

Bringing the Benefits of Photonic Instrumentation to the Field of Life Science



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Photonic instrumentation has undergone major evolution over the last decades. Many techniques that are now very popular, such as time-resolved fluorescence, and Raman spectroscopy, were already known at that time, but they could only be used by scientists highly skilled in photonics, for time-consuming experiment. Now, scientific instruments have so much progressed in terms of performance and automation, that they can be used by a large number of scientists and technical specialists in various fields.

These progress have been made possible by the improvement of technologies (including lasers, computers, and a variety of other components), but also by the vision and skills of people. The papers in this issue shows that a number of Horibarians¹ have had the passion and talent to be the drivers of a number of these major improvements.

But making instrument faster, simpler and cheaper is not enough to serve a wider audience and grow. As a company, HORIBA successfully addressed a number of applicative segments where the demand for advanced instrumentation was fast rising. Life Science is one of these growth segments. The following papers show that in this field, HORIBA has built strong relationships with scientific leaders. Our application scientists are mastering many aspects of Life Science, in addition to spectroscopy and photonic instrumentation. We have combined several technologies into a single instrument, as described by A. Gilmore et al., or several instrument in a consistent offer, as described by M. Sandros et al., in order to



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better serve users. We will sustain our efforts to turn instruments into solutions for our customers.

The location of HORIBA European Research Center, in the heart of Paris Saclay, has been facilitating our interaction and cooperation with high level researchers. With nearly 100 000 worldwide researcher visits on the Paris Saclay Campus each year, we get more visibility, and more customers in our Application Lab. In the field of spectroscopy, the “Jobin Yvon technology” brand is in many places a synonym for excellence.

We also have adapted our industrial organization to the evolution of the requirements from more applicative-focused users. These evolution are also in terms of delivery, service, compliance to different norms and standards, and sales channels.

Our OEM business has been another route to providing the benefits of our leading technologies, to the Life Science industries. Our OEM gratings and spectrometer power an increasing number of instruments in this field. Our technology, our long-standing commitment toward our OEM customers, generates growth for us even in some fields where we lack applicative understanding or sales capability.

The frontiers in science are moving from the micro- to the nano-scale. Our company has participated to this movement, by being a pioneer in expanding the benefits of Raman instrumentation to the nanoworld. Our commercial offer of Raman nanoscopy is now fully recognized by scientists all over the world, for its quality and reliability. The recent acquisition of AIST-NT Atomic-Force and scanning-probe technology adds strength to our nanoscopy activity. We will continue supporting leading scientists to explore the nanoworld, but also expand the benefits of these technologies to a wider audience, including in Life Sciences.

*1: HORIBA Group company employees