major at Louisiana State University. She grew up in New Orleans and has always been a curious person, especially about science. As a child, she always liked rocks, fossils, and especially minerals. Her favorite subject growing up was earth science, followed by chemistry later in life. She enjoys conducting research, with primary interests in mineralogy, geochemistry, and petrology. She is currently president of LSU's Geology Club.

During her free time, Mary enjoys reading, writing, hiking, and rock climbing. When she graduates from LSU, she wants to go into academia and conduct her own research, ultimately achieving a master's degree and/or PhD.

#### Mustuque Munim

Mustuque Munim is a second-year Geology and Geophyics PhD student at Louisiana State University. Originally from Bangladesh, he views geologists as detectives of the earth, much like the detectives he read about in books as a child. According to him, it is the role of geologists to unravel the mysteries of planetary bodies from their present condition. At LSU, he currently has two research projects – one is unraveling climate variability and evolution of Asian monsoons using isotope geochemistry, molecular biomarkers, climate dynamics, and times series analysis of sediment core from South China Sea. The other is molecular and mineralogic perspectives on the paleolimnology, paleohydrology, and paleotemperature of the latest Eocene Florissant Formation at Clare's Quarry, Colorado, USA. He is currently a member of GSA, AGU, AAPG, and Society for Sedimentary Geology.

Mustuque enjoys reading papers, experimenting in the lab, playing with his son, watching documentaries, and trekking across hilly terrains to collect rocks and fossils. After graduation, he plans on working for a national lab to develop paleo and future oceanographic models of Earth or Mars while continuing his studies and providing research opportunities for younger generations.



#### Michael Barnard

Michael Barnard is a graduate student at Louisiana State University. He is from Houston, Texas and became interested in geology after realizing his original plans of pursuing a chemistry degree involved too much math. He finds rocks fascinating and likes to be outside, so he decided it was the right choice for him. At LSU, he studies tourmalinites and their environments of formation with Dr. Barbara Dutrow. He is also a member of AAPG, GSA, the Mineralogical Society of America, and LSU's Geology Club.

Michael is also interested in cooking a variety of dishes, including homemade pasta and tomato sauce, and studying the Early Modern Period of human history. After graduation, he would like to work in the mining industry exploring new rare earth element resources.

#### Rorisang Kgoadi

Rorisang Kgoadi is a rising junior at Louisiana State University. He became interested in geology when he took a geology class and participated in research during his freshmen year and fell in love with the subject. His particular points of interest include rift systems and how the surrounding environment changes as a result of the evolution of the tectonic setting. He currently belongs to Research Ambassadors and LSU's Geology Club.

Besides staring at rocks all day, Rorisang is an avid lover of cooking a mean gumbo, baking delicious brownies, and beating anyone at Mario Kart. He also enjoys reading, biking, board games, and practicing music. Once he receives his undergraduate degree, he plans on enrolling in graduate school, most likely leading him into a PhD program that he will use to pursue a career at an educational institute.



# THE UNIVERSITY of **NEW ORLEANS**

## 2023 Scholarships Scholarships Recipients

#### **Emily Mailhos**

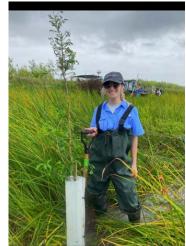
Emily Mailhos is a senior in Earth and Environmental Science at the University of New Orleans. She first became interested in geology during her freshman year of college after taking a few geology classes. From there, she fell in love with everything the UNO department had to offer. Her primary research interest is coastal sciences, including studing the effects of Mardi Gras beads on freshwater mussels. She is a member of the Society for Earth and Environmental Sciences (SEES) and president of Zeta Tau Alpha Soroity.

In her free time, Emily volunteers with Fisher Middle and High School as a cheer coach. She will be graduating from UNO in December, and she plans on pursuing a masters degree at UNO. From there, she hopes to work for an oil and gas plant.

#### Katelyn Merrill

Katelyn Merrill is a junior at the University of New Orleans. Originally from New England, she first became interested in geology as she traveled the U.S. while living out of her car and sleeping in a hammock in national forests. She was particularly fascinated by the rock formations in Nevada and the vastness of the Mojave Desert. She has seen the beauty this country has to offer, and hopes to help undo the damage humans have done to this planet. She is a member of Phi Theta Kappa Honor Society and the National Society of Leadership and Success.

Katelyn enjoys adventures in nature with her partner and friends, cycling, roller blading, listening to and playing music, reading, thunderstorms, learning about new discoveries, and making art. After graduation, she hopes to get a job in the field of Earth and Environmental Sciences as soon as possible so she can gain hands-on experience. She would also like to pursue graduate school in the future.









#### Barrie Sullivan

Barrie Sullivan is a senior at the University of New Orleans. She first became interested in geology when she when she was younger and traveled with her family across the U.S. to major geological sites such as the Grand Canyon, Great Sand Dunes, Petrified Forest, and Monument Valley. She also traveled often with her grandfather, a retired science teacher, to the beach, where she was fascinated by the geologic processes that formed the places where she has such fond memories. Her research has included studying fish in Bayou St. John and conducting sampling surveys across the state of Alabama. She is currently the president of SEES, Treasure of UNO's AAPG Chapter, and a member of the UNO Filmmakers Club.

Barrie enjoys crochet, cosplay, and reading. After graduation, she plans on enrolling in graduate school with the hope of earning a doctorate in Earth and Environmental Sciences.

#### **Donald Davidson**

Donald Davidson is a graduate student at the University of New Orleans. Growing up near Mount St. Helens in Seattle, he first became interested in geology at a young age and read many books about volcanoes. Since moving to New Orleans, he has been fascinated by the Mississippi River and it's powerful and destructive forces. His research interests include estuarine ecology and utilizing collaborative experiences to help maximize Louisiana's coastal wetland conservation and restoration plans. He is the current treasurer of UNO's Society of Earth and Environmental Sciences.

Donald's hobbies include music, hiking, birding, kayaking, and photography. After graduation, he plans on looking for positions that offer challenging, collaborative opportunities that will allow him to continue to learn and assist in the conservation of estuarine environments.

# PICTURE FROM THE PAST





NOGS Officers 1985-86

(left to right)

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Submitted by Christy Himel, NOGS Administrator



#### **Energy Transition** Research Symposium

Sponsored by the Louisiana Board of Regents and hosted by the LSU Center for Energy Studies, the inaugural Energy Transition Research Symposium aims to bring together energy researchers from across the state and across disciplines. Participating organizations include Louisiana Department of Natural Resources, Louisiana Legislative Auditor, Louisiana State University, Louisiana Tech University, McNeese State University, Southern University, Tulane University, University of Louisiana at Lafayette, and University of New Orleans. Representatives from all academic disciplines are welcome and encouraged to attend. Government and industry, as well as out-of-state researchers whose work focuses on Louisiana energy issues, are also invited to participate.

#### Call for papers!

Researchers are invited to submit an abstract or full working paper to be included in the program.

A <u>template</u> is available for use but not required.

Deadline for submissions: August 18

Agenda finalized: September 8

Date of Symposium: October 6





Admission is free!

Advance registration is required.

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Thank you once again for your continued support and for being an invaluable part of NOGS.



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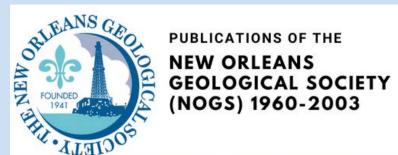


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