

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

Organisation Details	<i>Organisation Name:</i> Centre for Marine and Renewable Energy Ireland (MaREI) <i>Website</i>	
Organisation Type	<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 type="checkbox"/> Non-Profit <input type="checkbox"/> Other (<i>please specify</i>) _____
Research Field(s)	<input type="checkbox"/> Chemistry CHE <input type="checkbox"/> Social and Human Sciences SOC <input type="checkbox"/> Economic Sciences ECO <input checked="" type="checkbox"/> Information Science and Engineering ENG <input type="checkbox"/> Environment and Geosciences ENV <input type="checkbox"/> Life Sciences LIF <input checked="" type="checkbox"/> Mathematics MAT <input checked="" type="checkbox"/> Physics PHY	Keywords:
Short Description of the Organisation and the Faculty/Dept./School/Centre	<i>Please provide a description of the organisation and if applicable, the faculty/department/school/centre that is seeking qualified applicants.</i> Vikram Pakrashi, UCD School of Mechanical and Materials Engineering is seeking applicants in the field of dynamics and risk/reliability. In particular, system identification, monitoring, control and extreme values are some of the topics of interest in linear and nonlinear systems. Applications are varied and include but not limited to energy harvesting, renewable energy devices, bridges, etc. There are opportunities in both theoretical and experimental aspects.	
Short Description of the Research Project/Topic	<i>Please provide a short overview of the research area(s) that the applicant can develop a proposal in with the assistance of the organisation.</i> Structural Health Monitoring, System Identification, Energy Harvesting, Structural Control, Exploration of novel dynamical systems, Linearity and nonlinearity assessment in systems, Assessment of output-only systems, Experimental Dynamics, Sensors and	

	systems for dynamical measurements, signal processing, statistical methods and time series techniques in dynamics, extreme value analysis, reliability analysis, random vibrations.
Expertise required by the applicant	<p><i>Please specify the research expertise that the applicant should have.</i></p> <p>Training in theory and numerics of dynamical systems (linear/nonlinear/random vibrations/continuum/fracture) and/or</p> <p>Experimentation in dynamical systems and/or extreme value theory/reliability analysis</p> <p><i>Desirable: Experience/Interest in specific aspects of applications of dynamics</i></p>
Career development support offered to fellows	<p><i>Please outline the supports offered for learning and development, career planning etc. offered by the organisation. Include links to relevant webpages if applicable.</i></p> <p>Training provided in numerics, experimentation. Software and experimental tools will be provided, along with sensors. Access to existing data will be given to the group. Access will also be given to ocean wave basin for testing of floating devices. There will be great opportunities in networking. Also, there is dedicated support from the centre and the group to advance the career of the candidate. The candidate will be encouraged to participate in various meetings, collaborate with groups throughout the world and within Ireland and also will be given opportunity to participate in and contribute to teaching and learning.</p>
Application procedure	<p><i>Please describe what documents (e.g. CV, letter of motivation) the applicant should supply to the host.</i></p> <p>Please supply a CV and a separate letter of motivation outlining a specific area/plan of research. Please include existing training behind pursuing this research and the expectation of the candidate in terms of training required and career development.</p>
Contact Person	<p><i>Name and Email address of the person that interested applicants should contact.</i></p> <p>Dr. Vikram Pakrashi vikram.pakrashi@ucd.ie</p>