Masters projects in the Organic Synthesis Lab at ITQB

Title: The use of aziridines in the asymmetric synthesis of natural products.

Aziridines have been applied in our laboratory for the synthesis of natural products. The formation of cyclic acylaziridines is a reversible process. The aziridine serves as a protecting group for double bonds, a route to alfa substituted enones and as a directing group for ring functionalisation.

Title: The construction of functionalised nanoparticles for biological applications.

Nanoparticles which are fluorescent magnetic or excellent coordinating species are finding many uses in biology. They can be used in imaging, pharmaceutical transportation within living organisms, the selective removal of harmful microbes, and also the removal of harmful metals from biological systems. The construction of functionalised nanoparticles is a relatively new and expanding area which has a bright future.