

The logo for METROLab, featuring the word 'METROLab' in a stylized, white, sans-serif font. The 'M' is large and blocky, with a small blue 'x' inside its top-left corner. The 'E' has a red horizontal bar. The 'L' is a simple vertical bar. The 'a' and 'b' are lowercase and slanted to the right. The background is dark blue with a grid of dots and a large, faint, glowing circular graphic.

Company Presentation

October 2023

Journées des accélérateurs, Société Française de Physique, Roscoff.

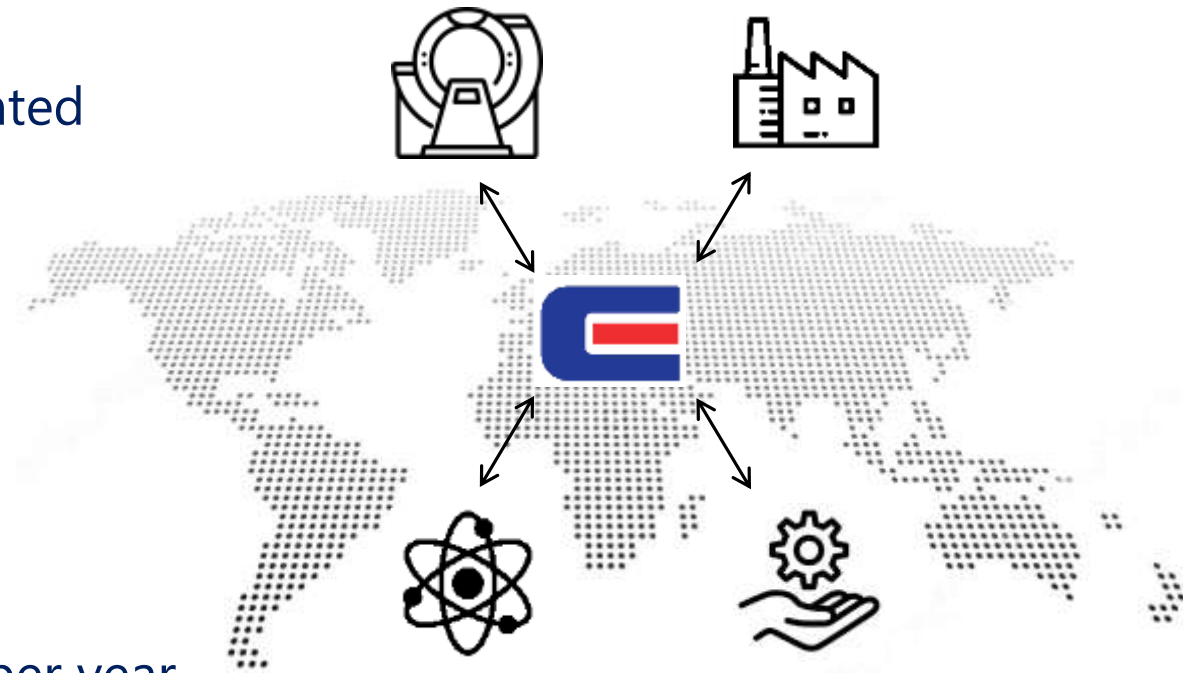
Metrolab Company at a glance

- Metrolab is the global market leader for high precision magnetometers.
- Since 1985, we have won the trust of MRI manufacturers and physics laboratories across the world.
- Metrolab embodies :
 - Mastery of precision magnetic field measurement
 - Understanding of magnet systems applications
 - The responsiveness of a small company
 - A passion for industrial quality
 - Customer oriented



Our strengths

- Global company with 15 distributors over 4 continents
- Highly engaged workforce - Customer oriented
- Intrinsically innovative company :
 - 20% of revenue spent in R&D
 - 40% of labor hours allocated to R&D
- Exhibitor at 12 conferences & trade-shows per year
- Member of IEEE Magnetic Society Standards Committee & UK Magnetic Society



ISO17025 Accredited Calibration Laboratory









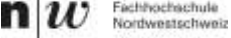







**ACCREDITED
CALIBRATION
LABORATORY**

**ISO/IEC 17025:2017
SN EN ISO/IEC 17025:2018**

First private laboratory accredited to use NMR Precision Teslameters to calibrate magnetic fields.

Customers we serve

Science		Medical	Industrial			
Research	Lab Equipment	MRI	Repair & Calibration	Safety	Complex Magnetic Assemblies	
						
						
						
						
						

Collaborations

- We develop and maintain our unique expertise through an international network of scientific consultants and academic collaborations :



Customers in France

- We deliver products to over 100 customers in France.

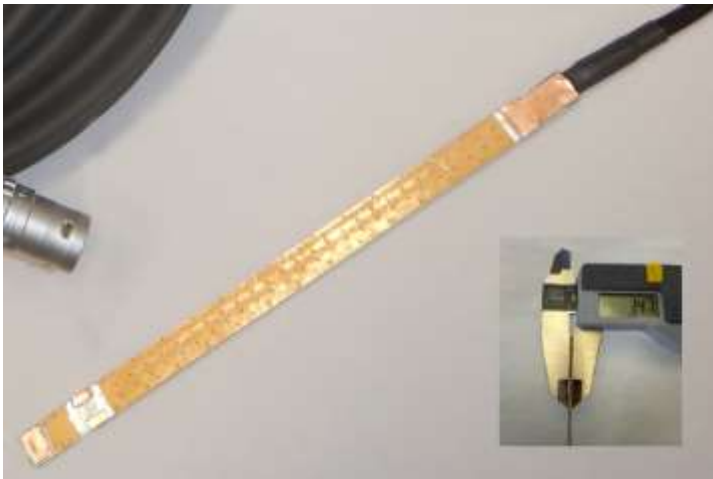


Magnetometer NMR

- Pulsed-wave NMR magnetomer
- Measure from 38 mT up to 30 T
- Precision of 10 ppb (parts per billion)
- Different probe design and range
- Reference for all calibration labs
- Used in scientific experiments



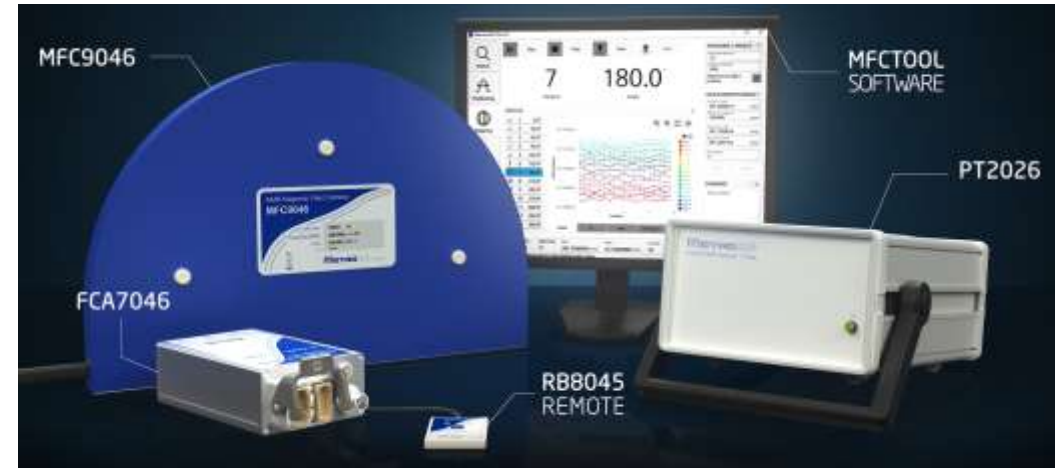
Customization opportunity of the 1426 and 1526 probes



1.5 mm thick NMR probes for IBS in South Korea

Magnetic Field Camera NMR

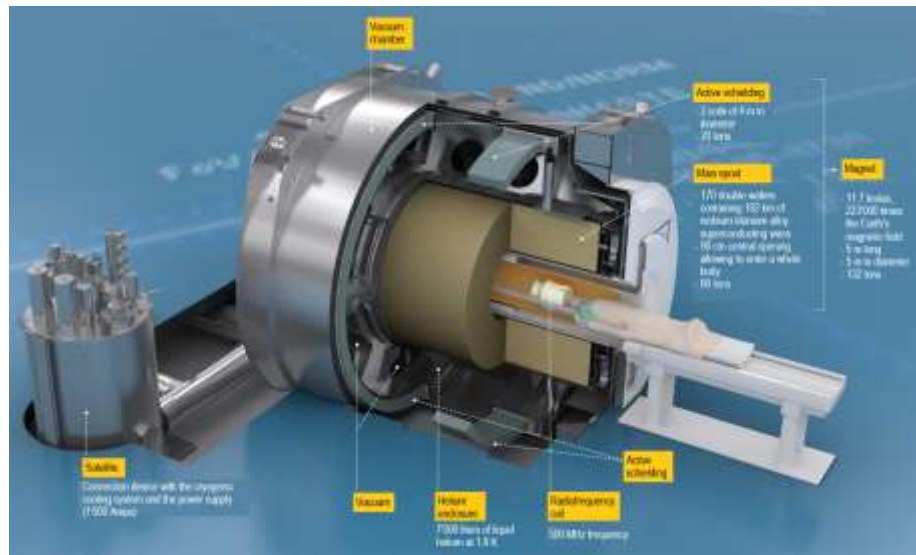
- NMR probe array camera
- Measure from 100 mT to 11.7 T
- From 20 mm to 600 mm DSV
- Up to 255 probes
- Custom design
- Used by MRI & NMR spectrometers manufacturers



Iseult, gigantic MRI magnet

Developed for the CEA in Saclay, France.

11.7 T whole-body magnet



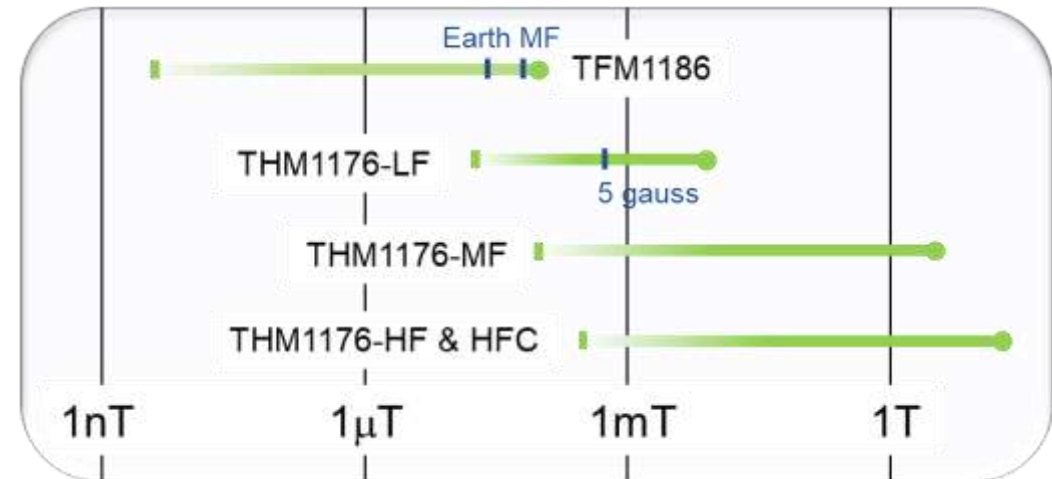
Fluxmeter

- World's fastest and most sensitive voltage integrator
- Up to 500 000 partial integrals per second
- Resolution down to 10^{-14} Vs
- Custom sens coils
- Used for multipoles measurements



Magnetometer Hall & Fluxgate

- Three-axis Hall and Fluxgate Magnetometers
- Measure from few nT to 20 T
- Resolution from 4 nT to 0.3 mT
- Up to 1 kHz AC field
- Accuracy around 1%
- Used in various fields



Magnetic Field Camera Hall

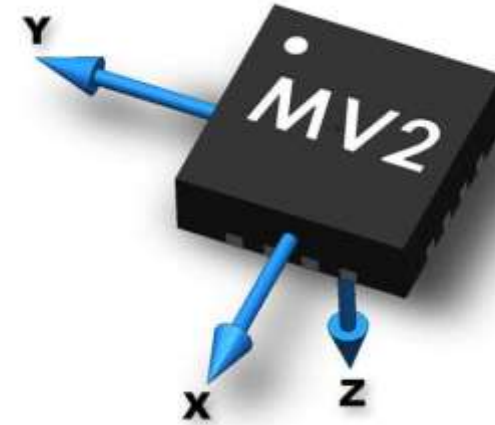
- Three-axis Hall effect sensors array
- 3 different configurations :
 - 32x2 (64 pixels, 80 x 2.5 mm)
 - 16x16 (256 pixels, 40 x 40 mm)
 - 32x32 (1024 pixels, 80 x 80 mm)
- Measure from few mT to 2 T
- Resolution from 4 μT
- Used for magnet characterization



Miscellaneous

- Three-axis Hall sensor :
 - Several ranges : 0.1, 0.3, 1, 3, 10 or 30 T
 - Sensing area of $200 \times 200 \times 5 \mu\text{m}^3$
 - Temperature range -40 to $+125^\circ\text{C}$

- Permanent magnets :
 - High homogeneity (NMR quality)
 - Field strength from 0.01 T to 0.5 T
 - Ferrite, Sm/Co, Nd/Fe/B



Personne de contact

Antoine Daridon, PhD

Daridon@metrolab.com



METROlab

