



Universidad Carlos III de Madrid (UC3M, www.uc3m.es) invites applications to fill Post-doctoral position ZARATHUSTRA-P1

Description and objectives:

The selected candidate will study the instabilities that are present in the discharge of electrodeless plasma thrusters and magnetic nozzles, developing models and codes amenable to linear and nonlinear stability analysis techniques. 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.

Requirements and desirable profile:

- PhD holder in Aerospace Engineering, Plasma Physics, Fluid Dynamics, or other relevant fields.
- Demonstrable experience on modeling, code development, 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 with a 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 30k – 32k € 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 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-P1**,” 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.