

激发核磁共振磁力仪

Overhauser effect magnetometer

动态激发核磁共振磁力仪是利用大功率交变磁场作用于样品产生大幅度核磁共振信号，通过测量进动信号频率继而测出地磁场的高精度磁测装置。主要由含有自由基溶液和同轴谐振腔的传感器及主机构成。

主要技术指标：

- ◆ 测程范围：20000nT ~ 120000nT；
- ◆ 静态噪声：0.01nT；
- ◆ 采样周期：0.2 ~ 5sec。

The Overhauser effect magnetometer is a high-precision magnetic measurement device which is the use of high-powered alternating magnetic field acts on the sample produce large nuclear magnetic resonance signal, by measuring precession signal frequency and then measure the magnetic field of high precision magnetic survey.

Specifications:

- ◆ Measuring range: 20000nT ~ 120000nT;
- ◆ Static noise: 0.01nT;
- ◆ Measurement cycle: 0.2 ~ 5sec.

通过对课题任务的研究，突破了技术难点，研制出了基于动态激发核磁共振技术的磁力仪原理样机，填补了国内在动态激发核磁共振磁力仪领域的技术空白。

Through the work of the project, with the breakthrough of the technical difficulties, it has developed a magnetometer prototype based on dynamic excitation nuclear magnetic resonance technology, which has filled the country's technological gap in the field of Overhauser effect magnetometer.



高精度直流激发型质子磁力仪
High precision direct current excitation proton magnetometer

动态激发核磁共振磁力仪
Overhauser effect magnetometer