

A Postdoctoral Position is open at BCAM Bilbao in close collaboration with the Polymerization Processes group at POLYMAT

Applications are invited for a postdoctoral position (2 years) in the CFD Group at the Basque Center for Applied Mathematics (BCAM) in Bilbao (<http://www.bcamath.org/en/research/lines/CFDMS>)

The project will be on "**Multiscale simulation of polymeric systems and adhesives materials** "

using a recently proposed Lagrangian Heterogeneous Multiscale Method (L-HMM) based on Smoothed Dissipative Particle Dynamics .

Adhesives are complex polymeric materials that work on the basis of interactions that occur across multiple length scales. For example, in a polymeric pressure sensitive adhesive the bond between the adhesive and the substrate occurs at the molecular level but the macroscopic behaviour observed is largely the result of chain dynamics at the macromolecular level. Understanding adhesion thus requires linking phenomena occurring over multiple orders of magnitude in length and time.

The postdoctoral candidate will work under the supervision of Ikerbasque Prof. Marco Ellero (CFD group, BCAM) on modelling and HPC simulations of the above mentioned systems. The project will be in close collaboration with the Polymerization Processes group at POLYMAT (Prof. José María Asua: <https://www.polymat.eu/en/groups/polymerization-processes-group>) which has which has extensive experience in the development of polymeric adhesives from synthesis to macroscopic applications and possess state-of-the-art analytical techniques for a detailed structural characterization of the complex polymeric systems and adhesives.

More information:

http://www.bcamath.org/documentos_public/archivos/ofertas/IC2023_02_IKUR_ELLERO.pdf

Apply here: <http://www.bcamath.org/es/research/job/ic2023-02-postdoctoral-fellowship-in-multiscale-simulation-of-polymeric-systems-and-adhesives-materials>

Deadline: 31st March 2pm CET.