## Training 1: <u>**Terminology in analytical measurement**</u>

### 29.06.2022 (Wednesday)

### A G E N D A

| Time | Topics |
|---|---|
| **11:00-13:30** GEO | <u>Importance of terminology in measurement</u><br>• The 'International vocabulary of measurement' (VIM)<br>     o Content<br>     o Structure<br>     o Examples of VIM 'concepts'<br>     o The online annotated VIM<br>     o Revision of VIM – development of VIM 4th edition<br>• The Eurachem terminology guide<br>     o Audience<br>     o Structure<br><u>Introduction to key terms in analytical measurement</u><br>• Measurement methods and procedures<br>• Metrological traceability<br>     o Definition<br>     o Principles of traceability<br>     o References for establishing traceability<br>     o Terminology related to measurement standards<br>• Method validation<br>     o Introduction to definition and process of validation<br>     o Validation vs. verification<br>     o Covered in more detail in the second session<br>• Measurement uncertainty<br>     o Definition<br>     o Interpretation of the definition<br>     o Sources of uncertainty<br>     o General process for evaluating uncertainty |
| **13:30-14:15** GEO | **Break** |
| **14:15-16:45** GEO | <u>Terminology associated with method validation</u><br>• Recap of definitions<br>     o Validation vs. verification<br>• Experimental designs for method validation<br>• Confirmation of identity<br>     o Definitions of selectivity and specificity<br>     o Experiments for evaluating selectivity<br>• Capability of detection<br>     o Definitions of LOD and LOQ<br>     o Statistical basis of limits<br>     o Experiments for evaluating LOD and LOQ<br>• Working range and linearity<br>o Definitions<br>o Instrument vs method working range<br>o Experiments for evaluating linearity and working range<br>• Precision<br>     o Definitions (including precision conditions) |

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|  | <ul><li style="list-style-type: circle;">Experiments for evaluating precision</li></ul><ul><li>Trueness and bias<ul><li style="list-style-type: circle;">Definitions</li><li style="list-style-type: circle;">Experiments to evaluate bias</li></ul></li><li>Ruggedness<ul><li style="list-style-type: circle;">Definition of ruggedness</li><li style="list-style-type: circle;">Principles of ruggedness testing</li></ul></li></ul> |