EUROMET PROJECT FÎNAL REPORT

Ref No.: 228

Field: Length

Type of collaboration: Cooperation in R&d, intercomparison

Partners: CH(OFMET), SE(SP), IT(IMGC)

Subject: Development of a practical air refractometer

Result:
This project was initiated by OFMET in 1990 who had the intention of developing an air refractometer for

This project was initiated by OFMET in 1990 who had the intention of developing an air refractometer for highly accurate length measurement. The idea was to profit mutually from the other partners' experience and to carry out an intercomparison. The interest expressed by SP and IMGC could not activated due to financial problems and lack of time.

The development of an air refractometer at the OFMET is completed. The poposer could profit from the experience of PTB and NPL in this field. A comparison with instruments built by these two laboratories in the framework of a BCR project led to successful results [1].

The project is declared to be completed. PTB, which has developed a transportable refractometer, kindly offers its knowhow, blueprints of the instrument and - after an appropriate arrangement - the possibility for an intercomparison. Dr. G. Wilkening would be the PTB contact.

[1] W. Hou and R. Thalmann, "Accurate measurement of the refractive index of air", Measurement 13 (1994) 307-314.

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