## New PTB Calibration Service for dc SQUID-based Noise Thermometers to Disseminate PLTS-2000

J. Engert<sup>1</sup>, J. Beyer<sup>1</sup>, M. Schmidt<sup>1</sup>, S. Ali Valiollahi<sup>2</sup>, H.-J. Barthelmess<sup>2</sup> and Th. Schurig<sup>1</sup>

<sup>1</sup>Physikalisch-Technische Bundesanstalt (PTB), Abbestr. 2-12, 10587 Berlin, Germany <sup>2</sup>MAGNICON GmbH, Lemsahler Landstr. 171, 22397 Hamburg, Germany

E-mail: jost.engert@ptb.de

**Abstract** - The Physikalisch-Technische Bundesanstalt has started a new calibration service for dc SQUID based noise thermometers according to the PLTS-2000. The thermometers are easy-to use, compact, robust and allow temperature measurements with less than 1% uncertainty in short times in the temperature range from 1 K down to the millikelvin region. New developments in low-temperature thermometry are briefly discussed.

**Keywords** - Noise thermometry, temperature scales, dc SQUID, magnetic gradiometer, calibration service