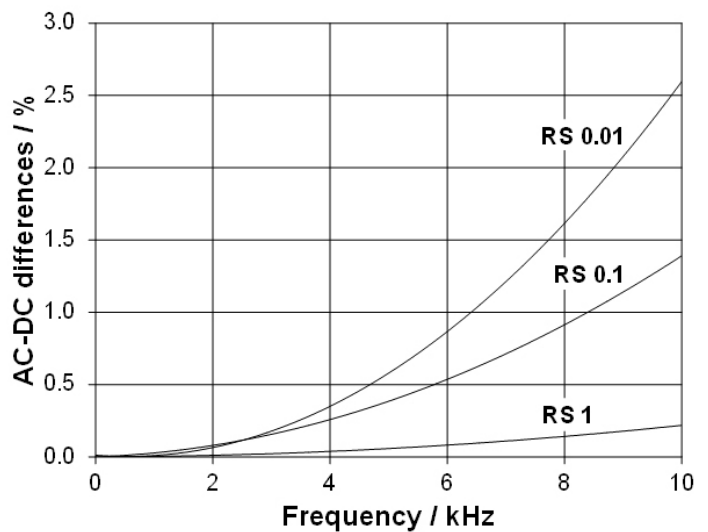


01DC009 Measurement of Frequency Dependences of Low-Value Four-Terminal Resistance Standards

Jaroslav Bohacek¹

A 10 Ω quadrifilar resistor with calculable frequency dependence served as a reference in measurement of frequency dependences of resistance standards ranging from 1 Ω to 0.01 Ω in a frequency range up to 10 kHz. In these measurement, a step-down method based on successive 10:1 comparisons of the standards by means of a transformer bridge was used. Ratio arms of this bridge being formed by an eight-decade, two-stage inductive voltage divider, a small variable voltage injected into one connecting lead of the ratio winding of the divider serves for quadrature balancing.

Keywords – Current shunt, calculable resistor, transformer bridge.

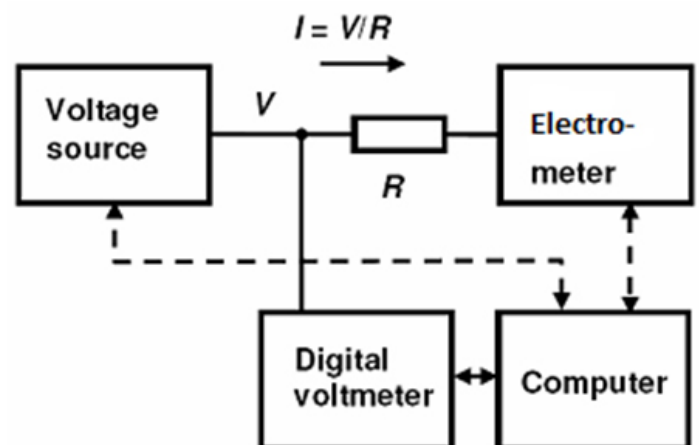


AC-DC differences of RS 1, RS 0.1 and RS 0.01

01DC020 Calibration System for Electric Charge at the Centro Español de Metrología

Félix Raso², Manuel L. Cervantes²

In this paper, the new system developed at CEM for the calibration of electric charge meters is presented. Two different approaches are adopted. The first one is based in the charge of a standard capacitor, the other one in the generation of a known current during a specific time.



Scheme of measuring system.