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Fakultäts - Kolloquium

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Microchips: The Next Generation

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Abstract

We live in a world that is more and more influenced by technological developments. One of the clearest examples of this phenomenon is microtechnology. The use of microtechnology to miniaturize and functionally integrate electronic components has changed our world and hardly any facet of our lifes is not in some way affected by microelectronics. Building on the microelectronics revolution we are applying similar microtechnology principles to the life sciences. We stand to gain many advantages of the miniaturization of chemical and biochemical analyses, including improved performance, portability, and reduction of analysis cost. In this presentation I will highlight a number of research projects from the Department of Micro and Nanotechnology (Technical University of Denmark, Lyngby, Denmark) which illustrate the advantages and opportunities of micro and nanotechnology. I will show how chip technology can be used to rapidly detect the disease-causing bacteria Campylobacter Jejuni in chicken, how we can analyse blood samples for medical diagnostics with microchips and how we can use multi-sensor chips to the study the behaviour of fish in the Baltic Sea.

Gastgeber: Prof. Dr. Roland Zengerle

Alle Interessenten sind recht herzlich eingeladen.

Organisation : Prof. Dr. B. Becker / F. Schmiedle

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