

**Seminar**

**Monday April 20, 2009, 1:00 pm**  
**237 SEC**

**Biological macromolecules and electronic  
polymers in nanostructured organics**

**Dr. Olle Inganäs**

Prof. Biomolecular and Organic Electronics  
Director, Center of Organic Electronics  
N-309, Dept. of Physics, Chemistry and Biology (IFM)  
Linköping University, Sweden  
Email: [ois@ifm.liu.se](mailto:ois@ifm.liu.se) Web [www.ifm.liu.se/biorgel](http://www.ifm.liu.se/biorgel)

Interactions between electronic polymers, designed to interact in aqueous media, and biological macromolecules give possibilities for ordering of the electronic polymer. With misfolded proteins, which form nanowires, electronic polymers also affords detection possibilities for in vitro and in vivo diagnostics of diseases associated with protein misfolding, such as Alzheimers. Ordering can be detected by light emission, and we are pursuing ordering of materials with this route, for obtaining bioorganic materials suitable for organic optoelectronics, photovoltaics, and OLEDs. Also metallic polymers can be ordered through this interaction, leading to possibilities for nanoelectronics and THz materials.