

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

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Department /Institute /Centre Name	INSIA – Instituto de Investigación del Automóvil - UPM
Address	Campus Sur UPM. Carretera de Campus Sur UPM. Carretera de Valencia, Autovía del Este, km.7, 28031 Madrid
Province	Madrid, Spain
Research Area	Information Science and Engineering (ENG) Environment and Geoscience (ENV)
Brief description of the Centre/Research Group	INSIA - the University Institute of Automobile Research of the UPM (https://insia-upm.es/en/) has a robust human capital of approximately 85 highly qualified researchers, has accumulated over 25 years of experience in Research, Development, and Innovation (R&D&I) projects, with a particular emphasis on the automotive sector and its environmental impact. Situated on the South Campus of UPM, INSIA is equipped with advanced facilities, including laboratory and research buildings. The institute has actively engaged with more than 1,200 industry companies, representing Spain in United Nations working groups on vehicle safety and environmental impact. Furthermore, INSIA has played a pivotal role in European and national networks, making substantial contributions to the automotive industry, transport, and road safety.
Project description	Title: Theoretical and experimental study of the dual combustion of hydrogen in a diesel engine. This project aims to study, through engine simulation, the impact on the performance and emissions of a diesel engine converted to H2-DualFuel. The aim is to develop a simulation model of this technology at the engine level that will serve as a basis for determining how to optimize the dual-fuel transformation of heavy vehicle diesel engines, guaranteeing low polluting emissions (Euro VI and Euro 7 compliance) and high efficiency. The final goal of the project will be to compare results and help guide a parallel project that will realize and study a retrofitted engine experimentally.
Applications: documents to be submitted and deadlines	Until 30 April 2024, please send: CV of the applicant Motivation letter Two letters of references It is important that the applicant has experience on thermal engine simulation.