



Universidad Carlos III de Madrid (UC3M, [www.uc3m.es](http://www.uc3m.es))  
invites applications to fill PhD position ZARATHUSTRA-D6

Position description and objectives:

Your PhD thesis will consist in **developing electromagnetic and kinetic models and numerical codes to simulate and understand the physics of electrodeless plasma thrusters, and identify optimal configurations**. The contract will be funded under the **ERC Starting Grant project ZARATHUSTRA** (Revolutionizing advanced electrodeless plasma thrusters for space transportation, [erc-zarathustra.uc3m.es](http://erc-zarathustra.uc3m.es)). The candidate will join the Plasma and Space Propulsion Team (EP2, [ep2.uc3m.es](http://ep2.uc3m.es)) at Universidad Carlos III de Madrid under the supervision of professor M. Merino, and collaborate closely with other researchers.

Requirements:

- Young MSc holder (and a total of 300 ECTS completed among BSc + MSc)
- Strong background in the following disciplines: **Scientific computing**, Applied Mathematics, Aerospace Engineering, Plasma Physics, Fluid Dynamics, Electromagnetism. Excellent candidates from other disciplines are also invited to apply.
- Outstanding academic record; critical & creative thinking.
- Team-working and communications skills; Previous international experience desirable
- Ability to deal independently and proactively with scientific and engineering challenges.
- Good proficiency in English (oral & written).

What we offer:

- Up to 4-year contract; starting annual gross salary 25 k€; productivity bonuses.
- Become part of a young, dynamic, highly qualified, collaborative team.
- Opportunity to travel to international conferences to present research activities.
- Opportunity to carry out a research internship abroad.
- Flexible working environment and schedule.

How to apply:

Interested candidates must send their applications to [ep2@uc3m.es](mailto:ep2@uc3m.es) indicating in the email subject the reference "**ZARATHUSTRA-D6**," and attaching the following documents in pdf format:

- A motivation letter highlighting candidate's skills, experience and research goals (max. 1 page).
- CV, including relevant education and work experience
- The contact information of up to two references (will be contacted during the hiring process)
- Sample of best works of the candidate (e.g. MSc thesis).

Application deadline is **June 30, 2024, but the position will be filled as soon as a suitable candidate is found**. Contract will begin in September 2024, though an earlier/later start date can be arranged. Applications from women and minorities are particularly encouraged.