



## **INSPIRATION Marie Skłodowska-Curie Innovative Training Network Early-Stage Researcher (PhD) Fellowships**

INSPIRATION (*managing soil and groundwater impacts from agriculture for sustainable intensification*) is a multidisciplinary European Training Network composed of 26 partners in 9 European countries, which aims to develop low-technology management practices, monitoring approaches, modelling and decision-making tools, and innovative technology applications in the field of sustainable agriculture by a combination of fundamental and applied science ([www.inspirationitn.eu](http://www.inspirationitn.eu)). The research focuses on understanding and predicting the environmental fate of nutrient and organic pollutants from agricultural practices and managing their impact on soil, water and climate systems to ensure sustainable production. It links lab- to catchment-scale studies of biogeochemical processes with field-scale evaluation of novel monitoring and management concepts, using state-of-the-art methods. The network will provide high-quality research training to young scientists, through 15 fully-funded Early-Stage Researcher (PhD level) fellowships. The network includes leading research groups, regulators, advisory bodies, water utilities, consulting firms, commercial R&D and multinationals. The project has an international advisory group and will undertake a comprehensive programme of knowledge transfer and outreach activities with other scientific networks and professional bodies in this field.

### **Job Description:**

This is an industry based PhD and the project will focus on the mitigation of soil and groundwater impacts from agriculture using mixed waste media. The main objectives of the PhD will include the following:

1. Identification of locally sourced raw materials across partner countries used in isolation or in combination that have the capacity to mitigate mixed contaminants and are safe to recycle back on land.
2. Evaluation of performance and biochar and other potential media in this application.
3. Development of methodology to measure NKP and other contaminants in the media. Passive sampling and microfluidic technologies will be considered.
4. Development of in-process monitoring to provide information for modelling on lab pilot plant.
5. Field deployment of measuring technology to monitor performance of media in a field application.

### **Host organisation:**

T.E. Laboratories Ltd., Tullow, Co. Carlow.

### **Duration of employment**

The period of appointment is up to 36 months, from October 2016. Successful candidates are expected to register for a programme of study that leads to a PhD.

### **Benefits**

All fellows will receive a contract of employment as a full-time researcher for the relevant period of their appointment, which will include applicable benefits in the host country. All fellows will complete a comprehensive personalised career development programme, with targeted training measures and participate in a range of network events across the partnership, including industrial training experience. Participation in external relevant scientific and technical training events and conferences is also supported. Fellows will benefit from interdisciplinary cooperation and interaction with all sectors of the agri-environmental management community, providing them with the best preparation for a successful career in either academia or industry.

Marie Skłodowska-Curie Fellowships for Early-Stage Researchers provide a fixed allowance of Euros 37,320 per year, which is subject to a country correction. Additional allowances for mobility and family status are also provided, as appropriate, in line with H2020-MSCA-ITN-2015.

**Experience and mobility conditions:**

To be eligible, applicants for Early-Stage Researcher fellowships must have no PhD and less than 4 years full-time equivalent research experience from the award of the degree which entitles them to undertake a doctorate. Applicants can be any nationality but at the time of selection must not have resided or carried out their main activity (e.g. work or studies) in Ireland for more than 12 months in the 3 years immediately prior to the starting date of the fellowship. Short stays, such as holidays, are not taken into account.

The eligibility requirements for Marie Skłodowska-Curie Fellowships are non-negotiable and ineligible applicants will not be considered. Further information and the full terms and conditions regarding eligibility are provided on [http://ec.europa.eu/research/mariecurieactions/about-msca/actions/itn/index\\_en.htm](http://ec.europa.eu/research/mariecurieactions/about-msca/actions/itn/index_en.htm) or <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/marie-sklodowska-curie-actions> **Work Programme 2014-2015.**

**Application process:**

Candidates should provide the following information in **one** file for their application:

1. A detailed CV with covering letter which explains your suitability, competence and motivation for scientific research and the fellowship to [hr@tellab.ie](mailto:hr@tellab.ie)

**Additional information:**

Further information on other fellowships available within the INSPIRATION Marie Skłodowska-Curie Innovative Training Network can be found on <http://ec.europa.eu/euraxess/>. Further information on the INSPIRATION project and consortium partners can be found on: [www.inspirationitn.eu](http://www.inspirationitn.eu)