

## " Engineered nanoparticles : Preparation, functionalization and applications ."



**T**he field of nanotechnology is related to the production and application of nanostructured materials, and has been recognized as one of the fastest developing fields. Nanotechnology manipulates matter at the nanoscale (1–100 nm) producing nanoproducts and nanomaterials that display novel and size-related physico-chemical properties differing significantly from those of their bulk counterparts. The novel properties have been exploited widely in diverse areas such as electronics, biomedicine, pharmaceuticals, cosmetics, environmental analysis and remediation, catalysis, and material sciences.

In this talk, I will focus on the preparation and functionalization of diamond and lipid nanoparticles and their applications in drug and gene delivery, photodynamic therapy (PDT), but also I will highlight in a few examples the potential of the functionalized particles to inhibit hepatitis C viral entry and biofilm formation.

### **Dr Rabah BOUKHERROUB**

Institute of Electronics, Microelectronics and Nanotechnology (IEMN)  
Université de Lille, Villeneuve d'Ascq

Invité par Chantal Pichon

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