

CAYMAN LEARNING WORKSHOP

“Solving product development and process problems using chemical analysis”

Session 1: Wednesday 19th April 2023 (9.00-11.00) Introduction to the common chemical analytical techniques (2 hours) on-line (MS Teams)

Session structured around giving a broad overview of analytical methods covering both solid state and solution based techniques;

Solid-State analysis including examining polymorphic forms, amorphous materials, particle size and morphology, qualitative vs. quantitative approaches etc.

- Techniques of interest include XRD/XRF, microscopy, thermal techniques (DSC/TGA), vibrational spectroscopy (and hyphenated techniques), SS-NMR

Solution based techniques examining qualitative vs. quantitative approaches; purity assessment and impurity ID / profiling, pure compounds vs. complex mixtures...

- Techniques including NMR (conventional and advanced, qNMR), mass spectrometry, chromatography for complex mixtures, vibrational spectroscopy etc.

Session 2: Case Studies: Wednesday 19th April 2023 (11.30-13.30) (2 hours) on-line (MS Teams)

In this session led by CAYMAN project scientists we will present and discuss how we have used chemical analysis to solve company problems including:

- Regulatory issues including stability studies and identification of impurities
- New product development including de-formulation of products
- Batch to batch process variations including analysis of raw materials from different suppliers

Session 3: Identifying a company problem/development need

In this private session with the company experts at the University we will discuss/identify potential problems/needs and determine an analytical strategy involving analysing samples at the University of Bradford's Centre for Chemical and Biological Analysis.

Session 4: Presentation and discussion of analytical results and future work

In this private session with the company our technical team will present the analytical data generated from company samples and discuss how the results can be used to inform potential future work and analytical strategies.

The University of Bradford is offering SME's based in the Yorkshire region free places (2 per company). For details of how to register for the workshop please contact:

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