N.A.Morozov

State of the vibrating wire stand and the NMR and Hall magnetometers manufacturing

Dubna, 28-29 October 2004.

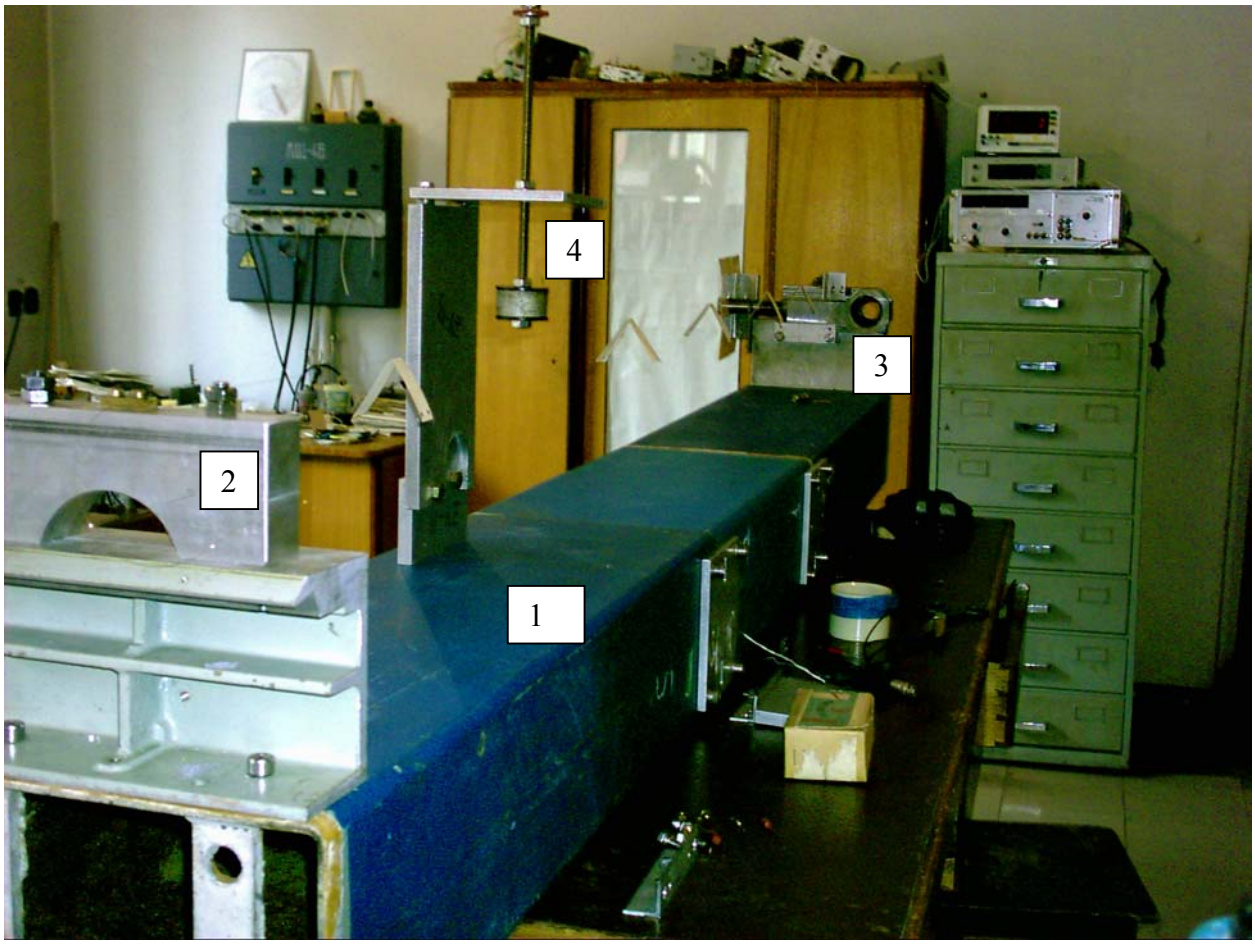


Fig.1. Overall view of the test stend

1 – steel table;
2 – rock with fixed end of wire;
3 – rock with end of wire under tension (Fig.2-4);
4 – tested PM magnet (Fig.5).

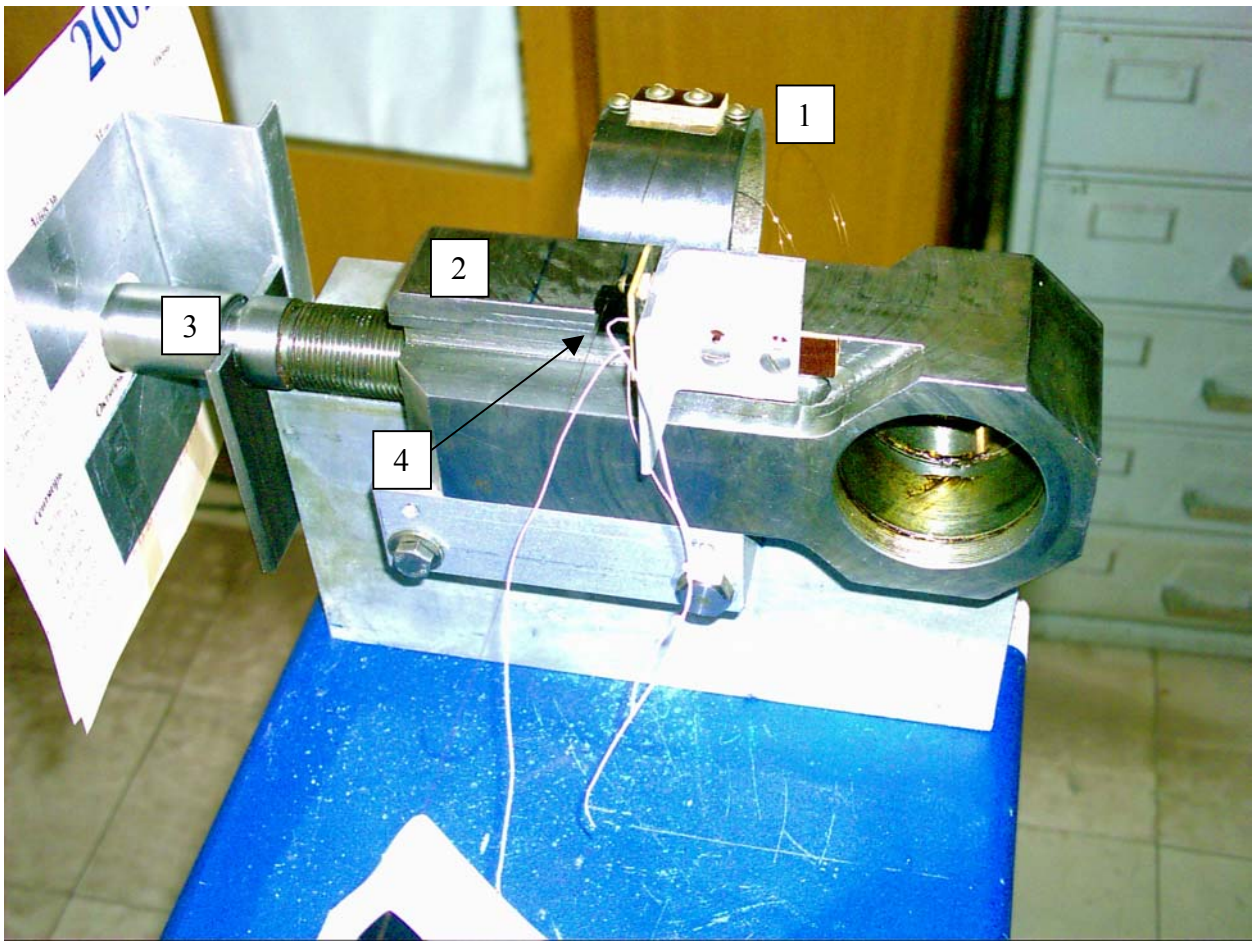


Fig.2. View of the rock with tensioned end of wire.

1 – cylinder for the wire end fixation and tensioning;
2 – moving support for the optic sensor position adjustment;
3 – screw for the support moving;
4 – optic sensor.

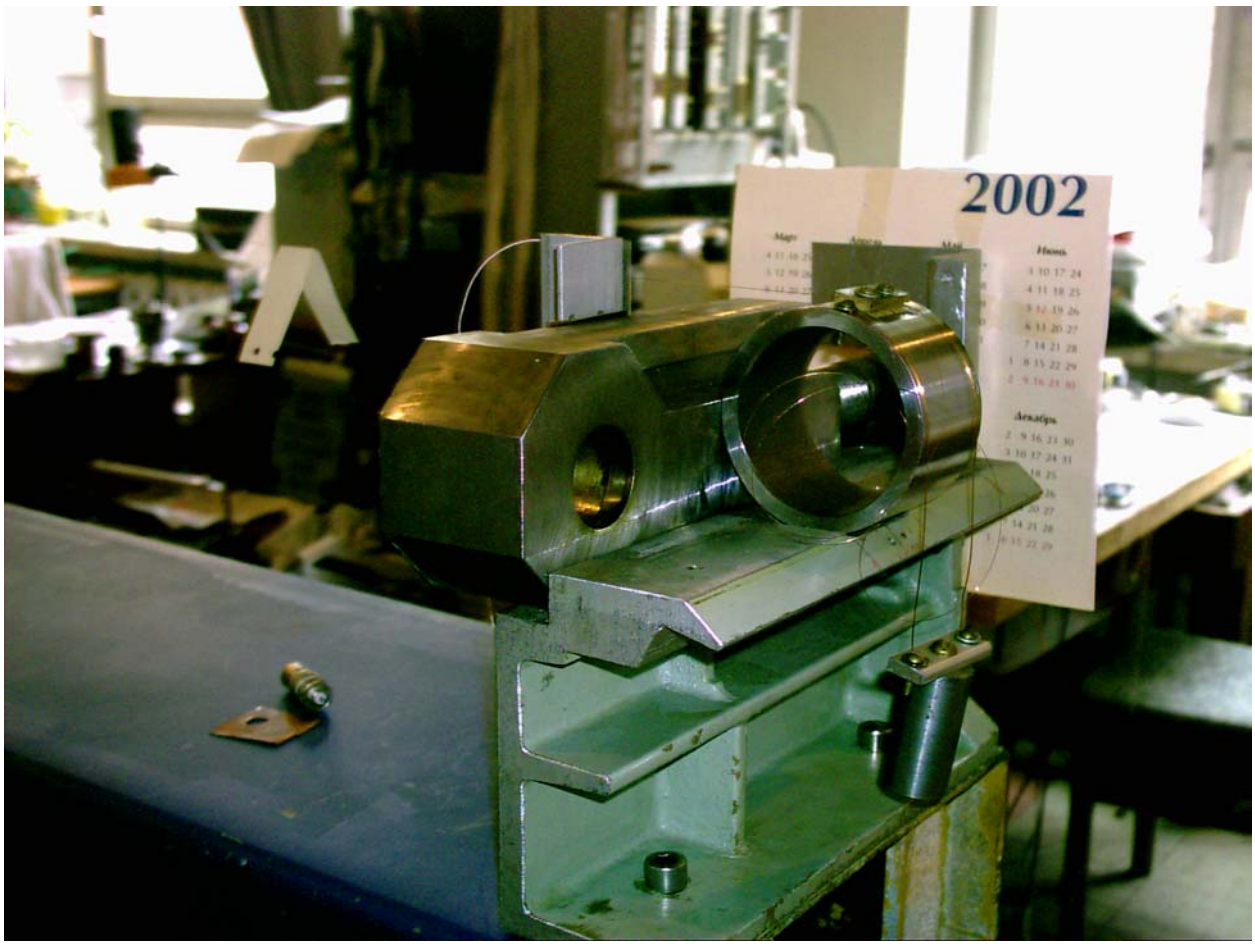


Fig.3. View of the rock with tensioned end of wire.

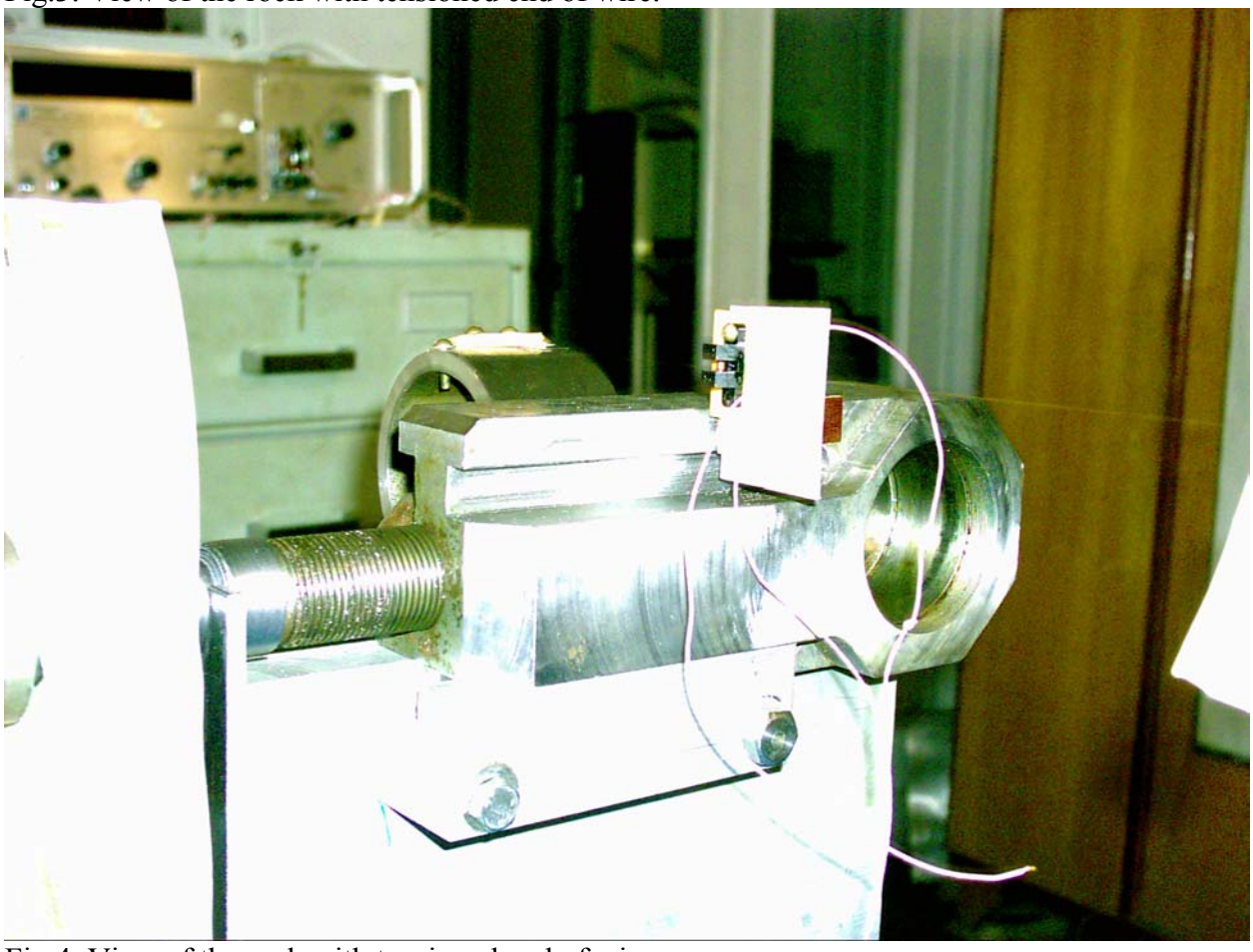


Fig.4. View of the rock with tensioned end of wire.

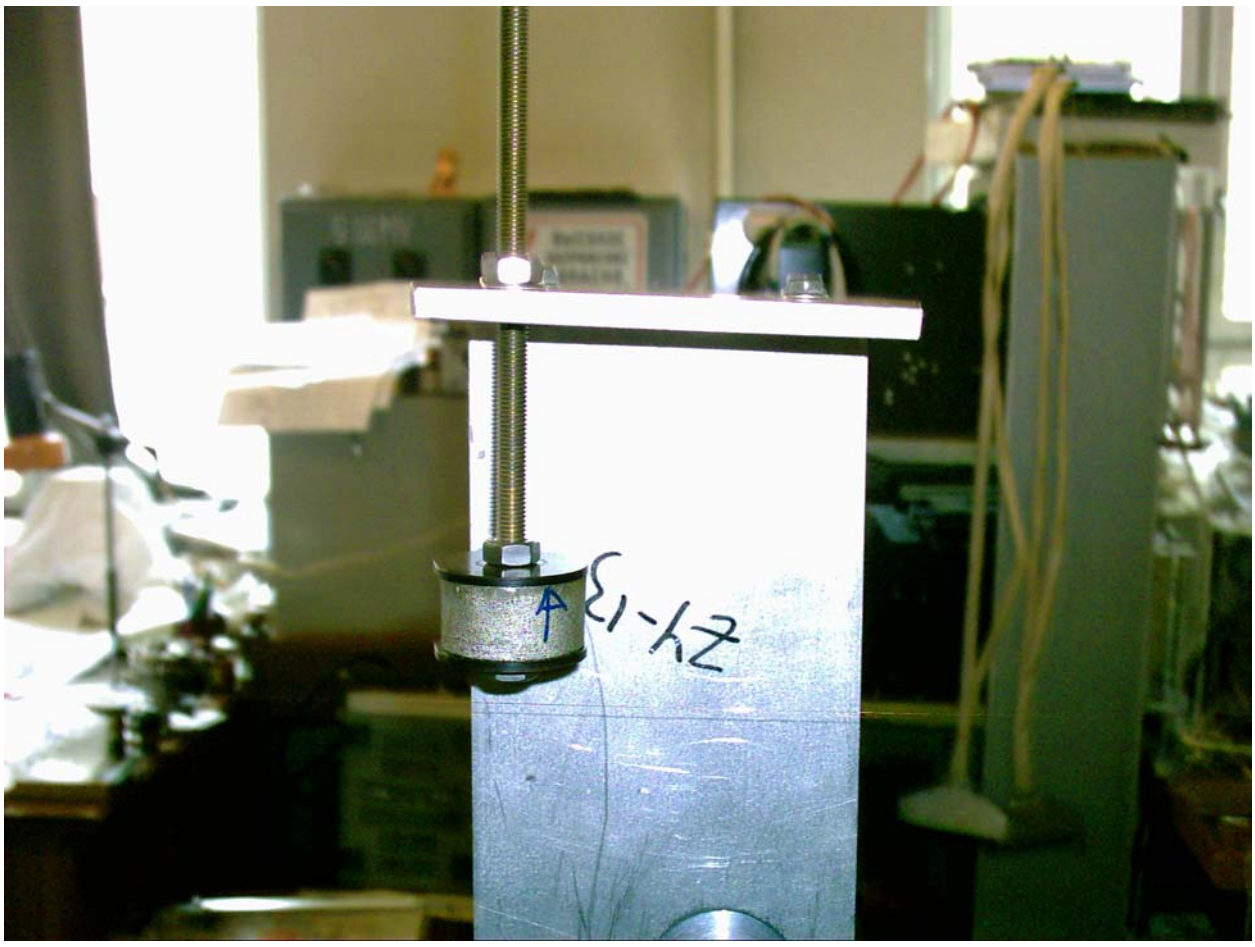


Fig.5. Cylindrical PM for testing.

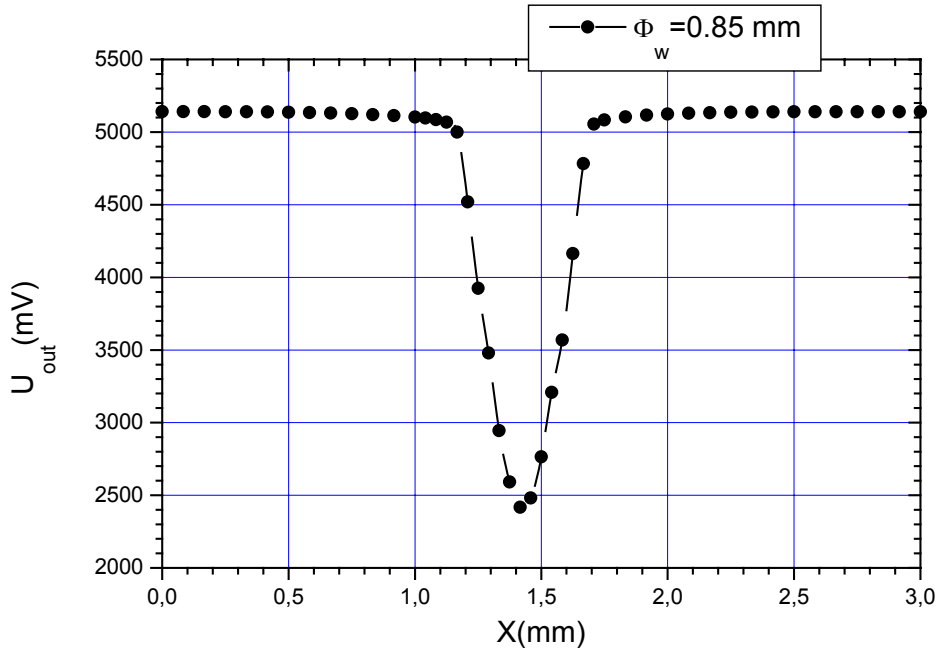


Fig.6. Position sensor signal versus horizontal wire position ($\varnothing_{wire}$=0.85 mm)

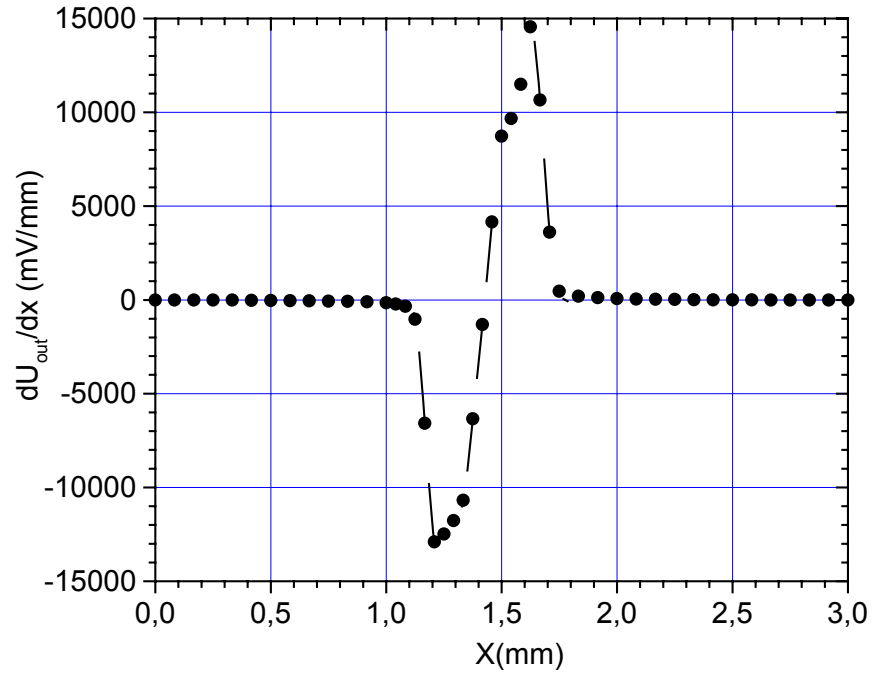
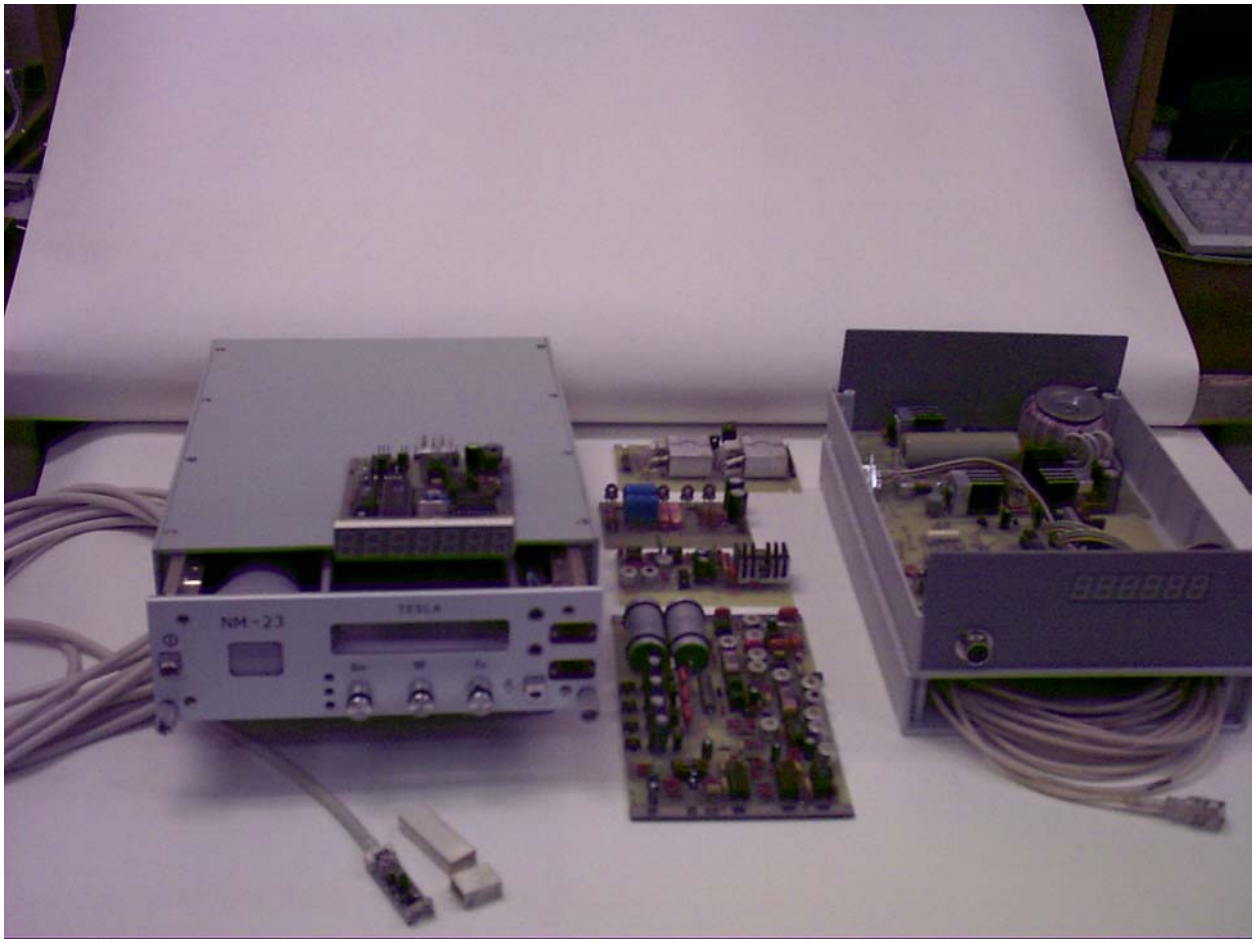


Fig.7. Derivative of the position sensor signal versus horizontal wire position ($\varnothing_{wire}$=0.85 mm)



NMR (left) and Hall magnetometer before final mounting

Finishing of the work – Dec.04 – Jan.05

Mounting of the elements.
Manufacturing of 8 NMR probes.
Commissioning.
Calibration of the Hall magnetometer (by special made magnet with maximal field 0.8 T).
Preparing of the technical documetation.