



Universidad Carlos III de Madrid (UC3M, <u>www.uc3m.es</u>) invites applications to fill PhD position ZARATHUSTRA-D5

Position description and objectives:

Your research work will consist in developing fluid/kinetic/wave models to simulate and understand the physics of electrodeless plasma thrusters and to help revolutionize their design. The contract will be funded by the recently awarded ERC Starting Grant project ZARATHUSTRA (Revolutionizing advanced electrodeless plasma thrusters for space transportation). The candidate will join the Space Propulsion and Plasmas Team (EP2, http://ep2.uc3m.es/) at Universidad Carlos III de Madrid, and collaborate closely with other researchers fully dedicated to the project under the supervision of Dr. M. Merino.

Minimum requirements:

- Young MSc holder (or MSc student with 60 ECTS passed at contract's signature)
- Strong background in the following disciplines: Aerospace Engineering, Plasma Physics, Fluid Dynamics, Applied Mathematics, and <u>Scientific computing</u>. Excellent candidates from other disciplines are also invited to apply.
- Outstanding academic record; critical & creative thinking.
- International experience; team-working and communications skills.
- Good proficiency in English (oral & written).
- Ability to deal independently and proactively with scientific and engineering challenges.

What we offer:

- 3-year contract (with potential 1-year extension); annual gross salary in the 20k 22k € range.
- 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.
- Opportunity to carry out research internships abroad.
- Health coverage under the Spanish National Health System.

How to apply:

Interested candidates must send their applications to cbackenk@pa.uc3m.es indicating in the e-mail subject the reference "ZARATHUSTRA-D5," 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 of 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 **July 31, 2022.** Early applications are strongly encouraged, while later applications may be considered until the vacancy is occupied. Contract will begin in October 2022, though an earlier/later start date can be agreed.