



Software for measurement uncertainty calculations from **validation and quality control data** according to Nordtest guide TR537.

- A user-friendly tool by [Envical Syke](https://envical.syke.fi).
- Can be utilized for measurement uncertainty evaluation often appearing to be a laborious task to perform.
- The traceability and comparability of analytical results require knowledge of the measurement uncertainty associated with a result.
- A uniform procedure for the evaluation of measurement uncertainty is expected to improve the comparability of analysis results between laboratories.
- MUKit measurement uncertainty software is available for download free of charge: www.syke.fi/envical/en. Training service is available by Envical Syke.
- Nordtest guide: [Nordtest TR 537, ed. 4](#)
- Contact: Teemu Näykki (firstname.lastname@syke.fi)

Within-laboratory reproducibility
Long-term random effects

$$u_c = \sqrt{u(R_w)^2 + u(bias)^2}$$

Laboratory and method bias
Long-term systematic effects

With the software, the laboratories can easily calculate measurement uncertainties using

- Quality control samples,
- Repeated results from routine samples,
- Results from proficiency tests and
- Results from recovery tests.

Calculates both relative and absolute uncertainties.