

MEASUREMENT TECHNIQUES

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THE PROBLEMS AND STATE OF MEASUREMENTS

M. I. Kiselev

At the conference there were 96 papers by 111 authors from Moscow and Moscow region, St. Petersburg, Nizhni Novgorod, Orel, Novosibirsk, Penza, Perm, Tula, and Kharkov, which were divided into the following sections:

- 1) Fundamental problems of metrology and metrological theory;
- 2) Quantum metrology and nanometrology;
- 3) Measurements on linear and angular quantities, time and frequency, and technical applications of these;
- 4) Metrological support to production;
- 5) Relocating and vibrational systems of exchange and mechanisms;
- 6) Data-based metrological support to processes and mechanisms;
- 7) Measurements in psychology and education; and
- 8) Metrological problems in medicine.

The contents of the papers, as they correspond to such important current aspects of metrology and measurement technology, ranging from previously unexplored research problems to strictly applied industrial and technological tasks. In this respect, the conference reflects, in a broad sense, a large area in science and engineering involved in today's activity.

The following results were demonstrated:

Use of type I superconducting resonating Josephson-junction of Cooper electron pairs for detecting particles of dark matter sensitive to dark matter.