

44th Annual Technical Conference of the National Association of Black Geoscientists

CONFERENCE AGENDA

Wednesday, September 3					
Session Time (MDT)	Title	Presenter	Location		
10.00AM - 2.00PM	Pathways to Geoscience Careers. High School Leadership Event	The National Energy Education Development Program & Shell	CANCELLED		
12:00 - 5:00 PM	CCUS Short Course	Dr. Manika Prasad	Green Center 200F		
2:00 - 5:30 PM	Data Analytics Short Course	Dr. Eileen Martin, Dr. Tobi Ore, Hafiz Issah	Green Center 200A		
4:00 - 6:00 PM	Hydrogeology Short Course	Dr. Adrienne Marshall Moses Adebayo	Berthoud Hall & Clear Creek		
6:30 - 9:00 PM	Welcome Reception / Check-in		Mines Museum of Earth Science		

CONFERENCE AGENDA

Thursday, September 4					
Session Time (MDT)	Title	Speaker	Location		
7:30 - 8:00 AM	Check-in/Registration		Green Center Lobby		
8:00 - 8:30 AM	Conference Welcome and Opening Remarks	Tramond Baisden President, NABG Dr. Alexis Sitchler Colorado School of Mines	Friedhoff 1		
8:30 - 9:00 AM	Exhibitor Intros	All Exhibitors	Friedhoff 1		
9:00 - 9:15 AM		Oluwaseyi Dasho	Friedhoff 1		
9:15 - 9:30 AM		Riliwan Abioye			
9:30 - 9:45 AM	Oral Presentations Segment 1	Damilola Ajewole			
9:45 - 10:00 AM	Segment i	Temidayo Popoola			
10:00 - 10:15 AM		Emmanuel Audu			
10:15 - 10:25 AM		BREAK			
10:25 - 10:40 AM		Caroline Apraku	Friedhoff 1		
10:40 - 10:55 AM	Oral Presentations	Beatrice Ogbuagu			
10:55 - 11:10 AM	Segment 2	Charlotte Annan			
11:10 - 11:25 AM		Zantia King			
11:25 - 11:55 AM	Tech Talk: Subsurface Predictions and Decision Making	Kimbra Quezergue ExxonMobil	Friedhoff 1		
11:55 AM - 1:20 PM	LUNCH				
12:20 - 1:00 PM	Brown Bag Lunch Talk: Workforce Gap and Challenges	Dr. John Bradford Colorado School of Mines	Friedhoff 1		
1:00 - 1:10 PM	BREAK				
1:10 - 2:50 PM	Workshop: Mapping your Mentor Network	ADVANCEGeo Partnership	Friedhoff 1		
2:50 - 3:00 PM	BREAK				
	Lightning Talks Segment 1	Kashauna Mason	Friedhoff 1		
		Eli Nyawunu			
3:00 - 3:50 PM		Nicollette Mitchell			
		Raven McRae			
		Rachel Iweka			
		Olalekan Alamoh			
3:50 - 4:00 PM	BREAK				
4:00 - 6:00 PM	Poster Presentations : Session 1		Friedhoff 2		
4:00 - 6:00 PM	Exhibitor Booths + Networking		Green Center Lobby		

CONFERENCE AGENDA

Friday, September 5						
Session Time (MDT)	Title	Speaker	Location			
7:30 - 8:00 AM	Check-in/Registration		Green Center Lobby			
8:00 - 8:10 AM	Welcome & Logistics		Friedhoff 1			
8:10 - 9:40 AM	Oral presentations Segment 3	TBD	Friedhoff 1			
		Tobechukwu Ude-Akpeh				
		Emuobosa Patience Ojoboh				
		Ariyanna Reedy				
		Richard Asirifi				
		Nicollette Mitchell				
9:40 - 9:50 AM		BREAK				
		Barnabas Adeyemi				
		Phylindia Gant				
9:50 - 11:20 AM	Oral presentations	Tochukwu Onyebum	Friedhoff 1			
9.50 - 11.20 AIVI	Segment 4	Ahmed Adeyekun	- Friedrion			
		Patrick Morton				
		TBD				
11:20 - 12:00 PM	LUNCH					
12:00 - 12:45 PM	Keynote Address	Dr. Melissa A. Burt Colorado State University	Friedhoff 1			
12:45 - 1:00 PM	BREAK					
1:00 - 1:30 PM	Geology at the Heart of the Energy Transition	Olamide Dada, CPA Heelstone Renewable Energy	Friedhoff 1			
1:30 - 2:00 PM	Global Initiatives, International Partnerships, and Building Inclusive Research Communities	Dr. John Bradford , CSM Dr. Luka Powanga, Regis U.	Friedhoff 1			
2:00 - 2:10 PM	BREAK					
2:10 - 2:50 PM	Geoscience Townhall	Karena Gill Arizona State University Sherilyn Williams-Stroud Texas A&M	Friedhoff 1			
2:50 - 3:40 PM	Lightning Talks Segment 2	Khalil Buckmire	- Friedhoff 1			
		Jane Onu				
		Greatness Ojum				
		Raymond Aderoju				
3:40 - 5:30 PM	Poster Session 2		Friedhoff 2			
3:40 - 5:30 PM	Exhibitor Booths + Networking		Green Center Lobby			
5:30 - 6:00 PM	BREAK					
6:00 - 6:30 PM	Conference Closing & Awards		Friedhoff 1			
6:30 - 8:30 PM	Student Social		Friedhoff 1/2			

ORAL & LIGHTNING TALKS - THURSDAY, 9/4

- 3. Oluwaseyi Dasho Graduate Student Virginia Tech
 UNCOVERING HIDDEN FLOOD RISKS: THE ROLE OF LAND SUBSIDENCE IN AFRICAN
 COASTAL CITIES
- 4. Riliwan Abioye Graduate Student University of South Carolina, School of the Earth, Ocean, and Environment (SEOE), Columbia, SC ESTIMATION OF THE DEPTH TO THE GROUNDWATER IN COASTAL AREAS: A COMPARISON OF GIS AND MODFLOW APPROACHES
- 5. Damilola Ajewole Graduate Student Baylor University, Department of Biology, Waco, TX CHARACTERIZING FRESHWATER SOURCES IN NORTHERN WISCONSIN STREAMS WITH STABLE ISOTOPES OF WATER AND GEOCHEMICAL TRACERS
- 6. Temidayo Popoola Graduate Student Texas Tech University, Department of Geosciences, Lubbock, TX

MODELING HOUSING DAMAGE FROM HURRICANE HARVEY IN HARRIS COUNTY: A TRACT-LEVEL ANALYSIS OF COMPOUND FLOOD VULNERABILITY

- 7. Emmanuel Audu Graduate Student University of Nebraska-Lincoln, Department of Earth and Atmospheric Sciences, Lincoln, NE UNCERTAINTY IN SUMMER PRECIPITATION PROJECTIONS OVER THE GREAT PLAINS: CONTRASTING ROLES OF NORTH ATLANTIC SSTS AND LAND-ATMOSPHERE COUPLING
- 8. Caroline Apraku Graduate Student Tennessee State University
 URBAN SOIL MOISTURE DYNAMICS UNDER LOCAL MICROCLIMATE EXTREMES IN
 TENNESSEE
- Beatrice Ogbuagu Graduate Student University of South Dakota, Department of Sustainability and the Environment
 MAPPING DUST: SOURCE AREAS IN UTAH'S GREAT BASIN
- 10. Charlotte Annan Graduate Student Georgia State University, Department of Chemistry (Geology), Atlanta, GA
 SYSTEMATIC ANALYSIS OF RADON EMANATION ACROSS SOIL HORIZONS
- 11. Zantia King Undergraduate Student Midwestern State University, Kimbell School of Geosciences, Wichita Falls, Texas
 URBAN TREE BIOMASS AND CARBON STORAGE IN NORTH TEXAS: A TERRESTRIAL LIDAR-BASED APPROACH

ORAL & LIGHTNING TALKS - THURSDAY, 9/4

- 13. Kashauna Mason Graduate Student Texas A&M University
 QUANTIFYING GRAIN SHAPE IN THREE DIMENSIONS: ADVANCING MORPHOLOGICAL
 TECHNIQUES FOR PLANETARY SAMPLES
- 14. Eli Nyawunu Graduate Student University of Texas at El Paso, Department of Earth, Environmental, and Resource Sciences, El Paso, TX
 THE LINKAGE OF ABOVE- AND BELOWGROUND STRUCTURAL DIVERSITY WITH SOIL FUNCTION IN A SHRUB-INVADED DRYLAND OF THE NORTHERN CHIHUAHUAN DESERT
- 15. Nicollette Mitchell Graduate Student Vanderbilt University
 FROM SEEDS TO GIANT SEQUOIA TREES: EXPLORING THE FORMATIVE ROLE OF
 EQUITABLE GEOSCIENCE PEDAGOGY FOR BLACK WOMENS' THRIVING
- 16. Raven McRae Undergraduate Student The Pennsylvania State University, Department of Geosciences, State College, PA LEGACY OF NEGLECT
- 17. Rachel Iweka Graduate Student Indiana University Indianapolis, Department of Eath and Environmental Sciences, Indianapolis, IN COMMUNITY SCIENCE APPROACHES TO SOIL AND DUST LEAD CONTAMINATION IN MOBILE, ALABAMA
- 18. Olalekan Alamoh Professional Environmental Community Action
 GEOSPATIAL INTELLIGENCE FOR CRITICAL ENERGY INFRASTRUCTURE PROTECTION
 IN THE UNITED STATES

POSTER SESSION 1 - THURSDAY, 9/4

20. Rohanna Bowers - Graduate Student - University of Utah, Department of Geology and Geophysics, Salt Lake City, UT

CARBON STORAGE POTENTIAL IN UTAH: CHARACTERIZING THE NAVAJO SANDSTONE

21. Daphne Varmah - Undergraduate Student - Texas Christian University, Department of Geological Sciences, Fort Worth, TX

A STUDY OF FOSSILIZED ROOT COLONIES AS INDICATORS OF PAST WATER TABLE LEVELS IN THE COLL DE MONTLLOBAR

22. Raymond Aderoju - Graduate Student - Department of Geology, University of Georgia, Athens, GA

PORE-SCALE MODELING OF DISSOLUTION-DRIVEN ALTERATIONS IN SANDSTONE RESERVOIRS FOR ENHANCED CO₂ STORAGE

23. Daniel Chukwudi - Graduate Student - Illinois State University, Department of Geography, Geology, and the Environment, Normal, IL

LONG TERM IMPACT OF FLOATING WETLANDS ON NUTRIENT REDUCTION IN URBAN STREAMS

24. Spencer Williams - Graduate Student - Kent State University, Department of Earth Sciences, Kent, OH

EMPLOYNG REMOTE SENSING TECHNIQUES TO UNDERSTAND SEASONAL CHANGES IN WATER QUALITY – MUSKINGUM CONSERVATORY WATERSHED DISTRICT (MCWD)

25. Christabel Abugu - Graduate Student - Illinois State University, Department of Geography, Geology and the Environment

SUPPORTING GROUNDWATER RECHARGE RESEARCH: SOIL ASSESSMENT AND FIELD SITE PREPARATION AT A KANSAS STUDY SITE

26. Michael Mbah - Graduate Student - Texas Christian University, Department of Geological Sciences

GEOCHEMISTRY OF SELECTED EDIACARAN AND CAMBRIAN IGNEOUS ROCK UNITS IN THE WICHITA MOUNTAINS IN THE SOUTHERN OKLAHOMA AULACOGEN

27. Sadiq Rijiya - Graduate Student - Texas A&M University
GEOCHEMICAL CONSTRAINTS ON OAE 2 FROM THE BENUE TROUGH: INSIGHTS INTO
REDOX DYNAMICS AND VOLCANIC INPUTS

POSTER SESSION 1 - THURSDAY, 9/4

- 28. Joseph Mayala Nsingi Graduate Student Montclair State University
 THE MIOCENE-PLIOCENE PALEOENVIRONMENTAL CONDITIONS OF THE IODP 395
 U1562 C, BJÖRN DRIFT SITE
- 29. Oghenevwede Efobo Graduate Student Department of Earth, Atmosphere and Environment, Northern Illinois University, 1425 W. Lincoln Hwy, DeKalb, IL 60115, USA MODELING GROUNDWATER SUSTAINABILITY UNDER URBANIZATION AND CLIMATE STRESS IN THE ETHIOPE RIVER CATCHMENT, NIGERIA
- 30. Franklin Ijigade Graduate Student Illinois State University EXPLORING NITRATE REDUCTION IN A SATURATED RIPARIAN BUFFER THROUGH A THREE-DIMENSIONAL REACTIVE TRANSPORT MODEL IN AN AGRICULTURAL AREA, MCLEAN COUNTY, CENTRAL ILLINOIS
- 31. Elvis Owusu Graduate Student Texas Christian University, Department of Geological Science, Fort Worth Texas
 SPATIOTEMPORAL EVOLUTION IN HYDROGEOCHEMISTRY OF GROUNDWATER IN ECOREGIONS OF TEXAS (1985-2014)
- 32. Mazvita M. Chikomo Graduate Student Rutgers University, The State University of New Jersey (New Brunswick), Earth and Planetary Sciences Department, NJ GLOBAL WETLAND DYNAMICS SINCE THE LAST GLACIAL MAXIMUM REVEAL WETTER GLACIAL WORLD AND REGIONALLY DISTINCT PATTERNS OF CHANGE
- 33. Hannah Lartey Graduate Student Illinois State University, Department of Geography, Geology and Environment, Normal, IL UNDERSTANDING PHOSPHORUS LOAD TRENDS AND CONTROLLING FACTORS IN ILLINOIS WATERSHEDS
- 34. Meagan Figueroa Undergraduate Student Rutgers University, Department of Earth and Environmental Sciences, Newark, NJ CHARACTERIZING MAGNETIC MINEROLOGY IN HANFORD VADOSE ZONE SEDIMENTS USING NUCLEAR MAGNETIC RESONANCE (WASHINGTON, USA)
- 35. Kaila Lewis Undergraduate Student Rutgers University, Newark, Department of Earth and Environmental Sciences, NJ 07102

EXAMINING THE INFLUENCE OF SOIL SATURATION AND SALINITY ON SPECTRAL INDUCED POLARIZATION MEASUREMENTS

POSTER SESSION 1 - THURSDAY, 9/4

- 36. Kriti Panta Graduate Student Illinois State University
 ASSESSING GLACIAL MASS CHANGE AND ITS IMPACT ON WATER RESOURCES IN
 PARTS OF THE HIMALAYAS USING SATELLITE REMOTE SENSING
- 37. Jackline Timah Graduate Student Illinois State University, Department of Geography, Geology and the Environment HIGH-RESOLUTION MAPPING OF SOIL MOISTURE VARIATION USING UAS THERMAL AND MULTISPECTRAL IMAGERY
- 38. Rebecca Ayanwunmi Graduate Student Temple University, Department of Earth and Environmental science
 MECHANICAL STABILIZATION OF MIGMATITE GNEISS DERIVED LATERITIC SOILS FROM IBADAN TOLL-GATE
- 39. Sharif Coker Graduate Student Miami University, Department of Geology and Environmental Earth Science, Oxford, OH ASSESSMENT OF AVAILABILITY AND ACCESSIBILITY OF HAZARD WARNINGS IN CASCADIA TO IMPROVE EQUITY IN DISASTER RISK REDUCTION

ORAL & LIGHTNING TALKS - FRIDAY, 9/5

- 41. Tobechukwu Ude-Akpeh Graduate Student University of Texas Permian Basin INTEGRATED RESERVOIR MODELING FOR CO₂ INJECTION AT TOMBOY (TMB) FIELD, NIGER DELTA
- 42. Emuobosa Patience Ojoboh Graduate Student University of Tulsa RESEARCH TITLE: APPLICATION OF THE LOCAL EXTREME LEARNING MACHINES (LOCELM) TO THE ACOUSTIC WAVE EQUATION
- 43. Ariyanna Reedy Undergraduate Student Fort Valley State University, Department of Chemistry, Fort Valley, GA
 SPATIAL AND TEMPORAL DISTRIBUTION OF INDUCED SEISMICITY LINKED TO
 HYDRAULIC FRACTURING IN THE EAGLE FORD SHALE PLAY, SOUTHERN TEXAS
- 44. Richard Asirifi Graduate Student Texas A&M University, Department of Geology & Geophysics, College Station, TX
 SEQUENTIAL FRACTURE ACTIVATION AND STRESS EVOLUTION DURING EGS
 STIMULATION AT UTAH FORGE REVEALED BY WAVEFORM CROSS-CORRELATION
- 45. Nicollette Mitchell Graduate Student Vanderbilt University
 FROM SEEDS TO GIANT SEQUOIA TREES: EXPLORING THE FORMATIVE ROLE OF
 EQUITABLE GEOSCIENCE PEDAGOGY FOR BLACK WOMENS' THRIVING
- 46. Barnabas Adeyemi Graduate Student Stevens Institute of Technology, Department of Civil Engineering, Hoboken, NJ PORE-SCALE STUDY ON THE POSITIVE FEEDBACK BETWEEN STRESS AND POROSITY IN PRESSURE SOLUTION OF POROUS MEDIA
- 47. Phylindia Gant Graduate Student University of Florida HOT SPRINGS, COLD CLUES: USING GC-MS TO UNEARTH BIOSIGNATURES IN ICELANDIC DEPOSITS
- 48. Tochukwu Onyebum Graduate Student University of Nebraska-Lincoln, Department of Earth and Atmospheric Sciences, Lincoln, NE CRUSTAL ARCHITECTURE AND TECTONIC EVOLUTION OF THE TYRRHENIAN SEA: INSIGHTS FROM INTEGRATED GEOPHYSICAL MODELING.

ORAL & LIGHTNING TALKS - FRIDAY, 9/5

49. Ahmed Adeyekun - Graduate Student - West Chester University, Department of Earth and Space sciences, West Chester, PA

REMOTE SENSING OF MORPHOLOGICAL CHANGES IN THE BIRD'S FOOT DELTA, MISSISSIPPI RIVER.

Patrick Morton - Professional - Department of Interior, Appraisal and Valuation Services
 Office, Division of Minerals

Evaluation

UNBIASED MINERAL VALUATION SERVICES FOR FEDERAL AGENCIES

- 52. Khalil Buckmire Graduate Student The Pennsylvania State University APPLICATION OF PHYSICS-INFORMED MACHINE LEARNING FOR REACTIVE TRANSPORT OF GEOCHEMICAL FLUIDS IN COMPLEX RESERVOIRS
- 53. Jane Onu Graduate Student Colorado School of Mines
 IS GEOSCIENCE AT THE CORE OF EFFECTIVE OIL AND GAS WELL DECOMMISSIONING?

 INSIGHTS FROM PLUGGING AND ABANDONMENT PRACTICES
- 54. Greatness Ojum Graduate Student University of Arizona
 LEEB HARDNESS TESTING FOR ROCK STRENGTH ESTIMATION: A CASE STUDY FROM
 THE BINGHAM CANYON MINE:
- 55. Raymond Aderoju Graduate Student Department of Geology, University of Georgia, Athens, GA

INTEGRATED CORE LOGGING AND 3D BLOCK MODELING FOR RESERVE ESTIMATION IN CENTRAL GEORGIA KAOLIN DEPOSITS

POSTER SESSION 2 - FRIDAY, 9/5

- 57. William White Undergraduate Student Fort Valley State University, GEOPAths GEOPATHS SUMMER TRAINEESHIP PROGRAM IN GEOPHYSICAL TECHNIQUES AT FORT VALLEY STATE UNIVERSITY
- 58. Maurice Releford Undergraduate Student Fort Valley State University
 IMAGING THE SUBSURFACE USING GROUND PENETRATING RADAR (GPR): A SUMMER
 TRAINEESHIP PROGRAM AT FORT VALLEY STATE UNIVERSITY
- 59. Sandra Hardy Professional The University of Texas at El Paso CIELO-G DRIVING GEOSCIENCE TRANSFORMATION REFLECTIONS AND IMPACT AT YEAR THREE OF CIELO-G
- 60. Olaniyi Anisere Graduate Student Louisiana State University, Department of Geology and Geophysics, LSU
- EFFECT OF LIGHT ELEMENTS ON THE MELTING BEHAVIOR OF LIQUID IRON ALLOYS UNDER EARTH'S INNER CORE BOUNDARY CONDITIONS.
- 61. Precious Oso Graduate Student University of Kansas, Department of Geology PRELIMINARY FACIES AND MINERALOGICAL ANALYSIS OF PENNSYLVANIAN BLACK SHALES FROM CORE SAMPLES IN KANSAS
- 62. Keneni Godana Graduate Student University of California, Santa Barbara INVESTIGATION OF ELASTIC FOCUSING EFFECTS ON APPARENT ATTENUATION USING MID-OCEAN RIDGE MODELS
- 63. Joseph Awuku Graduate Student Texas A&M University
 APPLICATIONS OF NUCLEAR MAGNETIC RESONANCE FOR HYDROGEOLOGIC
 CHARACTERIZATION IN A SAND-SILT-CLAY COLUMN
- 64. Samuel Ofori Graduate Student Georgia Institute of Technology, Department of Earth and Atmospheric Sciences, Atlanta, GA
 CONSTRAINTS OF UPPER MANTLE THERMODYNAMICS WITH THE VERY BROADBAND RHEOLOGY CALCULATOR AND MAGNETOTELLURIC OBSERVATIONS
- 65. Obson Joseph Undergraduate Student Rutgers University-Newark, Department of earth and science, Newark, NJ
- INVESTIGATING COASTAL FOREST HEALTH AND FRESHWATER-SALTWATER DYNAMICS USING ELECTRICAL GEOPHYSICS

POSTER SESSION 2 - FRIDAY, 9/5

- 66. Keiana Mazzio Graduate Student Miami University, Department of Geology and Environmental Earth Science, Oxford, OH INVESTIGATING HUMAN INDUCED SEISMICITY IN THE EAGLE FORD SHALE PLAY: EVIDENCE FOR HYDRAULIC FRACTURING CORRELATING WITH INCREASING MAGNITUDES OF SEISMICITY
- 67. Lawrence Arthur Graduate Student Texas A&M University
 CONTINUOUS DAS SURVEILLANCE: AUTOMATED IDENTIFICATION OF TRAIN PASSAGES
 AND AIRCRAFT LANDING
- 68. Ibrahim Isiaka Graduate Student Virginia Polytechnic Institute and State University, Geosciences Department, Blacksburg, VA PROBABILISTIC MODELING OF VERTICAL LAND MOTION (VLM) USING INSAR TIME SERIES AT LOUIS ARMSTRONG AIRPORT, NEW ORLEANS
- 69. Randall Walker Graduate Student University of Texas at El Paso, Department of Earth, Environmental, and Resource Sciences, El Paso, TX SCIENCE MISSION OPERATIONS FOR THE 2024 AUGMENTED REALITY DATA VISUALIZATION ANALOG RESEARCH CAMPAIGN (ARDVARC) ANALOG LUNAR ROVER DEPLOYMENT
- 70. Dorothy Mwanzia Graduate Student Colorado School of Mines CO₂ EFFECTS ON ELASTIC AND PETROPHYSICAL PROPERTIES OF SALINE RESERVOIR ROCKS
- 71. Autumn Williams Undergraduate Student University of Texas at El Paso LINKING SEISMIC VELOCITY AND CRYSTAL FABRIC IN GLACIER SHEAR MARGINS
- 72. Oluwatofunmi Adeboye Graduate Student University of Hawaii at Manoa, Department of Earth Sciences, Honolulu, HI SHEAR WAVE SPLITTING ANALYSIS IN THE GALÁPAGOS HOTSPOT AND SPREADING CENTER

POSTER SESSION 2 - FRIDAY, 9/5

73. Ayomiposi Falade - Graduate Student - University of Memphis, Center for Earthquake Research and Information, Memphis, TN EFFECT OF RUPTURE DIRECTIVITY ON SLOPE STABILITY IN NEW MADRID SEISMIC ZONE.

74. Rebecca Ayanwunmi - Graduate Student - Department of Earth and Environmental science, Temple University, Philadelphia, PA, USA.

MINERALOGICAL, GEOCHEMICAL AND INDUSTRIAL EVALUATION OF KAOLINITIC CLAY OCCURRENCE IN IKERE-EKITI AREA, SOUTH WEST, NIGERIA