



Universidad Carlos III de Madrid (UC3M, www.uc3m.es) invites applications to fill Post-doctoral position ZARATHUSTRA-P2023

Description and objectives:

The selected candidate will be responsible for the development and extension of EP2 plasma simulation codes, which include fluid, kinetic, and electromagnetic codes. These tools will be used in a variety of studies to understand the physics of electrodeless plasma thrusters, and are a key element of the research group's long-term strategic plan. Bringing new skills and capabilities to the team is highly desirable. The contract will be funded by the **ERC Starting Grant project ZARATHUSTRA** (Revolutionizing advanced electrodeless plasma thrusters for space transportation, <https://erc-zarathustra.uc3m.es/>). The candidate will join the Space Propulsion and Plasmas Team (EP2, <https://ep2.uc3m.es/>) at Universidad Carlos III de Madrid under the supervision of Dr. M. Merino, and collaborate closely with other researchers.

Requirements and desirable profile:

- PhD holder in Aerospace Engineering, Plasma Physics, Fluid Dynamics, Computer Science, or other relevant fields.
- Demonstrable experience on modeling, HPC, numerical analysis, postprocessing.
- Outstanding academic record; critical & creative thinking.
- International experience; team-working and communications skills.
- Good proficiency in English (oral & written).
- Ability to lead independently their own research line, and to deal proactively with scientific and engineering challenges.

What we offer:

- 2-year contract (with optional 1-year extension); annual gross salary in the 35k – 38k € range depending on experience.
- Become part of a young, dynamic, highly qualified, collaborative team.
- Flexible working environment and schedule.
- Opportunity to travel to international conferences to present research activities.
- Health coverage under the National Health System.

How to apply:

Interested candidates must send their applications to odriva@pa.uc3m.es indicating the reference “**ZARATHUSTRA-P2023**” in the e-mail subject, and attaching in pdf format the following documents:

- A motivation letter of experience, interests, and research goals (max. 1 page).
- CV, including relevant education, experience and knowledge.
- Sample of best works by the candidate
- The contact information of up to two references (will be contacted during the hiring process).

Submissions from female candidates are particularly encouraged. Reception of applications closes by **September 15, 2023**. Early applications are strongly encouraged, while later applications may be considered until the vacancy is occupied. Contract will begin in October-November 2023, though an earlier/later start date might be arranged.