A PRACTICAL APPROACH IN THE APPLICATION OF NEAR INFRARED SPECTROSCOPY IN THE PHARMACEUTICAL INDUSTRY

Background

Change is inevitable in a pharmaceutical manufacturing operation. Vendors change processes, sources, and specifications for raw materials, equipment requires repair, service, or replacement, manufacturing locations are changed, batch sizes are increased or decreased and advancements in technology are made that dictate changes to the operations. The role and responsibilities of quality control are also ever expanding and at times with little to no understanding of the impact on the supply chain.

This training programme aims to provide an understanding of the innovative NIR technology that is employed by the industry to assist in alleviating delays in the supply chain, particularly those in the quality control environment.

Learning Objectives

1. Background and Fundamentals of the NIR Technique.

2. Mathematical Processing of NIR signals.

3. Qualitative Analysis

4. Quantitative Analysis

Target group
- Production or Manufacturing
- Research and Development
- Quality Control (QC)
- Quality Assurance
- Regulatory Affairs

- Researchers (Clinical and Academia)

Programme

The presentation will consist of a presentation emphasizing practical approaches of the application of NIR Spectroscopy in the regulated pharmaceutical environment. Practical cases studies relating to production and analytical processes emphasizing the following:

1. Principles of Near Infrared Spectroscopy
2. Operational Procedures in NIR
3. Sample Selection
4. Multivariate Calibration Methods
5. NIR as a PAT Process Analyzer

Presenter

Mr Asanda Mdwayi is a qualified Analytical Chemist with a great passion for the pharmaceutical industry with extensive industry background. His experience includes quality management systems consultancy, analytical method development and validation.

Asanda holds a postgraduate degree and a vast number of courses from various institutes and thus he is well versed with current techniques, skills and standards in the pharmaceutical industry. He has been successfully developing and validating qualitative and quantitative NIR analytical methods for nearly two decades.