

SHRUTI S. PHILIPS
shruti.philips@hunter.cuny.edu

EDUCATION

Ph. D. 1999

The Graduate School of the City University of New York, Earth and Environmental Sciences

M. Phil. 1995

The Graduate School of the City University of New York, Earth and Environmental Sciences

Post-Masters Diploma in Mineral Exploration, 1990

The University of Poona, India, Department of Geology

MSc. in Geology, 1989

The University of Poona, India, Department of Geology

BSc. in Geology with a minor in Chemistry and Botany, 1987

Fergusson College of the University of Poona, India, Department of Geology

TEACHING / WORK EXPERIENCE

Doctoral Lecturer in Earth Science, 2022 to present.

Adjunct Assistant Professor, 2002 to 2004; 2007 to 2022

Hunter College of the City University of New York, Department of Geography and Environmental Science

- Courses taught:
 - GEOL 100 Introduction to Geology
 - GEOL 101 Introductory Geology Lab
 - GEOL 105 Introduction to Environmental Studies
 - GEOL 180 Introduction to Oceanography
 - GEOL 205 Environmental Geology
 - PGEOG 250 and PGEOG 251 Earth System Science Lab
 - GEOL 280 Marine Geology.
- Designed in-person and virtual curricula in geology, oceanography, and environmental science.
- Supervised teaching assistants and adjuncts in core undergraduate geology courses.
- Mentored students and supervised capstone and independent study projects.
- Created learning materials and 'Geology at Hunter' website <http://www.geo.hunter.cuny.edu/geology/> to support virtual instruction for Geology labs.
- Manage and maintain the department's rocks, minerals, and the USGS map collection.

Catalyst Scholarship Program, 2012, 2013

Hunter College of the City University of New York, Department of Geography and

Environmental Science

- Mentored undergraduate students in the Catalyst scholarship program.

Guest lecturer, summer 2010

Department of Geology, Fergusson College of the University of Poona, India

- Lectured to graduate students in the MSc.in Geology Program
- Topic: **Long-Term global climate change**

Adjunct Assistant Professor, 2004 to 2010

Dyson College of Pace University, New York, Department of Chemistry & Physical sciences

- Designed and taught laboratory-based curricula for undergraduate courses
 - SCI 101 'Planet Earth
 - SCI 145 'Environmental Geology
 - SCI 170 'Oceanography

Substitute Assistant Professor, 2004-2006

School of Earth & Environmental Sciences, Queens College of the City University of New York

- Taught lecture and laboratory undergraduate courses in earth and environmental science:
 - ENSI 111 Introduction to the Environment
 - ENSI 112 Our Changing Planet

Adjunct Lecturer, 1993 to 1994; 1996 to 1998

Brooklyn College of the City University of New York, Department of Geology

- Taught lecture and laboratory undergraduate courses in **Fundamentals of Geology**.

Graduate Assistant, 1991 to 1993

Lehman College of the City University of New York, Department of Geology and Geography

- Assisted the teaching staff and managed the geology labs and materials.

RESEARCH EXPERIENCE

Dissertation Research, 1992 to 1999

American Museum of Natural History, New York; The Rensselaer Polytechnic Institute, Troy, New York; Rensselaer Center of Applied Geology, Troy, New York.

- **Conducted field studies** of the Cambro-Ordovician carbonate platform strata of the Galway, Hoyt, Little Falls, Gailor and Tribes Hill formations exposed in the vicinity of Saratoga Springs and lower Mohawk valley, New York.
- Performed **cathodoluminescence** and **microprobe analysis** of rock specimens in thin section using petrographic microscope.
- Results included '**facies analysis**' and the '**diagenetic history**' of limestones and dolostones exposed in the lower Mohawk Valley, New York.

Research Assistant, 1991

Hunter College of the City University of New York, Department of Geography and Geology

- Worked on a **cartography project** ‘Taxi’, to digitize a map of Manhattan for taxi drivers using programming in C.

Post-graduate research in Mineral Exploration, 1989-1990

Department of Geology - The University of Poona, India, Geological Survey of India, Indian Space Research Organization, and Bhabha Atomic Research Centre of the Government of India.

- Conducted **geological mapping, petrographic study, and geochemical analysis** of nickeliferous laterite deposits overlying the Precambrian Chromite-bearing ultrabasic rocks of the Vagda mine area in Kankavli, Maharashtra, India.
- Trained in **mapping** with the Geological Survey of India, **digital image processing** with the Indian Space Research Organization and **ore dressing** at the Bhabha Atomic Research Centre of the Government of India.
- Used **geophysical methods of gravity and magnetic measurements** to map and detect buried dikes in the Deccan Trap terrain on the outskirts of Mumbai, Maharashtra, India
- Conducted **geochemical analysis and petrographic study** of garnets and mafic minerals from Archean pyroxene granulites and associated Banded Iron Formations of Salem, Tamil Nadu which is part of the Precambrian high-grade metamorphic terrain of South India.

PUBLICATIONS

Rutberg, R., and **Philips S. S.**, 2018, A Literary Companion to Geology, Cognella Academic Publishing.

Philips, S.S., and Friedman, G.M., 2001, Carbonate diagenesis and dolomitization of Cambro-Ordovician (Sauk Sequence) platform strata in central New York: Depositional environments, Parasequences, and Facies: *Northeastern Geology and Environmental Sciences*, v. 23, no. 2, p. 127-169.

Philips, S.S., and Friedman, G.M., 2001, Carbonate diagenesis and dolomitization of Cambro-Ordovician (Sauk Sequence) platform strata in central New York: Part 2, *Northeastern Geology and Environmental Sciences*, v. 23, no.3, p. 205-252.

Philips, S. S., and Friedman, G.M., 1995, Carbonate diagenesis and dolomitization of Cambro-Ordovician (Sauk Sequence) platform strata in central New York (abstract): *AAPG Bulletin*, v. 79, no.9, p.1417. Presented at the AAPG/ES-NYSGA meeting.

INDEPENDENT STUDY AND HONORS THESIS SUPERVISION

Maria E. Viruez, 2016, (BA Environmental Management and Policy) Honors Thesis: An Analysis of the Differences Between the Solid Waste Management Systems in New York and Bolivia, as Representatives of the Global North and Global South, and the Role the Populace Plays in Improving the Systems for Both.

Jose Cleofas, 2016, Individual study: Large Igneous Provinces and Mass Extinctions: Is There a Direct Causal Link?

Morgan Schacker, 2015, (BA Environmental Studies) Honors Thesis: Geothermal Energy and Potential: Iceland vs. the U.S.

Suzanne Mikhail-Lee, 2014, (BA Environmental Studies) Honors Thesis: Earthquakes of New York City and Vicinity.

Peeloshmee Deonarain, 2013, Individual study: Carbon Sequestration as a Means of Mitigating Climate Change.