UNIVERSIDAD DE GRANADA

Postdoctoral research contract associated with the project "Computational modeling for the development of environmentally friendly polymer coatings (POLIMERO)"

Details

- **Location:** Biocolloid and Fluid Physics Group, Department of Applied Physics, Faculty of Sciences, University of Granada (Spain).
- **Duration:** 6 months
- **Monthly gross salary:** 1970 €
- **Application:** from January 15 to January 28, 2025, at https://investigacion.ugr.es/recursos-humanos/personal/contratos.

Activities to be carried out

Perform Molecular Dynamics simulations of systems of polymers adsorbed on surfaces using the HOOMD-blue software. Use and adapt previously developed Python codes, and implement improvements to analyze the effect of various factors on polymer adsorption and on the physical properties of polymer coatings. Analyze results, including trajectory visualization with specialized software and coding in Python to calculate static and dynamic properties. Contribute to manuscript writing and the presentation of results at conferences.

Required education

PhD and Master's degree in Physics or related fields relevant to the proposed activities. Specific training in numerical methods and molecular simulation will be highly valued.

Experience

Demonstrable professional experience in research projects related to the proposed activity. Previous experience with molecular simulation packages is particularly appreciated.

Other selection criteria

Publication of relevant articles on the research topic will be considered. Demonstrable proficiency in programming (in any language) is essential, with special consideration given to Python skills. Adequate English level to discuss, analyze, and write up results in this language. A personal interview may be conducted, if necessary.

Contact

Please contact **Irene Adroher-Benítez** (iadroher@ugr.es) for additional information. Informal queries before applying are welcome. Since the application website is in Spanish, please let me know if you have any difficulties understanding the procedure.