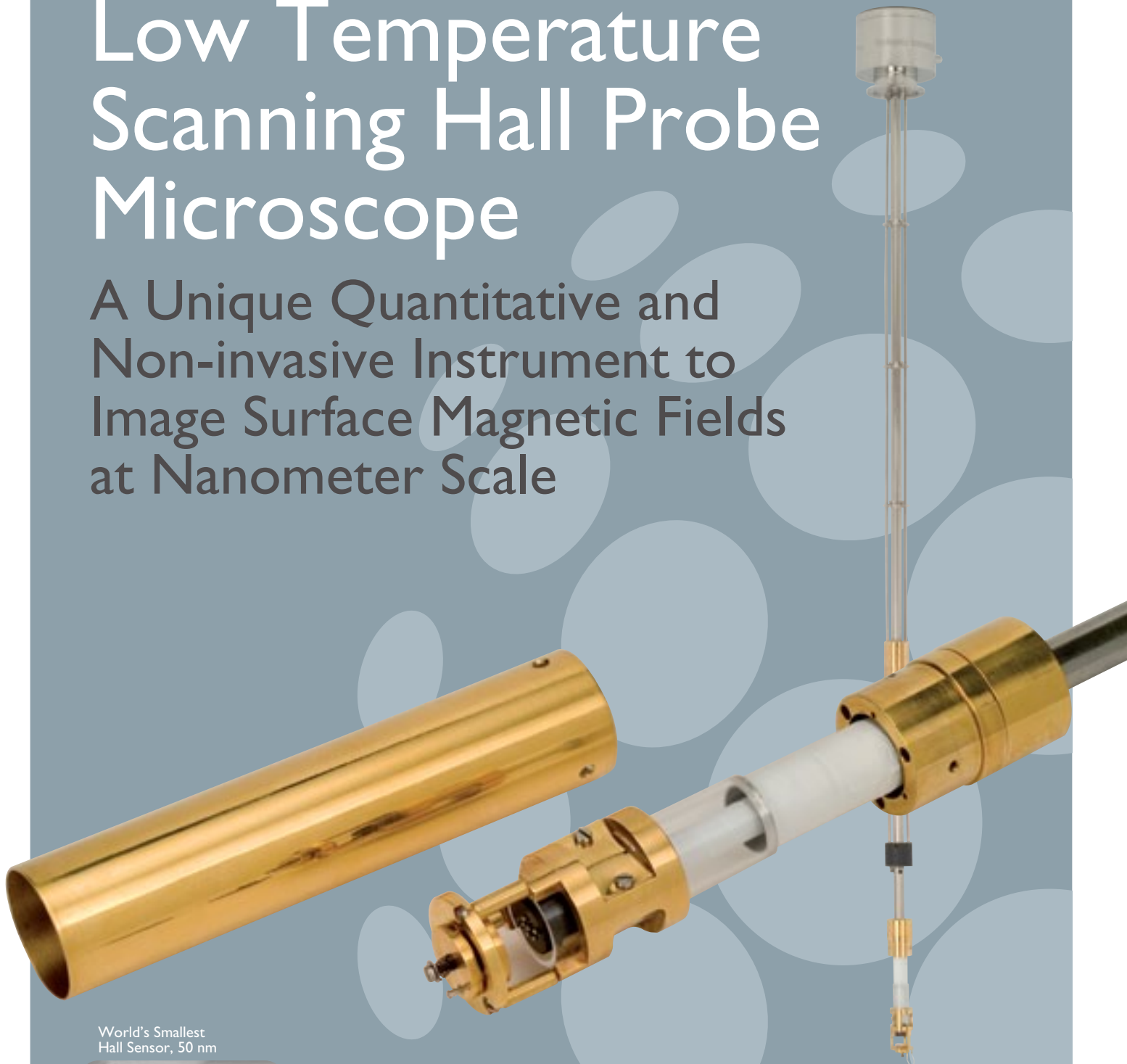


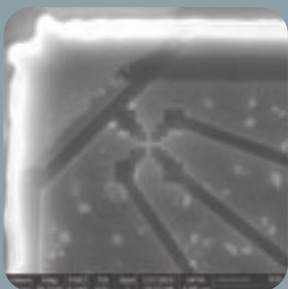
LT - SHPM

Low Temperature Scanning Hall Probe Microscope

A Unique Quantitative and Non-invasive Instrument to Image Surface Magnetic Fields at Nanometer Scale



World's Smallest
Hall Sensor, 50 nm



NANOMAGNETICS
INSTRUMENTS



**NANOMAGNETICS
INSTRUMENTS**

LT - SHPM Low Temperature Scanning Hall Probe Microscope System

Experimental $B_z(H)$ hysteresis loops measured above the indicated positions on the Fe disk

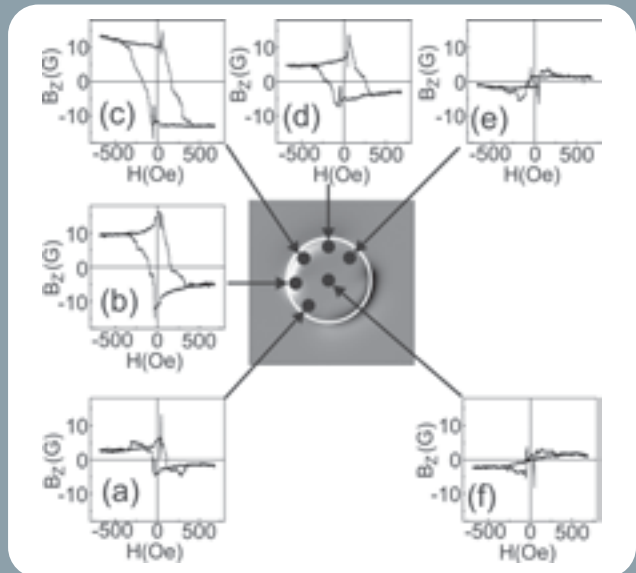
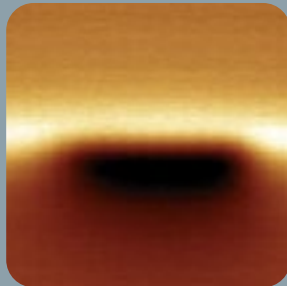


Image Courtesy of Prof. S. J. Bending, Bath University, England

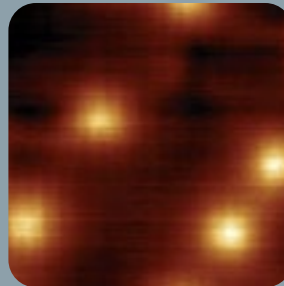
SHPM Image of NIST Calibration Sample



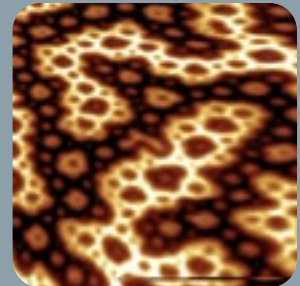
SHPM Image of Tape Head



SHPM Image of Vortices in BSCCO Single Crystal



SHPM Image of NdFeB Demagnetised Magnet



System Specifications

Imaging Modes : SHPM, STM, AFM, MFM, EFM, SNOM (in development)

Scan Size	Large Area Scan Head	Standart Scan Head	Small Area Scan Head
	150 x 150 μm @ 300 K	52 x 52 μm @ 300K	8 x 8 μm @ 300 K
	36 x 36 μm @ 77 K	14 x 14 μm @ 77 K	3.5 x 3.5 μm @ 77 K
	18 x 18 μm @ 4.2 K	6 x 6 μm @ 4.2 K	1.5 x 1.5 μm @ 4.2 K

Z Range	Large Area Scan Head	Standart Scan Head	Small Area Scan Head
	7.0 μm @ 300 K	4.8 μm @ 300 K	2.4 μm @ 300 K
	1.8 μm @ 77 K	1.2 μm @ 77 K	0.6 μm @ 77K
	0.8 μm @ 4.2 K	0.5 μm @ 4.2 K	0.25 μm @ 4.2K

Head Dimensions : 23.6 mm OD x 125 mm or 25.4 mm OD x 100 mm

Sample Approach : Stick-slip type; 10 mm Z, Φ 3 mm XY range with 50 - 800 nm step size

Sample Size : 15 x 15 x 5 mm maximum

Temperature Range : 1 K - 300K for LT-SHPM (limited by the cryostat)

Magnetic Field : >16 T

Suitable cryostats are also available

Software upgrades are free for lifetime

Note: Specifications are subject to change without notice.

Suite 290, 266 Banbury Road Oxford OX2 7DL U.K.

Tel: +44 7906 159508 • Fax: +44 870 7620573

www.nanomagnetics-inst.com • info@nanomagnetics-inst.com