In the Daktulos project, we will apply a recently discovered nano-fabrication technique to develop sophisticated probes with electronic functionality for scanning probe microscopy.

We specifically target magnetic and thermal microscopy. In magnetic microscopy (scanning Hall) we will improve on the state-of-the-art by enabling quantitative detection of magnetic stray fields with 10 nm resolution. In scanning thermal microscopy we will explore probes for high speed measurements of surface temperatures at sub 100 nm resolution.

Financing organisation: STW

Groups involved: Transducers Science and Technology (TST, MESA+)

People involved: Kodai Hatakeyama (PhD. student), Leon Abelmann (Assoc. Prof.), Niels Tas (Assoc. Prof), Edin Sarajic (SmartTip), Gijs Krijnen (Prof.)

Publications

{php}readfile("http://eprints.eemcs.utwente.nl/view/project/Daktulos.include");{/php}