NMR&MRI Education

EDUMR20-015V-I

Small benchtop NMR

Designed for experimental teaching

Medical imaging engineering, biomedical engineering

Spec

- Magnet type: permanent magnet
- Magnetic field strength: 0.5±0.03T
- Probe coil diameter: 15mm

Suzhou Niumag Analytical Instrument Corporation

Building 3,No.97 Qinglian Road,Xuguan Industrial Park,Gaoxin District, Suzhou,Jiangsu Province,China

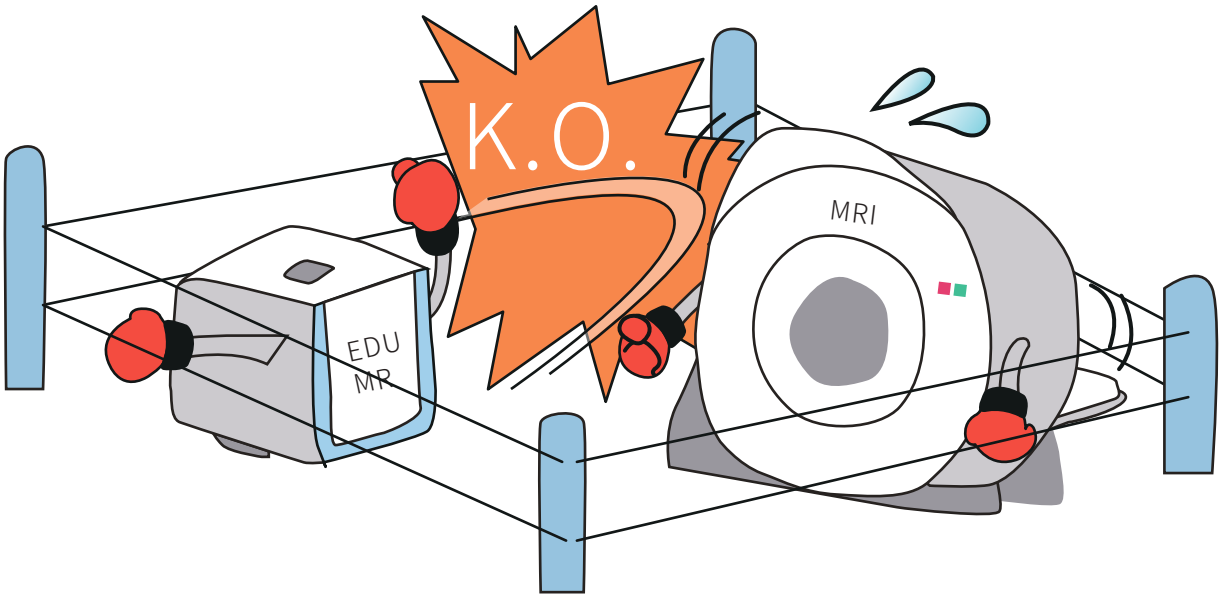
Room C/D/E, 6th Floor , No.1006, Jinshajiang Rd, Putuo District, Shanghai,China

Tel:+86-512-62393560

Email: info@niumag.com

Web: www.nmranalyzer.com

Low-field MRI application solutions provider



Compared to human MRI equipment, it has the following advantages.

- Increase the basic principle experiments to make students have a solid grasp of NMR theory
- Similar operator interface to human MRI equipment, making it easier for students to get started in the future
- Better teaching effect, lower teaching cost, give each student a real operating experience

Experimental projects

I. Principle experiments

Mechanical homogenization (multiple sets of instruments, detachable) and electronic homogenization
Hard pulse FID sequences to measure Larmor frequencies
FID signal in rotating coordinate system
FID signal one-dimensional processing and gain adjustment
Hard pulse echo sequence to determine hard pulse RF
Soft pulse FID sequence to determine soft pulse RF
Soft pulse echo sequence
Inversion recovery method to measure T_1
Hard pulse CPMG sequence to measure T_2

II. Imaging technology experiments

Spin-echo sequence imaging
Spin-echo weighted imaging
Inversion recovery sequence imaging
Two-dimensional gradient-echo sequence imaging
Image pattern of sampling parameters on image size and shape
3D gradient-echo sequence imaging

Operator interface similar to human MRI equipment