Foreword

HORIBA's Global Analysis Services for Megatrends

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In recent years, the environment surrounding us has reached a major turning point in terms of energy issues associated with population growth, responses to environmental pollution, medical care to support people's health, and work style reforms.

These social changes are driving innovations in technology, and the roles and expectations of companies in research, development and production are increasing, including the penetration of a digital society, advanced medicine such as gene therapy, and carbon neutrality in the shift to clean energy.

HORIBA has recognized this social trend and will further strengthen its partnership with customers by accelerating the development of analysis and measurement applications based on HORIBA's unique instruments, technologies, and know-how, creating new analysis and measurement solutions, and supporting research and development as "measurement" technology, in addition to the conventional product sales.

Aiming to create new values for "measurement" technology on a global scale

On the other hand, looking around the world, approaches to social issues differ from country to country and from region to region due to differences in national policies and regional characteristics.
HORIBA has 18 analysis laboratories around the world, each equipped with its own analysis and measurement instruments.
These laboratories not only conduct demonstrations for conventional instrument sales and test analysis by customer development teams, but also develop new analytical methods based on "Measurement" technology, provide contract analysis and testing, and conduct joint research with companies, universities, and other

research institutions. We have established a system that enables us to develop applications and provide analysis/measurement solutions tailored to the needs of each region.
Therefore, the name has been changed from “HORIBA Analysis Center” to “Analytical Solution Plaza,” and its role has been clarified and sharpened to accelerate activities as a place where analysis professionals gather to create new analysis and measurement value and provide solutions unique to HORIBA to meet the diverse needs of our customers.

Here is an example of our participation in the “Hayabusa2” project at the Analytical Solution Plaza in Japan and our challenges based on “Measurement” technology.

In December 2020, JAXA’s asteroid explorer “Hayabusa2” brought back sand from the asteroid Ryugu, and in June 2021, its initial analysis confirmed that Ryugu is an asteroid with a composition similar to the average elemental composition of the solar system, rich in organic carbon, and carbonates produced by structural water and water quality denaturation were found. We participated in this project, which required the analysis of precious samples with unprecedentedly small amounts, and developed and proposed optimal analytical principles and methods, sampling methods, pretreatment, jigs and analysis techniques, while conducting elemental analysis using an X-ray fluorescence microscope (XGT-9000), confirmation of carbonates using a Raman microscope (LabRAM), quantitative analysis of carbonates and organic substances using the new carbon and sulfur analysis system in materials (EMIA-STEP). With these sample handling processes, we were able to provide one-of-a-kind analysis and measurement solutions by creating new value for existing analysis and measurement problems.

In this way, we will continue to support our customers’ R&D and other corporate activities based on “measurement” technology, not only by selling instruments and existing analysis and measurement solutions, but also by creating new applications, even in an era of change.

We not only develop analytical and measuring instruments based on new analytical principles and existing technologies, but also create new value in analysis and measurement, including the development of application technologies such as analytical methods and software, as well as solutions that ensure the reliability and safety of analytical data. We will continue to pursue our mission as a partner that can provide high value-added solutions to our customers.

HORIBA will continue to meet the expectations of our customers with our “measurement” technology, from research and development to analysis and measurement in manufacturing and quality inspection lines.

In this Readout No. 56, we will introduce our new Analytical Solution Plaza, a facility designed to provide customers with solutions based on “measurement” technology, as well as our efforts to provide analytical solutions at our domestic and overseas locations based on three business fields that we focus on ; “Energy & Environment,” “Materials & Semiconductor,” and “Bio & Healthcare”.

We promise that HORIBA’s analytical technologies will continue to bring new value through close collaboration with our customers around the world.

* Editorial note: This content in based on HORIBA’s investigation at the year of issue unless otherwise stated.