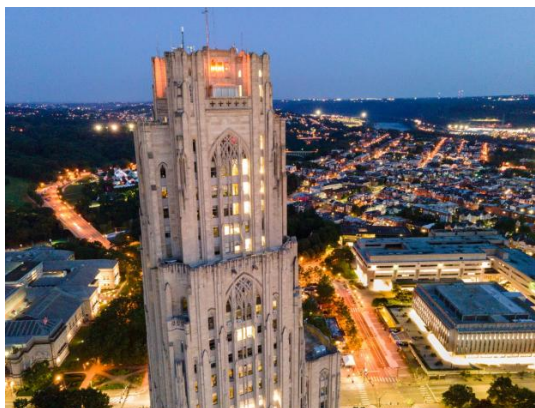


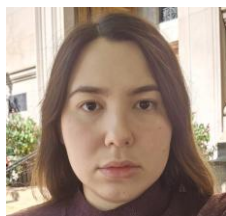


DEPARTMENT OF GEOLOGY & ENVIRONMENTAL SCIENCE

AGU 2025 PRESENTERS

MONDAY, DECEMBER 15

Luisa Vieira Lucchese
Room 225 - 227
Time: 09:05 – 09:15



H11F - Applications of Machine Learning in Large-Scale Hydrology and Water Quality Modeling I Oral

Abstract: Global River Suspended Sediment Flux from Space using Highly Scalable Deep Learning Models

Evan Ramos
Room 252 - 254
Time: 09:50 – 09:58



EP11B: Earth Surface Processes and the Global Carbon Cycle I Oral

Abstract: Time-dependent controls of clay mineral formation impact the net alkalinity generation from rock weathering

Claire Mock
Halls E-G (Poster Hall)
Time: 14:15 – 17:45



EP13D: Earth Surface Processes and the Global Carbon Cycle III Poster

Abstract: Hydrologic and geomorphic controls on bedrock organic carbon export

Hailey Sinon
Halls E-G (Poster Hall)
Time: 14:15 – 17:15



B13F: The Resilience and Vulnerability of Arctic and Boreal Ecosystems to Climate Change III Poster

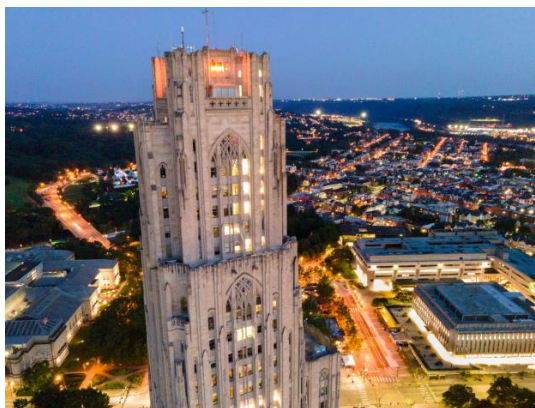
Abstract: Radiocarbon Age-Offsets from Birch Lake, Alaska Identify Large Shifts in Carbon Cycling During Holocene Establishment of Discontinuous Permafrost and Boreal Forests

Tashane Boothe Lordon
Room 352
Time: 17:00 – 17:10



V14A: Advances in Earth Resource Knowledge: Critical Minerals, Geothermal Systems, and the Path to a Sustainable Future I Oral

Abstract: Microbial and pH Control on Oxy-hydroxide Precipitation and Critical Metal Sequestration in Drainable Limestone Bed Acid Mine Drainage Treatment Systems



DEPARTMENT OF GEOLOGY & ENVIRONMENTAL SCIENCE

AGU 2025 PRESENTERS

TUESDAY, DECEMBER 16

Jamie Vornlocher

Halls E-G (Poster Hall) Time:

Time: 08:30 - 12:00



PP21D: Drought, Deluge, Fire, and Heat: Integrating Proxy and Model Approaches to Paleoclimate in the Western United States I Poster

Abstract: Abrupt Climate Variability Across Late MIS 4 to Middle MIS 3 Captured within Leaf Wax Lipids from Fish Lake, Utah

Michael Ramsey

Room 352

Time: 14:15 - 15:45



V23A: Volcano Processes, Monitoring, and Hazards II Oral

Abstract: Monitoring proximal volcanic emissions with the new era of high-resolution thermal infrared sensors

Adeel Jehangir

Halls E-G (Poster Hall) Time:

Time: 14:15 - 17:45



PP23C: Advanced Understanding of Tropical-Subtropical Hydroclimate Changes During the Pleistocene, Holocene, and Anthropocene III Poster

Abstract: Holocene Hydroclimate variations from Analyses of Lake Cores across South to North Transect of Pakistan

Anthony Schneider

Halls E-G (Poster Hall) Time:

Time: 14:15 - 17:45



H23J: Advancements in the Fate, Transport, Transformation, and Remediation of Contaminants in the Environment VII Poster

Abstract: Sedimentary Signatures of Industrialization: A Geochemical Investigation of Trace Metals and Sedimentation in a Legacy Industrial Water Supply Reservoir



DEPARTMENT OF GEOLOGY & ENVIRONMENTAL SCIENCE

AGU 2025 PRESENTERS

WEDNESDAY, DECEMBER 17

Eli Hall
Halls E-G (Poster Hall)
Time: 8:30 – 12:00



H31V: Stable Isotopes and Other Tracers in the Critical Zone: Hydrological Processes, Chemical Weathering, and Hydrochronology I Poster

Abstract: Investigating Nutrient Dynamics of the Allegheny Reservoir Using Stable Isotopes of Nitrate

Noah Jemison
Halls E-G (Poster Hall)
Time: 8:30 – 12:00



H31V: Stable Isotopes and Other Tracers in the Critical Zone: Hydrological Processes, Chemical Weathering, and Hydrochronology I Poster

Abstract: Impact of clay mineralogy on lithium isotope fractionation during rock weathering

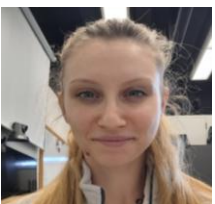
Luisa Vieira Lucchese
Halls E-G (Poster Hall)
Time: 8:30 – 12:00



NH31C - Assessing Tropical Cyclone Hazards and Risk in a Changing Climate System I Poster

Abstract: Quantifying Riverine Sediment Transport due to Tropical Cyclones in the Eastern United States

Sophie Pailot-Bonnétat
Room 353
Time: 14:45 – 14:55



V33C: Shaping the Future of Volcanic Hazard Monitoring and Forecasting I Oral

Abstract: Global Monitoring and Precursory Eruption Detection: Application of Convolutional Neural Networks to the ASTER Thermal Infrared Volcanic Archive

Daniel Williams
Room 353
Time: 15:15 – 15:25



V33C: Shaping the Future of Volcanic Hazard Monitoring and Forecasting I Oral

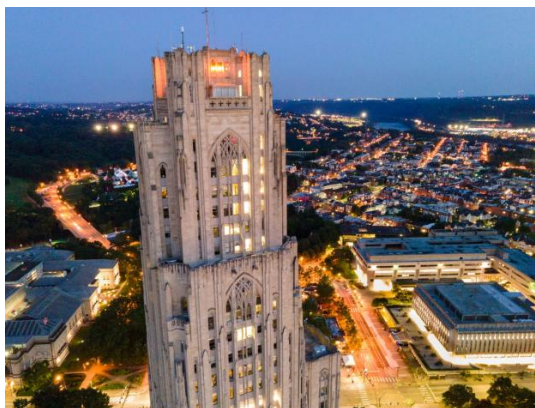
Abstract: Modeling the Spatiotemporal Changes in Volcanic Ash Composition from Space using Thermal Emission Spectroscopy

Hwiseo Choi
Room 238 - 239
Time: 17:11 – 17:21



H34H: Stable Isotopes and Other Tracers in the Critical Zone: Hydrological Processes, Chemical Weathering, and Hydrochronology II Oral

Abstract: Lithium Isotopes as Tracers of Silicate Weathering Intensity and Clay Formation in the East River Watershed, Colorado



DEPARTMENT OF GEOLOGY & ENVIRONMENTAL SCIENCE

AGU 2025 PRESENTERS

WEDNESDAY, DECEMBER 17 – online

Mohamed Hamdallah
Presenting Online
Time: 14:15 - 17:45



**NG33B-VR8799Applying Machine Learning on
Reflection Seismic and Well Logging Data to Identify
Gas- and Brine-Saturated Reservoir Zones**

THURSDAY, DECEMBER 18

Fan Gao
Halls E-G (Poster Hall)
Time: 08:30 – 12:00



**EP41E: Earth and Planetary Surface Processes General
Contributions Poster**

Abstract: Eastward Drainage-divide Migrations Driven by the
Spatial Variations in Precipitation and Tectonic Uplift Contribute to
the Formation of the Parallel Rivers in the Hengduan Mountains,
Southeastern Tibet

Godspower Ubit
Room 252 - 254
Time: 17:10 – 17:20



**GC44A: Climate Change, Variability, and Impacts in
Central and South America II Oral**

Abstract: Exploring the last two Millennia of Climate &
Environmental Change in Central Chile: Insights from Lago
NN Tantauco (42.8°S), Isla Grande de Chiloe

FRIDAY, DECEMBER 19

Laura Lopera Congote
Halls E-G (Poster Hall)
Time: 08:30 - 12:00



**GC51G: Climate Change, Variability, and Impacts in
Central and South America III Poster**

Abstract: High Andean hydroclimate variability response under
different boundary conditions: a comparison between the
Holocene, MIS 7 and MIS 11

SATURDAY, DECEMBER 20

Adnan Deshaee
Room 255 – 257
Time: 08:30 – 08:40



**H51H: Sources, Fate, and Transport of Metals, Metalloids,
and Rare Earth Elements in Fresh Waters II Oral**

Abstract: Tracing Boron Sources in Urban Streams