

# CUNY ADVANCED SCIENCE RESEARCH CENTER



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### Advanced Laboratory for Chemical and Isotopic Signatures (ALCIS)

The **Advanced Laboratory for Chemical and Isotopic Signatures (ALCIS)** will host cutting-edge instrumentation in support of researchers at the forefront of developing new analytical isotopic techniques.

The facility currently has the ability to **analyze isotopes of hydrogen, carbon, nitrogen, oxygen, and sulfur in almost any compound** in a variety of environmental and biological samples including solids, liquids, pure and mixed gases including atmospheric samples.

In addition to on-site testing, researchers will be able to **submit samples for routine isotopic analyses**.

The facility welcomes users from CUNY and other institutions regardless of academic level, in addition to start-up companies and industry.

For more information:  
[asrc.cuny.edu/facilities](http://asrc.cuny.edu/facilities)

### Available Instrumentation

The ALCIS is equipped with the following gas source mass spectrometers and peripheral devices for measurement of natural abundance stable isotope ratios

#### Gas Source Mass Spectrometers:

Thermo-Scientific MAT 253 Plus IRMS  
Thermo-Scientific Delta V Plus IRMS

#### Peripheral Devices:

ConFlo-IV  
Gas Bench II  
Flash HT Plus (TC/EA)  
GC-Isolink

*Planned expansion for late 2017 with the addition of a Thermo-Fisher Neptune High Resolution Multi-Collector ICP-MS*

#### Main research areas include:

Groundwater Flow Dynamics  
Paleoclimate and Paleohydrology  
Geochemistry  
Atmospheric Chemistry  
Ecosystem Nutrient Cycling  
Organic Contaminants in the Environment

