

POST-DOCTORAL POSITION

Contact :

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Safe design of active multi-layer structures containing Zero-Valent Iron Hybrid Nano-Particles

The baseline of the proposed position is to investigate multi-scales and multi-shapes iron based nano-systems with a large range of potential applications. The objective is to lift the major bottleneck of existing zero valent iron nano-particles (ZVINP) properties in terms of safety and stability by allowing new routes of usage conditions in multi-layer structures.

The researcher is expected to be in charge of developing a safe by design strategy of ZVINP combining enhanced activity (reduced size) of spherical biocompatible nanoparticles anchored on 1 or 2 dimension nano-supports to facilitate the use and limit exposure. The researcher will investigate in situ synthesis of spherical ZVINP onto the surface of clays and nano-cellulose fibers. Synthesized ZVI hybrid NP will be tested in usage conditions e.g. multilayers materials for food packaging. The researcher will work in the framework of the Labex SERENADE (www.labex-serenade.fr) in the JRU IATE in close collaboration with CEREGE Aix en Provence, ISTerre Grenoble, and INP PAGORA Grenoble partners.

The candidate must hold a PhD thesis preferably in nanotechnologies, chemistry, food, engineer or environmental sciences, with a good record of publications in relationship with the targeted field of activities: a minimum 5 A-level published papers is required.

The Post Doctorate candidate must be highly dynamic, extremely sociable, feel comfortable to speak and write english, be very autonomous and strongly motivated by a collaborative and collective work. The Post Doctorate candidate must be highly motivated by nanotechnologies. A scientific mind opened to others sciences such as health, environment, human, communication, modeling, computer or information sciences will be welcome. All nationalities are accepted.

Location: in Montpellier, south of France.

Term of contract: 18 months

Starting date: between october and december 2017

Contact: Valérie Guillard or Nathalie Gontard

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Applications must be submitted in English by email:

- a Curriculum Vitae (2 pages max)
- a list of publications (numbered A level)