

News Spectrum

INDUSTRY

Thermo Electron Corporation (Waltham, Massachusetts) and **Fisher Scientific International** (Pittsburgh, Pennsylvania) recently announced a merger plan that would combine the companies in a deal worth \$10.6 billion.

The new company would be called Thermo Fisher Scientific, and would have 30,000 employees and 2007 revenues of more than \$9 billion. The combined company would offer customers integrated, end-to-end solutions in instrumentation, life science consumables, software, and services.

► **Bruker Daltonics Inc.** (Billerica, Massachusetts) recently announced that it has obtained registration of its MALDI-TOF product line of microflex, autoflex TOF or TOF/TOF, and ultraflex TOF/TOF mass spectrometers as medical devices from the Ministry of Health and Social Development of the Russian Federation.

Bruker Daltonics now has registered its flex series MALDI-TOF mass spectrometers as medical devices in the Russian Federation to facilitate upcoming regulatory approvals of novel mass-spectrometry based upon in vitro diagnostic assays by its Russian customers.

► **PerkinElmer, Inc.** (Shelton, Connecticut) recently

announced the acquisition of **Spectral Genomics, Inc.** (Houston, Texas), a leading company in molecular karyotyping technology used to evaluate chromosomal abnormalities.

Spectral Genomics' array products and analysis software help pharmaceutical, biotechnology, cytogenetic, and clinical researchers identify chromosomal abnormalities related to the study of cancer and pre- and post-natal genetic disorders.

► **Aspectrics, Inc.** (Pleasanton, California), a supplier of encoded photometric infrared spectroscopy (EP-IR) analyzers, recently announced that it plans to establish operations in Europe in the third quarter 2006. The company expects to begin hiring later this year.

EP-IR spectrometry is a new rugged, cost-effective IR technology for industrial process monitoring applications, designed to capture full spectrum information in the infrared region. Applications under development by Aspectrics' European System Integrators include ambient air and stack gas monitoring, hydrocarbon processing, engine emission analysis, foods, and semiconductor processes.

Market Profile: X-Ray in Security Applications

The market for X-ray inspection in security applications has quickly developed from being virtually nonexistent three decades ago to becoming a market worth over \$1 billion in 2005. Airport security accounts for the majority of the demand for this market, which consists of a number of variations of X-ray technology.

The use of X-ray technology for security applications first developed in the 1970s due to the demand for the inspection of carry-on baggage for weapons at airports, starting in the United States. In the late 1980s and early 1990s, more advanced X-ray inspection technologies were used to inspect checked baggage for explosives. As terrorist attacks have become a more common occurrence, the application of X-ray inspection has been expanded further in airport security. However, it is also now seeing very strong growth in cargo inspection applications, as well as significant use in government and other potential target facilities.

The most commonly recognized X-ray inspection systems are transmission systems, which can identify patterns, but are not particularly adept at identifying explosive compounds. They are primarily used to check carry-on baggage at airports. Dual energy X-ray systems can differentiate between organic and inorganic compounds, and are used for both carry-on and checked baggage. The most advanced systems are computed tomography (CT) systems, which can cost over \$1 million each, and are used for checked baggage inspection.

The foregoing data were extracted from SDI's market analysis and perspectives report entitled

Analytical Instrumentation for Security Applications, May 2006. For more information, contact Stuart Press, Senior Consultant, Strategic Directions International, Inc., 6242 Westchester Parkway, Suite 100, Los Angeles, CA 90045, (310) 641-4982, fax: (310) 641-8851, www.strategic-directions.com.

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