



## COURSE DATASHEET

<b>Semester:</b>	2014/15/2
<b>Course:</b>	Validation of Measurements
<b>Code:</b>	VEMKKAM422V
<b>Responsible department:</b>	Department of Analytical Chemistry
<b>Department code:</b>	MKKA
<b>Responsible instructor:</b>	dr. Tamás Pap

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### Course objectives:

Understanding of the validation of the measurements.

### Course content:

1. Requirements of the ISO IEC MSZ 17025: 2005 standard for the laboratories. 2. Editing of validation plan. 3. Validation report: specificity and selectivity. Linearitás. 4. Validation report: Linearity. Calculation by regression analysis. 5. Validation report: Accuracy. Calculation by regression analysis. Confidence interval of the slope and intercept. 6. Validation report: Precision. Calculation by relative standard deviation (RSD). 7. Validation report: Repeatability. Calculation by analysis of variance (ANOVA). 8. Validation report: Stability and Ruggedness. 9. Validation report: Detection limit (DL), Quantitation limit (QL) 10. Validation report of chromatographic analysis. 11. Validation report of volumetric analysis. 12. Calculation the data for the validation report using excell. 13. Summary of the statistical methods using quality assurance in the laboratory. 14. Calibration. Calculation of the calibration curve using least square method. Organization and evaluation of an interlaboratory test.

### Requirements, evaluation and grading:

The topics of the lectures.

### Required and recommended readings:

Dr. Inczédy János: Folyamatos és automatikus analízis. Műszaki Könyvkiadó, Budapest, 1984.