

September 2016

Newsflash

Issues

Nanoparticles prevent cavities

Carbon nanotubes help neural tissue

Nano-brochure for consumers

Internship "Emerging Risks/Nanotechnology"

Presentation of the SimplyNano 2 in Düsseldorf

Dear Sir or Madam,

welcome to our September newsletter!

Among other things, in this newsletter you learn more about the following topics:

- How a carbon nanotube mesh helps reorganise neural tissue.
- How nanoparticles can break up plaque and prevent cavities.

Enjoy the reading and kind regards,

Christoph Meili & Nathalie Vonrüti

P.S. We are looking for an **intern** in the field of emerging risks/nanotechnology starting in autumn/winter 2016.

Research team uses nanoparticles to break up plaque and prevent cavities

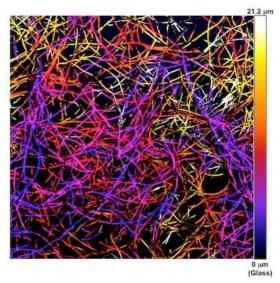


The bacteria that live in dental plaque and contribute to tooth decay often resist traditional antimicrobial treatment, as they can "hide" within a sticky biofilm matrix. A new strategy conceived by University of Pennsylvania researchers took a more sophisticated approach. Instead of simply applying an antibiotic to the teeth, they took advantage of the pH-sensitive and enzyme-like properties of iron-containing nanoparticles to catalyze the activity of hydrogen peroxide, a commonly used natural antiseptic. The activated

hydrogen peroxide produced free radicals that were able to simultaneously degrade the biofilm matrix and kill the bacteria within, significantly reducing plaque and preventing the tooth decay, or cavities, in an animal model.

Read more

Carbon nanotube mesh helps reorganise neural tissue



A 3D artificial scaffold network made from multi-walled carbon nanotubes (MWCNTs) could help locally "rewire" nerve tissue. This is the new finding from researchers in Italy and Spain, who say that the technology could be exploited as a neural interface to help repair nerve fibres after injury or disease.

Read more

New nano-brochure on nanotechnologies for consumers



The new nano-brochure of the Ministry of Rural Affairs and Consumer Protection Baden-Württemberg documents the current state of knowledge on

nanotechnologies for consumers and answers the following questions: What Nano-applications exist and how do they work? What do we know about hazards of nanotechnologies?

The brochure can be found under the following **link** in German.

Internship "Emerging Risks/Nanotechnology"



To complete our Emerging Risks Center team (www.emergingriskscenter.ch) we are looking for an intern (100%) starting in autumn/winter 2016.

The employment ad can be found **here** in German.

Presentation of the "SimplyNano 2" experimental kit in Düsseldorf



The Innovation Society presents the new "Simply Nano 2" experimental kit in Düsseldorf for the first time. The kit is a new teaching material about nanotechnology for schools which can be partially funded by the chemical industry for schools in Germany.

More information about the event can be found here in German.

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