SQUID Activities at PTB: Status 2008

Thomas Schurig and Lutz Trahms

Physikalich-Technische Bundesanstalt (PTB), Berlin Institute Abbestrasse 2-12, D-10587 Berlin, Germany; e-mail: thomas.schurig@pfb.de; lutz.trahms@ptb.de

Abstract – The purpose of this article is to overview the current status of R&D into SQUID technology and applications at the German National Metrology Institute, PTB. We summarize the recent progress in SQUID electronics and sensors. Subsequently, we succinctly describe the status in SQUID applications emphasized at PTB. These are: biomagnetism, cryogenic radiation detector readout, metrology, nondestructive evaluation (NDE), low-field nuclear magnetic resonance (NMR) and NMR at very low temperatures.

Manuscript received February 5, 2009; accepted March 25, 2009. Reference No. RN-9, Category 4