

IDENTITY

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Short Biography

Pr Mona Tréguer-Delapierre, a Professor at the Institute of Chemistry of Condensed Matter (ICMCB) near Bordeaux, focuses on nanoparticles synthesis and assembly into 2D and 3D materials. She obtained her PhD in Physical Chemistry from the University of Orsay and was a post-doctoral fellow at the Radiation Laboratory in USA. She works in several metallic materials of interest in optics and energy. Currently, with her colleagues, she is exploring how metallic nanostructures can be exploited for mastering the fabrication of next-generation materials for optoelectronics and to create innovative visual appearance designs.

Title of Oral Presentation

Matter and materials made from metallic nanoparticles

Keywords (5 words max)

Colloidal synthesis, (bi-)metal, plasmonic, anisotropy

Abstract of Oral Presentation

Colloidal metallic nanoparticles with well-controlled shapes and surface properties exhibit unusual physico-chemical characteristics. They are of significant interest for advancing applications in a range of exciting research fields : cloaking, imaging, optical communication. Mastering their fabrication enables to make useful novel materials and to gain deeper understanding of the optics of materials at the nanoscale. In this talk, I will show the recent advancements in the colloidal synthesis of metallic nanoparticles for the design of optoelectronic materials and the creation of surfaces with innovative visual appearances.

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