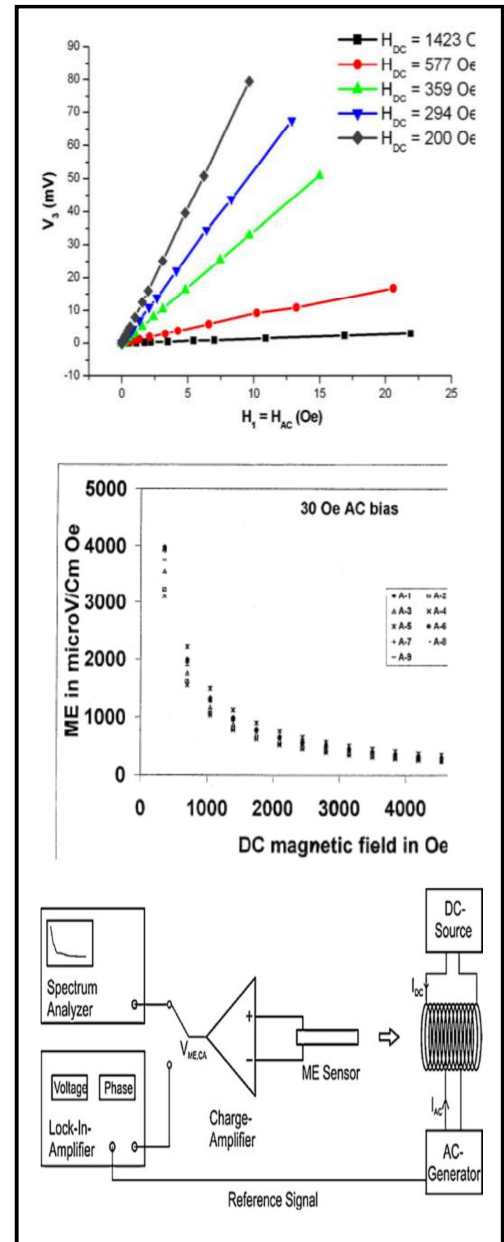


MAGNETO ELECTRIC COUPLING MEASUREMENT SYSTEM



ABOUT THE SYSTEM

Thermodynamically it is predicted that the magneto-electric effect occurs in materials where magnetic-electric or magnetic-electric-elastic phases coexist. The magneto-electric coupling facilitates the modification of electric polarization when an external magnetic field is applied, and the modification of net magnetization due to the application of an external electric field. The effect is mathematically described by the magneto-electric coupling coefficient. The magneto-electric coupling coefficient can be electrically induced describing the change in the magnetic induction of the sample due to the application of an electric field. The magneto-electric coupling measurement system is designed by our company are most advanced in its specifications and can undertake various tests needed by researchers.



MODEL: 1.5T

Various Tests Performed by this Model

- AC Measurement
- DC Measurement

Optional test performed by this model

- Magnetic Poling

Pole gap	Field
Mm	Tesla
12	1.5
14-16	1.3
16-18	1.1
18-20	0.9

MAGNETO ELECTRIC COUPLING MEASUREMENT SYSTEM

TECHNICAL SPECIFICATION

The Highly Advance Magneto Electric Coupling Measurement System test software takes care of important functions of the measurement automatically without any human interventions. Following are highlights of important functions:

- Simultaneous AC DC Measurement.
- Automatic values of Alpha Beta with Sine, triangle wave form generation.
- A Highly advance software to show values at different frequency.
- Representation of data and graphs in automatic scale.
- Online math work for different calculations using sample dimensions
- Data in standard ASCII Format exportable to standard software's like excel origin etc.
- Online export of data from graph.
- Inbuilt Overload protection with thermal shut off.
- A Hall probe display unit provided on front panel of magnetic power supply.

MODEL	1.5T
DC Field	0- 15000 Gauss H frame magnets
Max Pole Gap	80 mm (field vs. pole gap chart provided)
Pole Diameter	4inches (100mm)
Magnet Diameter	12 Inches
DC Field Resolution	10 Gauss in 2 Tesla Range
Bipolar power supply	80V, 5 Amps
Input	220V/440VAC 50Hz
Stability	$\pm 1\%$
Frequency range	500Hz to > 100 KHz
Beyond 20KHz	Field reduces Proportionally
Voltage signal range	$\leq 0.01 \mu V$
Size/ Construction	H frame constructed with TATA A Grade Steel
Cooling	Air Cooled
Helmholtz coils	As per design
Field Coils	AC
Bipolar AC Input Amplifier	0-5 Volts / 0-1 Ampere
AC Field	Current Controlled
Max Sample Diameter/ Thickness	Diameter 10mm/ Thickness 1-2.5 mm
Sample Type	Pellet or film etc

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