INTERLABORATORY COMPARISONS AND INTERNAL QUALITY CONTROL: EXPERIENCE, PROBLEMS AND SOLUTIONS

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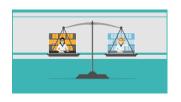
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EXPERIENCE

LLC "Profilab"

1 organizes and carries out interlaboratory comparisons (ILC)

2 holds training on ILC and quality control (QC) for laboratories

3 gives advices/consult laboratories on planning and implementation QC

We have knowledgeable, skilled and trained personal to perform this works

We are guided by the provisions of international and generally recognized documents

PROBLEMS

Interlaboratory comparisons

- small number of participants;

- no opportunity to set the assigned value independently of results of participants (not available reference laboratories, reference methods, certified reference materials);

- problems of confirming homogeneity and stability (due to small number of participants; it needs a sufficient amount of samples which makes participation too expensive)

EURACHEM 2019
Critical Issues of the Accreditation Standards – ISO/IEC 17025:2017 and ISO 15189:2012

SOLUTIONS

Interlaboratory comparisons

- individual approach to each program, measurement method, measurand, participant;

- use statistical methods different from recommended with ISO/IEC 17043 (expert opinion, reproducibility, statistical criteria, metrological compatibility)

PROBLEMS

Quality control

- right selection of quality control sample (stability for long time)

- large areas of accreditation

- some tests are rare (two – three of times per year)

- misunderstanding of statistical methods

- difficult to set quality criteria

SOLUTIONS

Quality control

- individual approach to each measurement method, measurand, opportunities of laboratory;

- choice of appropriate statistical method (expert opinion, precision, trueness, statistical criteria, metrological compatibility)

Thank You for attention

Questions?