

Company Description

Job Description A PhD position is available at POLYMAT and DIPC (San Sebastian, Spain) to conduct research in NUCLEATION AND CRYSTALLIZATION OF SEMI-CRYSTALLINE SEMICONDUCTIVE POLYMERS. The project is aimed at gaining full understanding of how the solid state microstructure is generated in new generations of high-performing polymers for organic photovoltaics (e.g. PBDB-T, PBDB-T-2Cl, etc.) via crystallization. The final goal will be to establish relevant interrelationships between the processing, the structure and the (optoelectronic) properties of this polymers. This is a joint doctoral program between Dr. Jaime Martín (EHU/UPV - POLYMAT) and Prof. Alejandro J. Müller (EHU/UPV - POLYMAT).

Information

 **Deadline:** 2019-11-15
 **Category:** Academia
 **Province:** Gipuzkoa

 **Country:** Basque Country
 **City:** SAN SEBASTIAN

Company

Polymat

POLYMAT
 Basque Center for
 Macromolecular Design and Engineering

Main functions, requisites & benefits

Main functions

Main tasks of the position will be: Study the crystallization processes of semiconducting polymer thin films combining ultrafast calorimetry, synchrotron radiation, spectroscopic and microscopic methods. Understand how the microstructure impact optoelectronic properties, for example, charge-carrier transport, charge generation, exciton recombination, etc.

Requisites

Eligibility Applicants must have a BSc and MSc in Physics, Chemistry or Materials Science/Engineering and general knowledge about polymer physics or organic electronics. A background in Polymer Physics is highly desirable. Good command of written and spoken English is a must. The selected candidate is expected to conduct research, travel, write papers, and deliver a PhD thesis.

Benefits

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