



Oxy-Anion Stable Isotope Consortium

Louisiana State University

High Quality

Timely delivery

Reasonable Price

Fostering collaboration

Who are we?

Oxy-Anion Stable Isotope Consortium (OASIC) was established by Prof. Huiming Bao in 2001 at Louisiana State University (U.S.A). OASIC's research and educational activities are relevant to energy, environment, and human well-being. OASIC is now offering high-quality stable isotope ratio measurement services to the greater research, government, and industrial communities.

What facilities do we have?

OASIC currently hosts two isotope ratio mass spectrometers (MAT253 and Isoprime 100) and one Infrared laser isotopic water analyzer (Los Gatos IWA-35d-EP with auto-injector). The lab has the capabilities of analyzing isotopes of hydrogen (water), carbon, nitrogen, oxygen, and sulfur. In addition, a laser fluorination line has the ability to analyze triple oxygen isotope compositions for most silicates, oxides, phosphates, nitrates, and sulfates, which makes OASIC stand out among stable isotope laboratories in the world.

Lab website: <http://www.geol.lsu.edu/Faculty/Bao/OASIC-2014.html>

What service do we provide?

We analyze the common isotope compositions δD , $\delta^{13}C$, $\delta^{15}N$, $\delta^{18}O$, and $\delta^{34}S$ of diverse organic or inorganic materials. In addition, OASIC is specialized in $\Delta^{17}O$ analysis (natural or doped). Please see our analytical methods and precision on the back. We also provide reference materials and services on sample extraction and purification, data interpretation, and training.

How to contact us?

It is important that you contact [Dr. Yongbo Peng \(ypeng@lsu.edu\)](mailto:ypeng@lsu.edu), Tel: 001-225-578-3413) before sending samples. We must make sure we understand your needs, the nature of your samples, and the timeline before we accept your business.

If you are sending samples from China, simply contact [Dr. Dong Feng \(feng@scsio.ac.cn\)](mailto:feng@scsio.ac.cn) Tel: 86-20-8902-2336). He will ship your samples to us in a correct, speedy, and hassle-free fashion.

How to pay for the service?

A simple wire transfer. A both-party signed official service contract and an itemized invoice will be sent to you by Louisiana State University.

Analysis		Analytical Precision	Analyzer	Turnaround Time
Water (Liquid)	$\delta^{18}\text{O}$	0.03 ‰	Los Gatos laser absorption spectroscopy	1-2 weeks
	δD	0.2 ‰		
Sulfate Nitrate Phosphate Cellulose Oxides	$\delta^{18}\text{O}$	0.3 ‰	MAT253-TCEA	2-4 weeks
Nitrate	$\delta^{15}\text{N}$	0.3 ‰		
Sulfate Nitrate Phosphate Oxides	$\Delta^{17}\text{O}$	0.05 ‰	MAT253 dual inlet-Fluorination laser line system	2-4 weeks
Carbonate	$\delta^{13}\text{C}$	0.04 ‰	MAT253- Gas Bench	1-2 weeks
	$\delta^{18}\text{O}$	0.08 ‰		
Sulfate Sulfides Elemental and organic S	$\delta^{34}\text{S}$ and ‰S	0.2 ‰	Isoprime100-EA with TCD	1-2 weeks
Organic matter	$\delta^{13}\text{C}$ and ‰C	0.1 ‰	Isoprime100-EA with TCD	1-2 weeks
	$\delta^{15}\text{N}$ and ‰N	0.3 ‰		