

**FOR IMMEDIATE RELEASE**

Media Contact Information:

Name: Deepali Mohindra

Phone: (408) 481-4272

Email: [deepali.mohindra@thermofisher.com](mailto:deepali.mohindra@thermofisher.com)

Website: [www.thermofisher.com](http://www.thermofisher.com)

Secondary Contact Information:

Aaron Kellogg

(617) 275-6526

[akellogg@greenoughcom.com](mailto:akellogg@greenoughcom.com)

**Thermo Fisher Scientific Couples Chromatography and Mass Spec Systems to Develop Method for Detecting Arsenic in Apple Juice**

*Instrument Combination and New Method Enable Food Safety Labs to Distinguish Between Organic and Inorganic Arsenic with High Sensitivity*

BREMEN, Germany (January 10, 2012) – Thermo Fisher Scientific Inc., the world leader in serving science, today announced that its Dionex ICS-5000 reagent-free ion chromatography system can be coupled with the Thermo Scientific XSERIES 2 ICP-Q-MS to create a proven IC-ICP-MS method for detecting trace elements, including levels of organic and inorganic arsenic in apple juice. A [Consumer Reports investigation](#) recently revealed elevated levels of arsenic in juice samples.

Thermo Fisher's highly sensitive and selective equipment can distinguish between both inorganic and organic types of arsenic. The distinction is important, as inorganic forms of arsenic are highly toxic whereas organic forms are not. Arsenic is a naturally-occurring element that is sometimes found in drinking water and fruit juices, entering during agricultural and industrial processes. Because typical levels of total arsenic found in apple juice are lower than the U.S. Environmental Protection Agency (EPA) drinking water maximum contaminant level, apple juice is generally considered safe and is currently not regulated.

"Thermo Fisher has developed a [highly sensitive and specific method](#) for analyzing arsenic levels in apple juice," said John W. Plohetski, vice president and general manager, ion chromatography/sample preparation business unit at Thermo Fisher. "The ability to distinguish between organic and inorganic forms of arsenic is critical, and our equipment is sensitive enough to capture that data accurately and reliably."

To demonstrate the capabilities of the combined Dionex ICS-5000 and Thermo Scientific XSERIES 2, Thermo Fisher tested four apple juice brands purchased from a local supermarket. Using the Dionex IC system for chromatographic separations and the XSERIES 2 mass spectrometer for identification, researchers developed a highly sensitive, routine IC-ICP-MS method for determining trace metal species, including arsenic. The method can be used in the analysis of different juices after a simple 10-fold dilution.

**About Thermo Fisher Scientific**

Thermo Fisher Scientific Inc. (NYSE: TMO) is the world leader in serving science. Our mission is to enable our customers to make the world healthier, cleaner and safer. With revenues of nearly \$11 billion, we have approximately 37,000 employees and serve customers within pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions and government agencies, as well as in environmental and process control industries. We create value for our key stakeholders through two premier brands, Thermo Scientific and Fisher Scientific, which offer a unique combination of continuous technology development and the most

convenient purchasing options. Our products and services help accelerate the pace of scientific discovery, and solve analytical challenges ranging from complex research to routine testing to field applications. Visit [www.thermofisher.com](http://www.thermofisher.com).

###