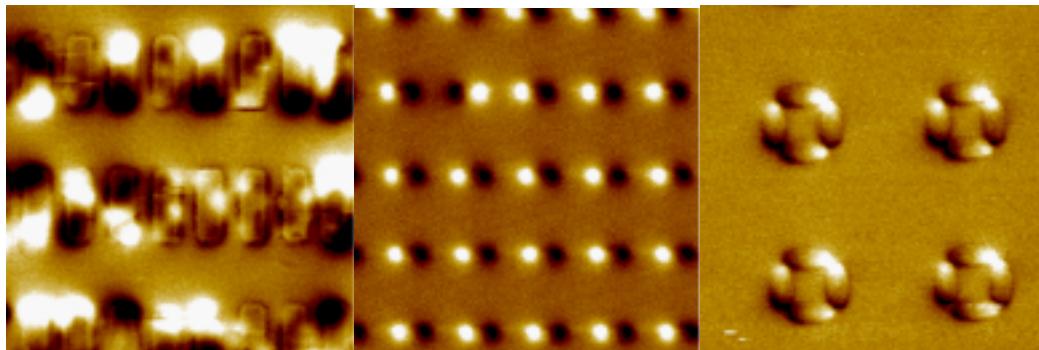


**SMALL MAGNETIC PARTICLES - THE BUILDING BLOCKS OF
ADVANCED MATERIALS**
nanometer fabrication
micromagnetism
magnetic force microscopy



a) b) c)

MFM images of a) Ni particles $900\text{ nm} \times 300\text{ nm} \times 50\text{ nm}$, b) elliptical Co-particles $450\text{ nm} \times 150\text{ nm} \times 20\text{ nm}$ and c) interacting, elliptical permalloy particles $450\text{ nm} \times 150\text{ nm} \times 24\text{ nm}$.

Our project comprises experiments and numerical calculations and we can offer project work e. g. with the following themes:

- *performing simulations of the magnetic structure and magnetization dynamics of magnetic particles (e.g. by applying a program from NIST <http://math.nist.gov/oommf/>),
- *making magnetic measurements and magnetic force microscopy,
- *constructing equipment for applying magnetic fields in a magnetic force microscope, MFM,
- *preparing advanced tips for MFM?

Are you interested?

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