Reflecting on RamanFest 2023

By Philippe de BETTIGNIES, HORIBA Technologies Roadmap Manager.

My best Raman conference ever! **I was impressed by the very high quality of the talks and the presenters sharing their research results.**

The conference subtitle "A*dvanced Applied* Raman Spectroscopy" is particularly well suited; here are a few of my favorite topics:

Raman imaging is getting faster and faster with a potential of several order of magnitudes, either by broadband Coherent Raman (MCARS, BCARS, multiband SRS…) which is becoming more robust, or by alternative strategies such as statistics-based adaptive sampling (spectrally or spatially). This is especially relevant in life-science, where we can note that cell sorting applications based on Raman technologies are reaching beyong the research phase.

To gain more traction in the industry, and to generate quantitative information, **data processing is key**, both for life science and materials applications. But the metrology aspect of these measurements is becoming mandatory, to ensure that the numbers are relevant, repeatable and guaranteed. That's why significant studies around standardization of the Raman analysis process and workflow are starting.

Last, for the beauty of science, we could directly visualize the electron density around a single molecule via photons, thanks to ultra-high resolution STM-TERS. This was impressive and inspiring, by establishing the link between an instrument and fundamental physics.

To all speakers and participants: thank you for your passion in Raman!

A webinar program in 2 acts:

In 2024 we have already scheduled two webinar series.

The first is a continuation of the **Educational Series** by Thibault Brulé, Raman Product Manager. Six webinars to explore certain aspects of Raman technology in greater depth.

The second will provide **an overview of Raman applications**. These webinars will be presented by our application engineers Sarah Desplanche, Céline Eypert, Hajar Elazri and Alina Maltseva.

The first two webinars are:

➡️ Educational Series: Raman Effect, what it is?

More and more, Raman microscopy is being used for a wide variety of applications. As a vibrational spectroscopy, it is mainly compared with Infrared absorption. However, the origins of this Raman effect and the information provided by Raman spectroscopy are different than any other.

During this webinar, we will present what the Raman effect is and what kind of information can be obtained based on a Raman spectrum.

Jan 25, 2024, 3 PM CET, 2 PM GMT, 6 AM PST, 9AM EST

Register here

➡️ Raman Application series: Raman microscopy to support pharmaceutical challenges

The pharmaceutical product development process involves many different steps and needs in molecular characterization. Thus, understanding API crystal forms, controlling API and excipients interactions or process optimization needs techniques that are able to manage different forms of molecules with a minimal sample preparation. As a result, Raman microscopy is so becoming a standard technique in pharmaceutical laboratories.

During this webinar, we will present what Raman microscopy brings to pharmaceutical challenges, especially in formulation development and troubleshooting steps.

Feb 22, 2024, 3 PM CET, 2 PM GMT, 6 AM PST, 9AM EST

Register here

Stay connected!

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