

JUNE 23, 2006

KURSAAL BERN

nanoCONVENTION

Friday, June 23, 2006

10 AM to 5 PM

**Allegro Grand Casino
Kursaal Bern**

Kornhausstrasse 3,
CH-3003 Bern 25

Online-Registration

www.nanoconvention.ch

Conference

Nanotechnology – A key technology of the 21st century and its impact on science, the economy, health, the environment and society



Materials Science & Technology

Welcome to the Empa NanoConvention '06

Experience-sharing, workshops, discussions, visions – Empa is bringing the main parties together on 23 June 2006 in the Kursaal Berne. Nanotechnology is regarded as one of the key technologies of the 21st century, and one that will have a major impact on tomorrow's society, the economy and life in general. Scanning tunnelling microscopy and the advanced technologies derived from it allow us to take a detailed look into the world of atoms and molecules. Researchers have even learnt how to selectively move around individual atoms. This brings about the production of novel materials with customized properties. Ultra-thin, scratchproof coatings, flat screen panels made of carbon nanotubes or innovative, non-deletable magnetic data storage devices are but a few of the developments that have their origins in nanoscience.

The physicist Richard Feynman anticipated this «quantum leap» as long ago as 1959. «The principles of physics, as far as I can see, do not speak against the possibility of manoeuvring things atom by atom», stated the Nobel laureate-to-be in his now famous lecture «There's plenty of room at the bottom».

Feynman's vision is now materializing. But the prospects of improved material and product properties thanks to nanotechnology have to be weighed up against the potential risks. How do nanoparticles affect human (and animal) physiology or the environment? How do legislators, employers or ordinary consumers go about dealing with the new nanomaterials?

As the materials science and technology institution of the ETH domain, Empa investigates and exploits the opportunities of nanotechnology. However, it is also one of the few research institutions that concerns itself with potential risks, for example the effect of nanoparticles on cells and cell metabolism. At the beginning of 2005, for instance, Empa launched its «NanoRisk» project.

In order to take the «nano-dialogue» beyond the confines of individual disciplines, Empa is gathering the main protagonists from science, industry, insurance and finance, politics, administration and society. The aim of the Empa NanoConvention, to be held for the first time in the Kursaal Berne on 23 June, is to provide a forum for the exchange of experience, visions and ideas about nanotechnology and its impact on science, economy, health, the environment and society through workshops, lectures and discussion rounds. This will help stimulate research and development in this highly promising area in order to make use of the opportunities and also to take a responsible approach to dealing with possible risks.

I feel confident that the Empa NanoConvention will provide an excellent opportunity for some fascinating and lively debates and I would like to extend a cordial invitation to you to join us in Berne.

Louis Schlapbach, CEO Empa

Supportet by:

