NANO-ENAG - Use of nanomaterials for environmental and agricultural applications REFERENTE dott. De Martino Antonio, Dip. Scienze del Suolo, della Pianta, dell'Ambiente e delle Produzioni Animali

The aim of the joint research programme is to study nanomaterials for environmental and agricultural applications. The global objectives of this project will be:

- to synthesize and characterize low cost nanomaterials such as layered double hydroxides (LDHs) or fine grained poorly crystalline Fe-Al or Fe-Mn oxides. These nanomaterials will be used in native form and complexed with an organic matrix, named polymerin, recovered from olive mill wastewaters (OMW);
- to study the behaviour of nanomaterials for retention of pesticides and biophenols and to develop slow-release formulations of these chemicals, with particular emphasis on assessing their bioavailability;
- to totally detoxify OMW through fractionation on nanomaterials.

Coordinator UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II (Italy)

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End date 31/08/2011
Duration 24 mesi
Project cost Project Funding 46800.00 euro
Subprogramme Area International Research Staff Exchange Scheme
Contract type International Research Staff Exchange Scheme