

PhD Fellowship in the use of microfluidics for understanding emulsion polymerization

A PhD Fellowship in Chemistry is available in the Polymerization Processes Group at the Basque Center for Macromolecular Design and Engineering, POLYMAT Fundazioa (www.polymat.eu). The project is to be conducted in collaboration with a world-leading producer of emulsion polymers.

Emulsion polymerization is an industrialized process for the production of polymer latexes that involves a complex, heterogeneous polymerization system. Due to the high complexity, and despite decades of study, much of the emulsion polymerization process remains poorly understood. The aim of this project is to use microfluidic techniques to gain an improved understanding of fundamental processes involved in emulsion polymerization, particularly with regards to events in the aqueous phase. This will involve both experimental studies and theoretical modelling.

Applicants must have an MSc in Chemistry (or a related discipline) by September 1, 2021. A background in polymer science or microfluidics is highly desirable.

Good command of written and spoken English is a must (if preselected, a telephone interview will be carried out before any other appointment is made). The selected candidate is expected to conduct research, write papers, and deliver a PhD thesis.

Applications should be addressed to Prof. José M. Asua and Dr. Nicholas Ballard and sent via email in one single PDF to nicholas.ballard@polymat.eu before the 1st July 2021 (applications will be considered upon arrival) including:

- (i) a cover letter highlighting their interest in the position.
- (ii) curriculum vitae.
- (iii) a short description of previous research (1-2 Pages).
- (iv) the names and contact addresses (e-mail) of two academic referees.

Please note that *because of the large number of applications expected*, we will not be able to give individual *feedback* to unsuccessful applications.