

# ECOVISION

*A complete solution for stable isotope analysis in Ecology and Agronomy*



Small footprint



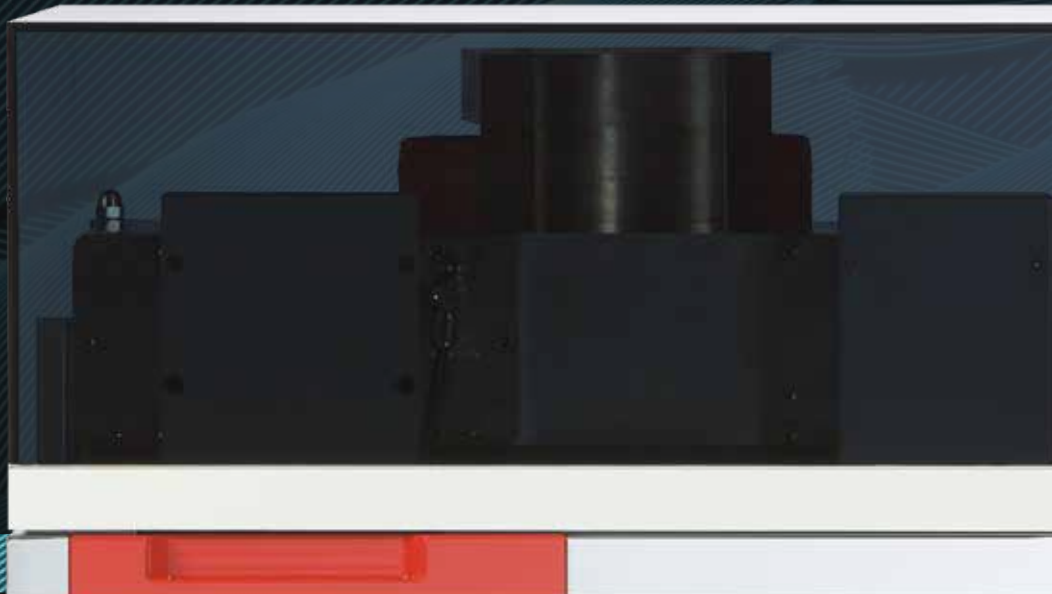
Ease of use



Advanced data analysis



Low cost of ownership



# ECOVISION

*Predator or  
Prey?*

**Stable isotope analysis has the power to deliver unparalleled insight into the complex interactions of the living world. It can elucidate complex ecosystems on land and at sea aiding conservation and shaping policy for protection of vulnerable species.**

In agriculture, stable isotope analysis brings great insight into the intricate dynamics of the crop / soil interface. Developing our understanding of these innate relationships aids our stewardship of the natural world to ensure that future generations enjoy the same wonders that we do today.

ECOVISION brings the insightful power of stable isotope analysis at a level of simplicity that has not been possible before, allowing more laboratories access to this incredible technique.

*A powerful combination.*

② Market leading **isoprime vision** stable isotope analyzer



## ionOS® is the most advanced stable isotope software ever produced.



### ionOS KEY FEATURES

ionOS works in concert with the **isoprime visION** and **centrION** to provide an unrivalled level of intelligent control. Designed completely from the ground up and uniquely for stable isotope analysis, ionOS is the most sophisticated yet simple software ever created. Its clean user interface belies the level of sophistication within, giving users unrivalled capabilities to generate exceptional data with ease.

Ecovision reclaims responsibility for sample analysis from the user by offering incredible functionality both pre- and post-acquisition significantly reducing instrument contact time.

- Incredible new capabilities for acquisition and data processing.
- Elegant user interface with contextual control.
- Intelligent and automatic instrument performance optimization.
- Instantaneous data processing with dynamically updating results.
- Import your data from 3<sup>rd</sup> party instruments.

## isoprime visION is the most elegantly simple stable isotope analyzer ever created.

Simplicity is what **isoprime visION** is about. Creating something simple seems, well, simple. In fact, simplicity can only be achieved once the fundamental requirements of our customers are understood. With this clarity, **isoprime visION** offers a completely new experience of stable isotope analysis. An experience where the user is free from the routine chores of maintenance allowing them to focus on the science, not the instrumentation.

**isoprime visION** offers exceptional bulk and compound specific isotope analysis through market leading technology from Elementar and Agilent Technologies. Harnessing this technical ability through the **isoprime visION** finally opens the power of stable isotopes to practically any laboratory.



### isoprime visION KEY FEATURES

- Almost 50 % smaller instrument than any other currently available
- Straightforward analysis and intelligent control for incredible ease of use
- Significantly reduced consumption of laboratory resources
- Good-For-Go control significantly reduces instrument contact time
- 100 V amplification for large dynamic range samples
- Unique purge & trap chromatography for exceptional separation of gases
- Zero blank ball valve sample introduction
- 10 year furnace warranty
- Auto sample dilution of large element concentrations
- Analysis of enriched minor isotopes as standard

Ⓢ Market leading elemental analyzer



## Ecovision ENHANCEMENTS

- Expand your research into microbial ecology by adding  $\delta^{13}\text{C}$  compound specific isotope analysis with Agilent 7890 GC
- For complete confidence in your GC-IRMS analysis, add the Agilent 5977A mass selective detector for simultaneous compound identification and isotope analysis
- Upgrade to the vario PYRO cube elemental analyzer for paleo-ecology applications such as  $\delta^{18}\text{O}$  analysis of chitin and apatite
- Complementary water analysis can be performed with the vario LIQUID sampler
- Perform accurate weighing with 6 figure analytical microbalance for high precision elemental analysis

Expand your research further.

### Ⓢ Elemental Analysis

Conversion of organic materials to sample gases prior to isotope analysis

### Ⓢ Isotope Analysis

Intelligent analysis of sample gases from GC & EA inlets

### Ⓢ Gas Chromatography

Separation of volatile organics and real time conversion to sample gases



## RESEARCH AREAS SERVED

- Academic aquatic and terrestrial ecology and paleo-ecology groups
- Public environmental protection labs
- Wildlife protection agencies

## SAMPLE TYPES ANALYZED

- Organic matter from all trophic levels of the food chain
- Ground-waters, plant waters
- Microscopic biota trapped on glass filters
- Materials enriched in minor isotopes for tracing energy flow



### Small footprint

Almost 50 % smaller than any other commercial stable isotope analyzer



### Ease of use

Good-For-Go control allows one click instrument set-up



### Advanced data analysis

The most powerful stable isotope data processing software ever created



### Low cost of ownership

Instrument sleep / wake-up functions for reduced consumption of resources

### Elementar – your partner for elemental analysis

Elementar is the world leader in high performance analysis of organic elements. Continuous innovation, creative solutions and comprehensive support form the foundation of the Elementar brand, ensuring our products continue to advance science across agriculture, chemical, environmental, energy, materials and forensics markets in more than 80 countries.

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