



**EARLY STAGE RESEARCHER (PhD position) available at the  
Laboratory of Photochemistry, Department of Drug Sciences,  
University of Catania (ITALY)**

**Funded by the EU Marie Curie Network **CycloN-Hit****

**TITLE:** Design and fabrication of photoactivable cyclodextrin-based nanoconstructs for antimicrobial applications

**STARTING DATE:** September 1<sup>st</sup>, 2014 or according to agreement.

**DURATION:** 12 months renewable up to 36 Months

**DEADLINE:** July 10, 2014

**BENEFITS:** The successful PhD student will enjoy a full employment contract with a very competitive salary (>49000 €/year), work in a nice location and interactions and collaboration with top Institutions/Labs in Europe.

**REQUIREMENTS:** MSc (Master of Science) degree obtained between 2010 and 2014 (*i.e.*  $\leq 4$  years research experience at the time of hiring) in Chemistry, Pharmaceutical Sciences or related. Applicants should be preferably European Citizens (from EU Member States or Associated Countries) but also candidates from Third Countries are eligible. The applicants must not have resided or carried out his/her main activity (work, studies, *etc*) in Italy for more than 12 months in the 3 years immediately prior to his/her recruitment. For more details, see: [http://ec.europa.eu/research/mariecurieactions/index\\_en.htm](http://ec.europa.eu/research/mariecurieactions/index_en.htm). The ideal candidate should be a highly motivated person with a strong background in his/her field, and aspiration to carry out challenging research.

**DESCRIPTION OF WORK:** The recruited person will carry our research in the general area of nanomedicine and specifically in light-activated nanoassemblies based on cyclodextrin (CDs) for antimicrobial applications. The final goal is to developing CD-based nanoconstructs able to delivery multiple therapeutic species under the exclusive control of light input for multimodal antimicrobial therapy, in order to overcome certain forms of multidrug resistance. The ERS student will carry out European-funded research (FP7, Marie Curie ITN Network) and will operate in a network of highly specialized groups in CDs chemistry, photochemistry and biological evaluation from academia and industry. Therefore, the recruited person will work on synthetic chemistry, molecular self-assembly and investigation of photochemical and photophysical properties of all the systems achieved. The antimicrobial effectiveness of the nanomaterials prepared will be tested in collaboration with the other CycloN-Hit partners. Moreover, the PhD student will be required to fully follow the training program of CycloN-Hit, travel to collaborating laboratories, present her/his research in biannual project meetings, conferences, and in regular reports, and attend the Summer Schools and Workshops organized by the project.

**HOW TO APPLY:** A detailed CV, illustrating the candidate's educational background, the list of publications, contributions to conferences, seminars and any other information that is believed appropriate to demonstrate the required skills, together with contact information of at least two referees, should be sent by e-mail to:

Prof. Salvatore Sortino,

Email: [ssortino@unict.it](mailto:ssortino@unict.it)

Tel. +39-095-7385079

Website: <http://docenti.unict.it/sortino>

**The applicants should be prepared to participate to at least one interview via Skype**