



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

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|----------|---|
| 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

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| 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

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| 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

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|----------|---|
| 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) |

OPENHOUSE.LDEO.COLUMBIA.EDU #LamontRocks





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

SPECIAL EXHIBITS

A. 75 Years of Discovery

B. Warming Stripes

C. Visit the Olmsted Perennial Garden