



A Close-up View on Nanoparticles in Biological Matter and Dermal Drug Delivery

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Nanoparticles are nowadays frequently used in innovative products, so that humans are increasingly exposed to these ultrasmall man-made objects. Possible adverse health effects due to nanoparticles have been considered, which are still under discussion. From the physical chemistry point of view this requires to develop in an interdisciplinary research environment a quantitative understanding of the crucial properties of nanoparticles as well as physical and biological barriers preventing particle uptake into cells, organs, and entire organisms. In addition, innovative detection approaches of nanoparticles are of importance for their quantitative and sensitive detection in biological environments. Selected spectromicroscopy approaches will be presented. Knowledge, that is useful for avoiding any uptake and accumulation of nanoparticles in organisms, can be also exploited for optimizing those processes, in which particle uptake is highly desired, such as nanoparticle-based drug delivery. Modern strategies of nanoscopic drug delivery systems are briefly reviewed.

Time/Date:

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Location:

ISN Seminar Room
500 Technology Square, Room 189
(NE47-189)
Cambridge, MA 02139

Screen-share connection information:

<https://isn.adobeconnect.com/ruehl/>

Teleconference line:

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