*April 2020 – for immediate release Further information: Chris Pockett, +44 1453 524133*

**Renishaw launches Raman system for forensic analysis**

Renishaw today announced the launch of the inVia™ InSpect, a new version of its bestselling inVia confocal Raman microscope, optimised for use in forensic laboratories for trace evidence analysis.

Forensic science covers many disciplines because evidence can take many different forms. This means the typical forensic laboratory is home to a range of analytical systems. Renishaw has designed the inVia InSpect Raman microscope to complement these technologies. It can be used in isolation to analyse samples that cannot be examined fully using other techniques, and it can also be used with them to obtain more detailed chemical information.

**Why use the inVia InSpect?**

The inVia InSpect can identify materials that may be difficult or time consuming to prepare. For example, hard crystalline powders, ceramic shards and glass chips can all be easily analysed with virtually no preparation required. InSpect also offers a powerful confocal Raman capability, providing pinpoint analysis whilst minimising interference from surrounding adjacent materials – vital for analysing complex structures containing layers, voids or inclusions.

Dr Chris Dyer, Product Manager for Chemical and Forensic Sciences at Renishaw plc, said “We have spoken to staff at forensics laboratories worldwide and identified a need for a highly sensitive Raman microscope that can process samples that are currently not compatible with more commonly used microscopy systems…

“Renishaw’s inVia Raman microscope is one of the best on the market, renowned for its sensitivity and overall efficiency. We have honed it and added features to optimise it for use in the majority of forensic laboratories. Users will be able to process more samples, more rapidly; even those which are usually difficult or time consuming to analyse. Furthermore, samples will retain their integrity as minimal preparation is required. And users who are unfamiliar with Raman will find the InSpect simple to learn and easy to use.”

**Features**

The inVia InSpect comes equipped as standard with features that are essential for effective forensic analysis in the routine laboratory:

* Highly automated data collection and analysis – saving time and increasing throughput of samples
* A range of microscope contrast techniques, including bright field, dark field and polarisation contrast
* High-performance video camera and long working distance objectives – to confidently locate areas of interest even on complex substrates
* Fully-integrated confocal capability – choose the optimum confocal settings for different situations, to precisely define the analysed region
* Powerful chemical image creation – use fully-integrated mapping techniques to reveal the distribution of components within a sample
* Particle analysis – use advanced image recognition algorithms and instrument control features to characterise particle distributions
* Correlative imaging – bring data from other microscopy techniques together with Raman analysis and create composite images rich with information
* Dual laser wavelengths – choose the wavelength which gives the best Raman data for different sample types, without needing to change optics or gratings.
* Automated calibration and alignment – easy to operate, and easy to optimise

Upgrade options are also available for more specialist forensics applications. For more information on the inVia InSpect, visit [www.renishaw.com/inspect](http://www.renishaw.com/inspect) or contact your local sales representative.

**Why use Raman for forensics?**

Raman spectroscopy is a non-contact, typically non-destructive analytical technique, meaning that samples can be reanalysed multiple times without damage or contamination. There is typically very little preparation needed. Raman spectroscopy also works through transparent containers and in solution, so samples that are potentially dangerous or require special handling can be safely examined.

For further information on the power of Raman spectroscopy, Renishaw provides a useful *Raman explained* booklet: [www.renishaw.com/ramanexplained](http://www.renishaw.com/ramanexplained)

**-ENDS-**

**Notes to editors**

UK-based Renishaw is a world leading engineering technologies company, supplying products used for applications as diverse as jet engine and wind turbine manufacture, through to dentistry and brain surgery. It has over 4,500 employees located in the 36 countries where it has wholly owned subsidiary operations.

For the year ended June 2019 Renishaw recorded sales of £574 million of which 94% was due to exports. The company’s largest markets are the USA, China, Japan and Germany.

Throughout its history Renishaw has made a significant commitment to research and development, with historically between 13 and 18% of annual sales invested in R&D and engineering. The majority of this R&D and manufacturing of the company’s products is carried out in the UK.

The Company’s success has been recognised with numerous international awards, including eighteen Queen’s Awards recognising achievements in technology, export and innovation.

Further information at [www.renishaw.com](https://renishawplc-my.sharepoint.com/personal/lp138190_renishaw_com/Documents/www.renishaw.com)