

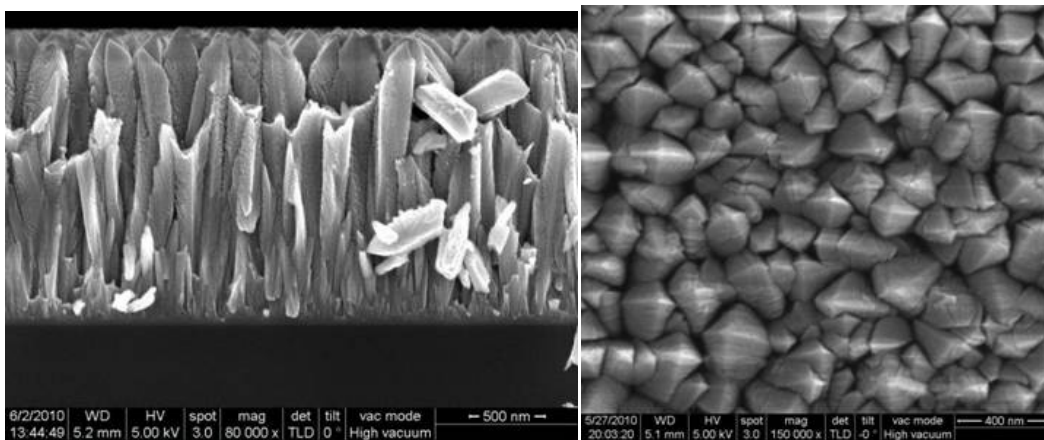
AMAS. Work in progress at the Tribology Center (August, 2010)

Development of TiO₂ and doped TiO₂ coatings.

During the past month the following results have been achieved:

(I). By glow discharge experiments it has been proved, that the TiO₂ coatings remain stable in the active anatase crystal phase at annealing temperatures up to 600° C. This opens the doors to a wide range of applications.

(II). Coatings with copper doped TiO₂ (anatase) coatings were produced. Scanning Electron Microscopy pictures show, that the coating microstructure is porous as is the case for for the undoped TiO₂ coatings.



Cross section

Top

(III). During the summer 2010, deposition of TiO₂ and TiO₂ doped coatings where performed on aluminium and steel substrates. The substrates where pretreated and the coated surfaces surfaces forwarded to the two AMAS partners: Danish Technological University, Dpt. Mechanical Technology [MEK]- and the Institute of Product Development [IPU]. They will investigate the efficiency of inhibition of bacterial growth on the photocatalytic surfaces.