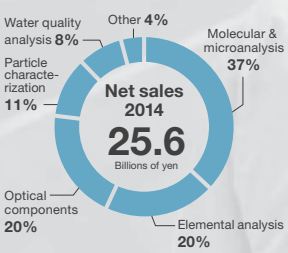
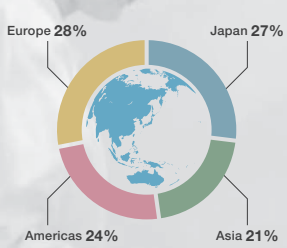
Scientific Instruments & Systems

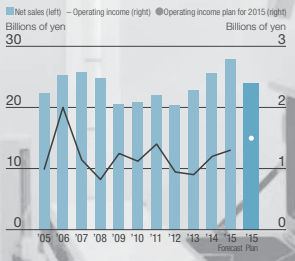
Sales breakdown



Sales breakdown by region



Net sales and operating income



Achieve a good balance between creation of analytical measurement technologies and business growth

HORIBA provides over 500 types of instruments for use at the leading edge of scientific technology. HORIBA solutions for data acquisition and analysis in niche markets support advanced research that ventures into unknown territory in the quest for products and processes of the future. HORIBA's analyzers are widely used in basic research, foreign-object examination and defect analysis for materials science, food, drugs, electronic components, forensic science, and archaeological surveys. Additionally, the Scientific Instruments & Systems segment develops basic analytical methods and core measurement technologies, which play key roles in providing new technologies to the four other business segments of HORIBA.

2014 results and 2015 forecasts

Expecting sales increase in fluorescence spectroscopy business and demand growth in private sector

In 2014, Scientific Instruments & Systems segment sales increased in yen terms from the previous year, partly due to the impact of the depreciation of the Japanese yen. The acquisition of Photon Technology International (PTI) in the U.S. expanded HORIBA's business by increasing sales of fluorescence spectroscopy. In addition, the depreciation of the yen helped boost sales of metal analysis instruments for the automotive industry in Asia. As a result, we recorded increases in sales and operating income year-on-year.
In 2015, we anticipate sales growth following an increase in R&D investment by private companies in Japan. We also aim to further boost HORIBA's market share (21%) in fluorescence spectroscopy business, which was expanded by the acquisition of PTI, and promote sales of these instruments for medical research, drug discovery, biotechnology, and other sectors.

Support for basic research in next-generation energy sources

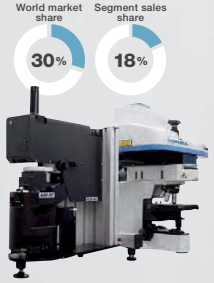
Demand is growing for products manufactured by HORIBA Jobin Yvon S.A.S. (France) for data analysis and basic research for organic and inorganic materials such as rare-earth metals and advanced lithium ion batteries, which are expected to become a core component in next-generation automobiles. Specific products include diffraction gratings, fluorescence spectroscopy and Raman spectrometers, which command a high global market share. We expect to increase our global sales and market share, as the markets respond to tighter regulations and more government spending, especially in the emerging markets.
In the particle characterization market, the need to accurately measure finer particle-size distribution is increasing for R&D activities and quality management in a wide range of areas such as battery materials, automobile catalysts and pharmaceuticals. With HORIBA particle characterization instrument, with world top-class measurement precision, we aim at expanding market share in the high-growth Asian market.

Major products and market shares

NOTE: Market shares quoted are estimates by HORIBA.

Raman spectrometers

Raman spectroscopy is a spectroscopic technique that provides information about the molecular structure of molecules by measuring the vibrational modes of a molecule. The vibrational modes of a molecule, which are a molecular fingerprint offering a quantitative measurement, can be used to identify the chemical under analysis. In recent years, Raman spectroscopy has attracted attention for new applications in material research. Raman has a very weak light scattering machanism, so a highly-sensitive and optimal optical design is necessary. HORIBA Jobin Yvon's outstanding know-how in optics-related technology has been successfully applied in the core development of our extremely high performance Raman spectrometers.



pH meters

HORIBA is recognized as one of the top pH meter brands beginning with a history of its development of Japan's first glass electrode pH meter in the 1950's. HORIBA offers a full pH product line to satisfy diverse customer needs ranging from desk-top models to support laboratory research to rugged instruments for field applications measuring river water, groundwater, and waste water.

HORIBA's target markets and proprietary technologies

HORIBA's Scientific Instruments & Systems segment products using the leading edge technologies are utilized by many diverse R&D centers, including corporate research divisions and academic research institutions. In February 2014, we acquired a fluorescence spectroscopy business with particular strengths in microscopy, drug discovery and biotechnological research. In those fields, as well as the energy, automotive, and others, we provide analysis and measurement solutions with the ultimate goal of becoming a true partner with whom our customers seek to consult and collaborate.

Target markets	Application	pH meter	Particle characterization instrument	X ray analyzer	Metal analyzer	Grating	Raman spectrometer	Fluorescence spectroscopy	Ellipsometer	GDS
Organic material analysis	• Organic EL lighting devices • Electrolyte for fuel cells	●	●		●	●	●	●	●	●
Inorganic material analysis	• Carbon materials • Metallic material (rare metals)	●	●	●	●	●	●	●		●
Lithium ion battery	• Positive and negative electrode materials, electrolytic solution for separators	●	●	●	●	●	●	●	●	●
Drug discovery and biotechnology	• Basic research to quality assessment of new drugs • Pharmaceutical composition mapping	●	●	●		●	●	◉		

Areas strengthened by the acquisition of the PTI

Accelerate market development for the fluorescence spectroscopy business

In February 2014, HORIBA acquired PTI's fluorescence spectroscopy business. This has led to an increase HORIBA's global market share in this field from 16% to 21%*. PTI operates in four countries and is strongly connected to the academic fields, by having a research facility in the Faculty of Medicine and Dentistry of the University of Western Ontario in Canada. HORIBA intends to create synergies by combining fluorescence spectroscopy with other HORIBA technologies and accelerate business expansion using these combined technologies and techniques.
*Source: SDi report [2013]


PTI's employees at an exhibition