

# ADVANCED FUNCTIONAL MATERIALS

## MAGNETS

With the aim of mimicking the functionality of magnetotactic bacteria, N. Gálvez, J. M. Domínguez-Vera, and co-workers create 'artificial magnetic bacteria'. The decoration of non-magnetic probiotic bacteria with several thousands of magnetic nanoparticles on their external surfaces induces them to behave as magnets at room temperature. Therefore, they become directionally arranged following the magnetic field lines when submitted to a magnetic field, as it occurs with magnetic bacteria. After grafting the magnetic nanoparticles, the artificial magnetic bacteria remain alive. In fact they are converted into living magnets at room temperature.

