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Universidad
Carlos III
de Madrid



The [Department of Aerospace Engineering, Universidad Carlos III de Madrid \(UC3M\)](#) invites applications to fill **Postdoctoral fellow positions** ROCINANTE-P1 and ROCINANTE-P2

Position description and objectives:

[ROCINANTE](#) is a 5-year ERC-Consolidator Grant aiming to unravel and tame the non-linearly oscillating structures and turbulence present in electrodeless plasma thrusters for in-space propulsion. The success of the project will enable the development of highly efficient devices and open a new research line on active control of space plasma thrusters. At the [Plasmas and Space Propulsion Team](#) we seek **excellent and motivated candidates to fill two Postdoctoral Fellow positions**:

- **ROCINANTE-P1**: Your responsibilities will include *the supervision of the development and instrumentation of a large plasma source, to characterize and analyze experimentally the fluctuations occurring in the plasma.*
- **ROCINANTE-P2**: Your responsibilities will include *the supervision of the development of an advanced Particle-In-Cell simulation framework in the Julia programming language, and apply it to characterize and analyze numerically the plasma fluctuations.*

Postdoctoral Fellows will participate in the instruction and guidance of PhD students dedicated to these topics. Frequent interactions between them will enable the achievement of the goals of the project.

What we offer:

- 2-year (extensible +1) postdoctoral fellow contracts
- One-to-one mentoring and the space/resources needed to nurture your young researcher career
- Become part of a young, dynamic, highly qualified, collaborative team.
- Opportunity to travel to international conferences to present research activities.
- Flexible working environment and schedule.

Requirements:

- Young PhD holder in disciplines relevant to the project. Previous design/laboratory experience (for P1) or numerical experience (for P2) is a strong requirement.
- Proven capability to lead research activities and publish & communicate results
- Team-working and internal communications skills; previous international experience desirable
- Good proficiency in English (oral & written).

How to apply:

Interested candidates must send their applications to odriva@pa.uc3m.es, indicating in the email subject the reference "**ROCINANTE-Px**" (with x=1,2) 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. publications or PhD thesis).

Application deadline is **May 31, 2026, but the position will be filled as soon as a suitable candidate is found**. Contracts will begin in October 2026, though an earlier/later start date can be arranged. Applications from women and minorities are particularly encouraged.