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**Renishaw introduces the world's first Raman system with remote probes capable of focus-tracking**

Renishaw's latest version of its Virsa™ Raman analyser, with new WiRE™ 5.5 software, enables its users to analyse samples away from the confines of the laboratory microscope, using remote fibre-optic probes. Its features expand the use of Raman spectroscopy to new samples, applications, and environments.

The new Virsa system has LiveTrack™ focus-tracking technology and the new Monitor™ software module. These enable it to easily perform real-time analysis on large samples that have irregular surfaces, are changing shape as they undergo phase changes, or that move, such as those on production lines. This versatile system has a modest footprint and can be used on a bench or mounted in an industry-standard 19" rack. This makes it ideal for researchers wanting to expand the application of Raman beyond traditional laboratory-based microscope systems.

Renishaw’s new Windows®-based Raman Environment (WiRE) software, version 5.5, adds two new features that complement the new Virsa system.

## Live reaction monitoring with the Monitor software module

With the Monitor software module you can process and analyse a constant flow of Raman data, enabling you to monitor changing chemical concentrations or other sample properties.

The Monitor software module is applicable to many applications and ideal for users who are looking to understand and monitor processes in development or production stages, as well as scientists looking to track spectral changes as their experiments progress. The Monitor software module can be applied to a wide range of sampling situations including:

* Sampling liquids with immersion probes
* Examining, via a window, materials in containers, vessels, or reactors
* Analysing the surface of a material in conjunction with Renishaw’s LiveTrack focus-tracking technology. This is an ideal way to compensate for sample height variations, such as during reel-to-reel production monitoring or during sample phase change studies.

## Partial least squares (PLS) analysis module

The PLS analysis module has many industrial and academic applications, especially in fields such as pharmaceuticals. It is now available as part of the WiRE 5.5 software. You can generate and test PLS models, and then predict values in real time (when used with the Monitor software module). Values can be predicted for any material which exhibits a spectral change, for example concentration or crystallinity changes.

Dr Tim Batten - Product Manager at Renishaw commented, “The Virsa system enables users to easily take Raman spectra from samples that were previously impossible, or difficult, to analyse. This opens up many new applications of Raman spectroscopy and imaging."

For further information on the Virsa Raman system, visit [www.renishaw.com/virsa](http://www.renishaw.com/virsa)

**-ENDS-**

**Notes to editors**

Renishaw is one of the world's leading engineering and scientific technology companies, with expertise in precision measurement and healthcare. The company supplies products and services used in applications as diverse as jet engine and wind turbine manufacture, through to dentistry and brain surgery. It is also a world leader in the field of additive manufacturing (also referred to as 3D printing), where it designs and makes industrial machines which ‘print' parts from metal powder.

The Renishaw Group currently has 79 offices in 37 countries, with over 4,400 employees, of which over 2,500 people are employed within the UK. The majority of the company's R&D and manufacturing is carried out in the UK and for the year ended June 2020 Renishaw achieved sales of £510 million, of which 94% was due to exports. The company's largest markets are China, USA, Japan and Germany.

Further information is available at: [www.renishaw.com](http://www.renishaw.com)

**Images**



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