



ESR1 – Job vacancy

| Position description | |
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| Reference | ESR1 |
| Title | Development of Polymer Blend Nanocomposites (PBNANOs) from Recycled Plastics |
| Recruiting Institution | University of the Basque Country (UPV/EHU)-POLYMAT |
| Secondment Institution | Borealis |
| Expected start date (estimated) | October 1, 2020 |

| Job Offer description | |
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| Objective | Formulation of polymer blend nanocomposites employing postconsumer recycled PET bottles, recycled polyolefins (PP and/or PE) and functionalized nanoparticles. i) Determining compatibilization efficiency, morphology stability and processing conditions, ii) Tuning the morphology and mechanical properties by addition of functionalized nanoparticles and compatibilizing agents (e.g., PP-g-MAH or PE-g-MAH), iii) Finding the optimum blend composition for balanced properties and adequate performance for sought upgrade application (e.g., automotive parts, smart packaging fibers). |
| Expected results | ESR should be able to evaluate the compatibilization efficiency of functionalized nanoparticles and grafted copolymers for novel recycled PBNANOs. ESR should evaluate the relationship between blend morphology, processing and end properties. |
| Supervisors | Prof. A. Müller (UPV/EHU and POLYMAT), Dr. S. Kahlen (Borealis). |
| Secondments (short term academic and industrial internships) | Borealis: Morphological characterization of prepared blends, Evaluation of mechanical properties of most promising PBNANO |

| Vacancy requirements | |
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| Qualifications | Not having resided in Spain for more than 12 months in the 3 years immediately before the recruitment date, and not having carried out their main activity (work, studies, etc.) in Spain during this period. Having a master degree or equivalent diploma, less than 4 years of research career at the recruitment date, and not having a doctoral degree. Solid background in polymer materials |
| Languages | Excellent command of written and spoken English is a must. |

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| Skills | Ability for research management, dissemination, communication with colleagues and supervisors, strong teamwork spirit, creativity, problem solving and attention to safety. |
| Experience | Research experience in the academic or industrial sector will be considered |

| Job details | |
|-------------------------|---|
| Salary | Salary and benefits will follow the rules of the MSCA-ITN, as foreseen in the Marie Skłodowska-Curie Actions Work Programme. Gross salary: (3270€ per month*CCC Spain (95,4%)) 3119,58€ + 600 € mobility allowance *CCC (Country Correction Coefficient) |
| Other benefits | Other benefits: Gross family allowance: 500€ per month - if applicable at the time of recruitment |
| Duration | 36 months (18 months at UPV/EHU and 18 months at Borealis) |
| Start date | Estimated: 01/10/2020 |
| Type of contract | Full time |
| Place of work | At UPV/EHU: Donostia-San Sebastián, Spain At Borealis: Linz, Austria |