Using Excel for data analysis in testing laboratories

09:00   *Registration and coffee*

09:30   **MORNING SESSION**

Introduction to course

Basic maths and understanding cell references

- Addition, subtraction, multiplication, division, power, square root, simple formulas, parenthesis
- Cell reference
- Number of decimal places, rounding, roundup and rounddown

Presenting simple data

- Tables
- Mean and standard deviation
- Relative standard deviation and count

Basic charting

- x-y scatter plot
    - Calibration graph with 1 and more replicates at each level
- Trend line
    - Equation and correlation coefficient)

Regression analysis

- Slope and intercept using Excel functions
- Regression analysis using Data analysis toolpack

Using regression parameters in calculations

- Simple formulas
- Assigning absolute cell reference

12:30   *Lunch*

13:30   AFTERNOON SESSION

Using conditional formatting in data analysis

- Comparing data with limits
    - o Highlighting numbers over/under a certain threshold value
    - o Returning a text message, e.g. fail or pass

Further Charting

- Adding limits to graph
- Comparing multi datasets

Pivot tables

Further data analysis and Excel functions

- Sorting and filtering data
- Randomising

Protecting cells

Freezing/locking panes

16:30   *Close*

Individual times approximate