



## Next Generation Environmental Sensor Laboratory (NGENS)

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### ABOUT THE ASRC

The **Advanced Science Research Center (ASRC)** at The Graduate Center of The City University of New York (CUNY) is an internationally recognized center of excellence in interdisciplinary scientific research and discovery. The ASRC's world-leading scientists in nanoscience, structural biology, photonics, neuroscience, and environmental science have formed a distinctive research culture—one that is creative, collaborative, and convergent—within a state-of-the-art building, sparking innovative approaches to solve complex scientific problems, with implications for human health and society.



## Next Generation Environmental Sensor Lab

The Sensor Lab is an open resource for environmental sensors. We have high-end reference instruments for:

- trace gases
- greenhouse gases
- volatile organic compounds
- particulates
- radiation
- noise
- phenology and thermal imaging
- soil and water analysis

In addition, we work with low-cost sensors, control and communication modules, and characterization and calibration chambers for designing and deploying sensors and sensor networks in the urban and exurban settings.

### OBSERVATORY

The lab also manages the rooftop observatory that provides an ideal space in upper Manhattan to stage instrumentation for urban air monitoring.

### INSTRUMENTATION

- CO<sub>2</sub>/H<sub>2</sub>O analyzer (Li-Cor LI-850)
- CH<sub>4</sub>/CO<sub>2</sub>/H<sub>2</sub>O portable platform (LI-7810)
- NO<sub>2</sub>/NO/NO<sub>x</sub> monitor (2B 405nm)
- O<sub>3</sub> monitor
- Aerosol and PM monitors
- C-N analyzer (Elementar Vario Max)
- Thermal Imager
- Regulatory sensors

### DESIGN & FABRICATION

The Sensor Lab has a design and fabrication facility to prototype and stage environmental sensors, enclosures and fixtures. It has: CNC mill, lathe, 3D printer, laser cutting, hand & woodworking tools, CAD workstations, electronic testing and measurement.

### YOUR SENSOR REQUIREMENTS

Whether it is a simple humidity sensor evaluation or a regulatory O<sub>3</sub> monitoring study, we can help you get results in your research and insight into your measurements.