

## Horizon 2020 Marie Skłodowska-Curie Actions Individual Fellowships Call – Expression of Interest

<b>Organisation Details</b>	<i>University of Limerick; Faculty of Science and Engineering; Department of Biological Sciences and Carbolea Research Limerick <a href="http://scieng.ul.ie/departments/life-sciences/people/dr-achim-schmalenberger">http://scieng.ul.ie/departments/life-sciences/people/dr-achim-schmalenberger</a> <a href="http://www.carbolea.ul.ie/index.php">http://www.carbolea.ul.ie/index.php</a></i>	
<b>Organisation Type</b>	<input checked="" type="checkbox"/> Academic <input type="checkbox"/> Large Enterprise <input type="checkbox"/> SME <input checked="" type="checkbox"/> Public Research Organisation	<input type="checkbox"/> Public Body <input type="checkbox"/> NGO <input checked="" type="checkbox"/> Non-Profit <input type="checkbox"/> Other ( <i>please specify</i> ) <hr/>
<b>Research Field(s)</b>	<input checked="" type="checkbox"/> Chemistry CHE <input type="checkbox"/> Social and Human Sciences SOC <input type="checkbox"/> Economic Sciences ECO <input type="checkbox"/> Information Science and Engineering ENG <input checked="" type="checkbox"/> Environment and Geosciences ENV <input checked="" type="checkbox"/> Life Sciences LIF <input type="checkbox"/> Mathematics MAT <input type="checkbox"/> Physics PHY	<b>Keywords:</b>  <b>Plant growth promotion; biochar; soil chemistry; bacterial nutrient mobilization; plant-microbe interaction</b>
<b>Short Description of the Organisation and the Faculty/Dept./School/Centre</b>	<p>The University of Limerick (UL) is a national leader in graduate education with a modern campus and encourages creativity, research and discovery. The Faculty of Science &amp; Engineering carries out an extensive range of research and includes three world-class research institutes. The proposed interdisciplinary research project will be conducted within the Carbolea Research Group and the Environmental Microbiology Research Group (EMRG) to combine the chemical and analytical studies with the microbial and molecular studies upon biochar production, soil biochar</p>	

	amendment and plant growth promotion. The expertise of Carbolea entails: chemical engineering, analytical chemistry, carbohydrate chemistry, soil sciences and agronomy. EMRG has an expertise in microbial mobilization of soil nutrients; soil microbial diversity and plant growth promotion.
<b>Short Description of the Research Project/Topic</b>	The research project should bridge the gap between biochar production and analysis, plant response (plant growth, nutrient uptake) and microbial activity (nutrient mobilization, plant-microbe interaction) with the aim to generate a more holistic understanding of the principal processes of biochar derived plant growth promotion (physicochemical and biological).
<b>Expertise required by the applicant</b>	The researcher must have a doctoral degree or at least 4 years' full-time equivalent research experience in environmental microbiology in combination with one of the following: plant biology, soil chemistry, analytical chemistry or molecular biology.
<b>Career development support offered to fellows</b>	A wide range of targeted training and personal and career development programmes are offered by the UL Human Resources division, the Research Office and the Library (research skills, interpersonal and teaching skills, project management, entrepreneurship, communications use of research tools, funding applications). In addition to this there is the opportunity to collaborate with other members of the Carbolea Research Group on biochar chemistry and members of the Plant and Agricultural Bioscience Research Centre (PABC; <a href="http://www.plantagbiosciences.org">www.plantagbiosciences.org</a> ).
<b>Application procedure</b>	Applicants should provide an up-to-date CV, a letter of motivation and at least one supporting letter from their supervisor or similar person who knows them in a professional capacity and is willing to act as a referee.
<b>Contact Person</b>	<i>Dr. Achim Schmalenberger; <a href="mailto:achim.schmalenberger@ul.ie">achim.schmalenberger@ul.ie</a></i>

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