

Marie Skłodowska Curie Action –Postdoctoral Fellowship 2024
(MSCA-PF-2024)

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Department /Institute /Centre	Name	Departamento de Energía y Combustibles
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	Province	Madrid (Spain)
Research Area		Environment and Geoscience (ENV)
Brief description of the Centre/Research Group		<p>The Prospecting and Environment research group (PROMEDIAM) develops its activity within the general framework of pollution prospecting on contaminated sites. For this purpose, the group has specialists in geochemistry, geophysics and environmental risk analysis applied to solve real case studies. In addition to the application of field and laboratory methods, the group has extensive experience in the mathematical modeling of environmental processes.</p> <p>More info: https://www.upm.es/recursosidi/map/prospeccion-y-medioambiente/</p>
Project description		<p>PROMEDIAM has two project proposals:</p> <p>(1) Development of alternative models to assess human health risk through the vapor intrusion pathway. Commercial software and their analytical vapor intrusion models (e.g., Johnson & Ettinger model) produce systematic overestimates of risk. The project will develop a non-stationary model (MATLAB-based) that considers four-phase partitioning (and possible NAPL formation) and (bio)degradation of contaminants in the subsurface.</p> <p>(2) Evaluation of the variability of the radon signal in the subsurface over time and its relationship with environmental parameters such as soil moisture and temperature, using Machine Learning tools to explore the multivariate data series generated in field tests. This project will be developed within the framework of the evaluation of the applicability of the radon deficit technique for the characterization of sites contaminated by organic phases.</p>
Applications: documents to be submitted and deadlines		<p>CV and Motivation letter (please include a brief description of the interest of the applicant in the project, emphasizing his personal contribution to the Project and the methodologies he/she would like to develop with the research group).</p> <p>Deadline: 30th April 2024.</p>