A simple system for hygrometer calibration

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Météo-France uses capacitive hygrometer in its operational observing automatic weather network. Since 1990, the Metrology Laboratory of Météo-France performed hygrometer calibration with a saturated salt solution generator associated with a reference hygrometer. This method was accredited by the COFRAC (The French Accreditation Body) in 2003.

About 1000 instruments are calibrated each year. The Laboratory has got a very important experience in this calibration method. Results are qualified by inter-comparisons with an other method (Two temperature bench) and also with theoretical value of the saturated salt solution.

These results guarantee a validation and also may advice this quite simple method on condition that requirements are met.