

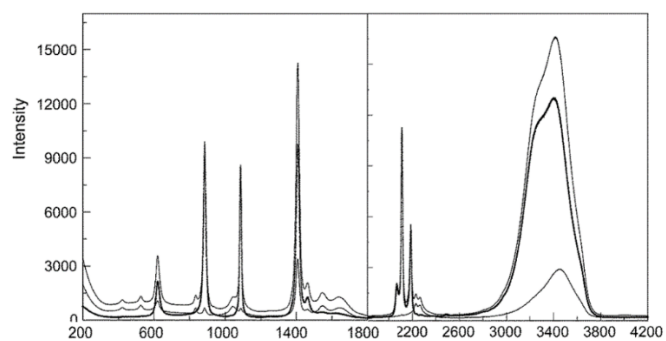
# Reduced fluorescence and extended spectral range

## m-oem presents Raman Concatenation at Analytica 2022 in Munich

Herisau, June 2022

Raman Concatenation involves sequentially collecting Raman spectra from two NIR lasers with one Raman spectrometer and one Raman probe. m-oem, the Metrohm OEM brand, is pleased to present this exciting new technique that enables fluorescence-free spectra of the fingerprint and stretching region with increased sensitivity and discrimination. Visitors of this year's show in Munich are welcome to learn more about this technique, its benefits, and possible applications at the m-oem booth in hall A2 at booth 522

- **Moisture determination:** Raman Concatenation expands the number of samples that can be identified and provides enhanced information about the sample. Specifically, water information from the stretching region is now available for moisture analysis and referencing. Water band stretches are used to calculate loss-on-drying for lyophilization and determine the expansion and concentration of hydrogels.
- **Biodiesel/Petrochemical analysis:** Raman Concatenation has been successfully used for biodiesel fuels and petrochemical applications in cases where visible and NIR Raman spectra are overwhelmed by fluorescence.
- **Food analysis:** Raman Concatenation has also been successfully applied to food analysis, where dyes and pigments can overwhelm the Raman spectrum in samples such as sweets and baked items.



Raman Concatenation enables reduced fluorescence and an extended spectral range.

Raman concatenation saves time and increases sensitivity and the discrimination power. One spectrometer and probe are incorporated into one sequential measurement, and the light can be focused on the same portion of the

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sample. While dampening fluorescence, an improvement of sensitivity and selectivity is demonstrated.

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### About Metrohm

Metrohm is one of the world's most trusted manufacturers of high-precision instruments for laboratory and process analysis. The company was founded in 1943 by engineer Bertold Suhner in Herisau, Switzerland, where it is headquartered to this day. Metrohm offers a comprehensive portfolio of analytical technologies ranging from titration and ion chromatography to near-infrared and Raman spectroscopy, as well as several other techniques. Metrohm sells its products and provides services through its own local subsidiaries and exclusive distributors in more than 120 countries worldwide. Our mission in a nutshell is helping customers from virtually every industry analyze and maintain the quality of their products at every stage in the manufacturing process and beyond. Since 1982, Metrohm has been owned 100% by the non-profit Metrohm Foundation. This foundation keeps to its purpose to support charitable, philanthropic, and cultural projects in eastern Switzerland and, above all, ensure the independence of the company.

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