

Specialized iNANO lecture

- open to all

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Title: Nanoscience and Enzyme Development

Time: Monday, December 19, 3.15 p.m.

Location: Auditorium, 3rd floor, Department of Physics

Abstract: Understanding of functionality at a molecular level is the philosophy behind the development of new enzymes at Danisco. The existing examples of nanoscience, which will be presented, are therefore related to protein engineering and macromolecular design. Nanoscience in the form of macromolecular engineering is illustrated with an example of enzymatically modified pectin.

Protein engineering is illustrated with the development of new uninhibited xylanases for whole grain bread.

Perspectives and application of nanotechnology in the laboratory will briefly be mentioned. The first project between Danisco and iNano, a project on using enzymes for antifouling, will be introduced. This project links enzyme technology and materials science.

Some future perspectives like nanoencapsulations or new nanostructures for food will be presented. In addition some future possibilities related to linking biotech and inorganic and organic chemistry will be shown.

