

OPEN HOUSE

DISCOVER EARTH SCIENCE

Saturday, October 19, 2024

10:00am-4:00pm

LAMONT-DOHERTY EARTH OBSERVATORY
COLUMBIA CLIMATE SCHOOL



SHUTTLE BUS INFORMATION

- **120th Street, Manhattan to LDEO:** Buses depart for the LDEO campus from 120th Street (between Amsterdam and Broadway, in front of Teachers College) in 15-minute increments beginning at 9:15 am until 1:15 pm.
- **LDEO to 120th Street:** Buses return to 120th street from LDEO in 15-minute increments beginning at 11:00 am through 12:30 pm and from 1:30 pm ending at 4:00 pm.
- **CRESTRON Parking Lot to/from LDEO:** Shuttle buses run continuously from 10:00 am to 3:00 pm (Open House event parking closes at 3pm) arriving and departing in front of the Geoscience Conference Building at LDEO.

We gratefully acknowledge the generous support of our sponsors:



South Orangetown Ambulance Corps

LECTURES AT OPEN HOUSE

Featuring Lamont-Doherty Earth Observatory and Columbia University Professors, Researchers and Scientists

Exhibit 12

MONELL BUILDING AUDITORIUM

- 11:00 am **Making Waves - Lamont's Contributions to Seafloor Mapping: Past, Present, and Future**, Vicki Ferrini, Sheila Cáceres, Tinah Martin
- 12:00 pm **Air Pollution and Climate Change Impacts**, Daniel Westervelt
- 1:00 pm **The Impact of Micro- & Nano-Plastics and Sustainable Solutions**, Beizhan Yan
- 2:00 pm **Research from the Field**, Einat Lev, Folarin Kolawole, Nicolas Young

Exhibit 7

GARY C. COMER GEOCHEMISTRY BUILDING

Seminar Room, 1st Floor

- 11:30 am **Geologic Time - Time is deep — How do we know?**, Alberto Malinverno
- 12:30 pm **Citizen Science to Track Child Exposure to Lead on Three Continents**, Lex van Geen
- 1:30 pm **Black Holes, Gravitational Lenses, and Red Shifts: Geodesy Weaves Einstein's General Relativity into Daily Life**, Jim Davis
- 2:30 pm **Geoscience Education Research: How People Think and Learn about the Earth and Environment**, Kim Kastens

Exhibit 5B

SEISMOLOGY SEMINAR ROOM
2nd Floor

- 11:30 am **NJ Jolts NYC: The Recent Magnitude 4.8 Earthquake in Tewksbury Township, NJ**
LDEO Seismologists
- 12:30 pm **Is Bangladesh Doomed to Drown? Sea Level Rise Versus Dynamics of the World's Largest Delta**, Michael Steckler
- 1:30 pm **Lamont's Role in Studying Mid-Ocean Ridges: From Faults and Volcanics to Continental Flooding Events**, Roger Buck

Exhibit 2

GEOSCIENCE CONFERENCE ROOM, 1st Floor

- 10:00 am **Earth2Class: Bringing Research to Your Classroom**, Michael Passow
- 2:00 pm **Earth2Class: Bringing Research to Your Classroom**, Michael Passow
(same talk as 10am)

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* Last shuttle buses to Morningside Campus and CRESTRON Parking Lot leave at 4:00 pm

EXPLORE THE EXHIBIT AREAS

- 1. WELCOME | GIFT SHOP TENT**
Kids' Scavenger Hunt • Programs • Geology Tour Sign-ups • Gift Shop
- 2. EARTH2CLASS** Mini-Workshops (*schedule on back*) • Eco Dendro-Hike Tour Signups
- 3. CORE REPOSITORY** Thousands of Cores, Rocks & Sediments
- 4. CENTER FOR INTERNATIONAL EARTH SCIENCE INFORMATION NETWORK**
- 5. SEISMOLOGY, GEOLOGY & TECTONOPHYSICS**
5A: Rock Mechanics • Tools of the Trade: Ocean Bottom Seismology
5B: Sea Level Change: Back to the Future • Sounds of Seismology! • Tidal Forcing & Tiny Earthquakes
- 6. BIOLOGY & PALEO ENVIRONMENT** Carbon Secrets: Exploring Soil and Forest Carbon at Lamont Sanctuary Forest • Chromatography Bookmarks • Climate Change Research at the Arctic Long-term Ecological Research Station • OLO BE TALOHA • Coastal Marshes of New York...What is Their Value, and How Do We Save Them? • Greenland's Amazing Fossils Below the Ice Sheet Hudson River Glacial Clay Left by the Last Ice Age • Let's Party in a Puddle!
- 7. GEOCHEMISTRY | EARTH SCIENCE LECTURES**
7A: Soil & Paint Lead Sampling • Marine Life Under Threat from Plastic Pollution • Race for safe water Groundwater - A Precious Resource
7B: Space Rocks! • Secondary School Field Research Program • Interactive Exhibits on Paleo-CO2 and Climate and Air Pollution • Ocean Nutrients and Biology • Experience Life as a Scientist onboard a Research Vessel • Where is the Source? Pre-Contact Quarries in the Metropolitan Area • Earth Science Lectures (*schedule on back*)
- 8. VOLCANOES | LAVA FLOWS**
- 9. OCEAN & CLIMATE PHYSICS**
Warming Stripes and CO2 • Hurricanes • Rotating Tank • Cloud in a Bottle • CO2 Absorption • Absorption of Radiation by Carbon Dioxide • Ocean Circulation • Saltwater Tasting • Atmospheric Chemistry • Air Quality
- 10. IN SEARCH OF EARTH'S SECRETS**
JOIDES Resolution Research Vessel Pop-Up Science Experience
- 11. VOLCANO FILMS**
- 12. EARTH SCIENCE LECTURES | ART EXHIBITS** Earth Science Lectures (*schedule on back*) • Research As Art Exhibit • Climate Disasters Inspired by Great Masters, Art Exhibit by Mary Tiegreen
- 13. MARINE & POLAR GEOPHYSICS**
Sound in Water • Polar Explorer & Thwaites Explorer • Polar Climate & Our Polar CAP Ambassadors • Hudson River Field Station • Glacier Hauntologies • Bangladesh: Coping with Sea Level Rise and Tectonics • Ice Flows! • Satellite Radar Interferometry • Polar Expeditions • Polar Puzzles • IcePod
- 14. TREE-RING LAB** Tree-Ring Samples & Field Photography
- 15. BATHTUB SCIENCE**
- 16. MARINE/LARGE PROGRAMS** In Search of Earth's Secrets • GeoMapApp • Ocean Mapping • Marie Tharp exhibit • Office of Marine Operation