



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

- CO₂/H₂O analyzer (Li-Cor LI-850)
- CH₄/CO₂/H₂O portable platform (LI-7810)
- NO₂/NO/NO_x monitor (2B 405nm)
- O₃ 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 O₃ monitoring study, we can help you get results in your research and insight into your measurements.