NANOTECHNOLOGY ON SURFACES

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ABSTRACT

Surfaces are important in many industrial and biological processes. To be able to get high efficiency of such processes in nature the degree of organisation at the molecular level is high. Is it possible to develop biomimetic processes where nature could give guidelines for development of efficient processes?

In this presentation I would like to give an overview of our work in this area during the last 10 years.

The following main topics will be presented:

- Site specific and site selective immobilisation techniques at the nanometer scale
- Single molecule detection and investigation of biomolecules
- Heterogeneous biomimetic catalysis
- · Smart materials