



Erasmus+ Traineeship

EMPLOYER INFORMATION	
Name of Organization	University of Murcia
UMU Contact Person and e-mail	José Ginés Hernández Cifre jghc@um.es
UMU Address	Facultad de Química, Campus de Espinardo, 30100 Murcia
UMU Telephone	+34 868 88 7427

ENTERPRISE JOB DESCRIPTION	
Name of enterprise	Polymers Group (physical chemistry of macromolecules) / Grupo de Polímeros (química física de macromoléculas)
Duration	From 3 to 6 months
Working Hours	25-35 h/week
Project Description	<ul style="list-style-type: none">- Experimental: Synthesis, modification and characterization of nanoparticles in solution.- Computational: Modelling and simulation of macromolecules in dilute solution.



Tasks of the Erasmus intern	<p>If experimental: synthesis of metallic nanoparticles, their modification with polymers, and the characterization of their size and shape under different environmental conditions.</p> <p>If computational: use of computer programs to simulate the conformation and dynamics of macromolecules (synthetic polymers and biomacromolecules) and calculate their solution properties.</p>
Requirements	<p>The student should be able to communicate in English or Spanish.</p> <p>The student should have basic knowledge of the physical chemistry of macromolecules.</p> <p>For the experimental tasks: knowledge of basic laboratory skills.</p> <p>For the computational tasks: basic knowledge of some high-level programming language and numerical techniques. Skills in the use of computational tools like spreadsheets, molecular visualization tools and graphical tools.</p>
What do we offer	<p>A good work atmosphere and a training in computational modelling and simulation and/or in physical-chemical analytical techniques like dynamic light scattering, size exclusion chromatography, rheology, etc.</p>
Website	<p>https://curie.um.es/curie/catalogo-ficha.du?seof_codigo=1&perf_codigo=10&peva_cod=003&titulo=Ciencias+Experimentales&sec_codigo=&cods=E045*04</p> <p>Also: http://leonardo.inf.um.es/macromol</p> <p>Contact: José Ginés Hernández Cifre (jghc@um.es)</p>



UNIVERSIDAD DE
MURCIA

Vicerrectorado de
Internacionalización