



Universidad Complutense de
Madrid



QUIMAPRES
Research Network



MOMAT
Research Group
<http://www.mat.ucm.es/momat>

Call for a PhD Research Contract

Applications are invited for a PhD Research contract fully funded by the Community of Madrid within the area of numerical modeling of High Pressure Processes, in the Department of Applied Mathematics (within the MOMAT Research Group, <http://www.mat.ucm.es/momat>) at the Universidad Complutense de Madrid (UCM).

Salary and duration:

The contract will provide a stipend of about 1.142,00 euros per month until the end of 2010 (renewable until the end of 2013). In addition, the selected candidates will also receive Spanish Social Security coverage, comprising health care and contribution towards retirement pension.

Research activities:

The chosen candidate will be involved in the mathematical modeling of High Pressure processes (with special attention to enzymatic and microbial behavior and also to industrial equipment design); application and extension of existing computer code; planning and running the numerical simulations; and analyzing the results. The applicant is also expected to participate in the publication of journals and conference papers as part of his/her research degree.

This contract is offered in the framework of QUIMAPRES, a Network of Research Groups funded by the Community of Madrid. Therefore, the student will also work in collaboration with the other partners: Research Group "Altas presiones: Determinación de parámetros espectroscópicos y termodinámicos" in the School of Chemistry at UCM; Institute of Refrigeration (CSIC); National Institute of Aerospace Technique (INTA); Institute of Material Science of Madrid (CSIC); Research Group "Simulación de Sistemas poliméricos complejos y proteínas" in the School of Chemistry at UCM; Esteban Espuña, S.A.; and NC Hyperbaric.

Minimum required qualifications:

Applicants should hold a bachelor degree (or expect to hold it within a few months) in Applied Mathematics, Engineering or Physical Sciences. Knowledge and experience of modeling with differential equations, programming in Fortran, C or Matlab, Linux operating system and parallel programming will be taken into account.

Enquiries and Applications:

Applications should consist of a letter explaining the reasons for applying for the contract, a copy of an official transcript and degree certificate, and a detailed CV (specifying expected or actual degree). Enquiries and applications should be sent by email (before February 28th, 2010) to Angel Manuel Ramos, angel@mat.ucm.es.