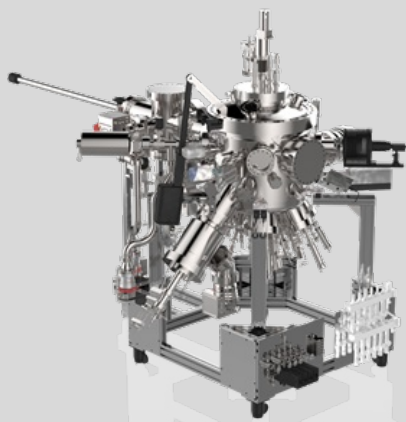


## 2019 News and Events

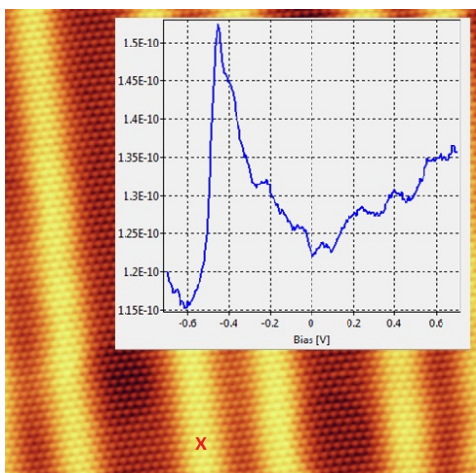


### Magnetic Materials

2018 marked both the launch of our new **Q-SERIES (PVD)**, **M-SERIES (MBE)** platforms, and the addition of **UHV PLD** to our lineup of UHV deposition systems.

These platforms, equipped with our unique sources are allowing researchers to push further into the world of magnetic and new Heusler and Chalcogenide materials.

[Learn more about these products here](#)

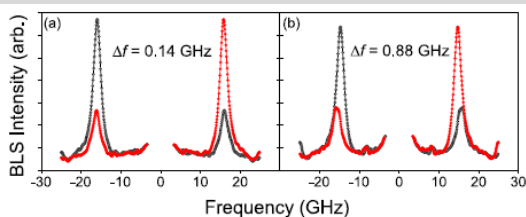


### Results: INFINITY CC-SPM

The launch of our closed cycle **INFINITY SPM** has been followed with three successful installations.

Left: **STM** topological image and corresponding **STS** dI/dV point measurement on Au(111) at **9.6K**. No data averaging or filtering applied.

[INFINITY Closed Cycle SPM results](#)



Raw Brillouin Light Scattering (BLS), spectra (a) Pt/Co/Au (2A)/Pt and (b) Pt/Co/Au (16A)/Pt samples.

The interfacial nature of proximity induced magnetism and the Dzyaloshinskii-Moriya interaction at the Pt/Co interface  
R. M. Rowan-Robinson, A. A. Stashkevich, Y. Roussigné, M. Belmeguenai, S.-M. Chérif, A. Thiaville, T. P. A. Hase, A. T. Hindmarch & D. Atkinson  
[www.nature.com/scientificreports](http://www.nature.com/scientificreports)  
Scientific Reports | 7: 16835 | DOI:10.1038/s41598-017-17137-z

### Research Highlights: Magnetism

Manipulating magnetisation with current is an extremely appealing prospect for magnetic memory and logic.

First realized with spin-polarised current in spin-valves, progress has been limited by the high current densities required to induce domain wall motion.

Researchers using multilayers grown using UHV Sputtering in a MANTIS Q500 system have shown that spin-orbit torques, can lead to more efficient magnetisation control.

Download the paper at:

[www.nature.com/scientificreports](http://www.nature.com/scientificreports)

We hope to see you at these upcoming events:

**PCSI 46**

Physics & Chemistry of Surfaces and Interfaces.  
January 13-17,  
Santa Fe, New Mexico USA.



MMM InterMag  
Booth 23.  
January 14-18,  
Washington DC, USA.



29th Annual Meeting of the Physical Society of Taiwan.  
January 23-25,  
National Chiao Tung University, Hsinchu, Taiwan.

Follow us on our social media channels

