

05-03: Measurement uncertainty for NIRS measurements

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Measurement uncertainty is a fundamental issue in e.g. measurement of impurities and frequently asked for during accreditation. A simple approach to apply measurement uncertainty to NIRS analysis missed the special circumstances of a calibrated method relying on a reference method.

In this paper we try to apply proposals from EURACHEM CITAC [1] for the following cases of NIRS measurements:

A) NIRS calibrations and validation with certified reference material

B) NIRS calibrations and validation using a reference method

C) NIRS calibrations with central validation and ring test

and make proposals to account for the special circumstance of a calibrated method.

References

[1] EURACHEM, CITAC Guide CG4, 2012: Quantifying Uncertainty in Analytical Measurement.