

In memoriam



Prof. Dr. GÜNTER SAUERBREY
1933–2003

Günter Sauerbrey died on 15 May, 2003, a few days after his 70th birthday. For 24 years he was responsible for the Laboratory of Medical Techniques and Dosimetry of the Physikalisch-Technische Bundesanstalt, Berlin and he also taught at Universities.

His important invention was the use of a quartz oscillator as a mass sensor, the quartz crystal microbalance (QCM), which he developed in his research for his doctoral thesis at the Technical University at Berlin. He described that method in two often cited papers: *Phys. Verhandl.*, 1957. 8: p. 193 and *Z. Physik*, 1959. 155: p. 206–222. With the QCM, Sauerbrey introduced a new class of mass measuring devices: inertial balances. The Sauerbrey equations are the basis of all vibrational weighing systems. His experiments on QCM allowed the extension of Einstein's equivalence principle from uniform fields to time-dependent fields. Further work was on radiometry, thermometry, medical measuring techniques, high-temperature and vacuum physics.

Günter Sauerbrey participated at several Conferences on Vacuum Microbalance Techniques and discussed at these events, in particular, applications of the QCM.

Requiescat in pace.



Erich Røbens

Vasile Mecea

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