

Opportunities for Raman and NIR spectroscopy in On-line Characterisation

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This talk will describe the recent advances and challenges in the application of optical spectroscopy to the on-line characterisation of formulated products. It will cover Raman spectroscopy, near-infrared spectroscopy and Fourier transform infrared (FTIR) spectroscopy - all using fibre optic probes. These techniques are all commonly used laboratory-based instruments but the advantages and disadvantages will be discussed for on-line academic and industrial uses. The sampling probe head for these techniques is of vital importance especially for the measurement of viscous or opaque materials and different options will be considered. Multivariate analysis of the data will also be covered with illustration of some recent results measuring impurities in SLES. Finally, future prospects including Raman microscopy will complete the presentation.