

Postdoctoral position in electrospray ion thrusters

Astronautics Group, University of Southampton, UK

Duration of post: 1 year, with possible extension for further year.

Start of post: March 2021, but can be flexible.

Pay: £31,866 per annum

Applications are invited for a Post-Doctoral Research Assistant (Research Fellow) position, for a duration of one year. The position is within the Astronautics Group, within the Department of Aeronautics and Astronautics, at the University of Southampton, UK.

The post will work on the development of a novel propulsion system for spacecraft that can use the same propellant for chemical as well as electric propulsion. The project, in collaboration with University of Illinois at Urbana–Champaign, will work to develop an electrospray ion thruster and chemical propulsion system that can utilise the same propellant. Work at Southampton will focus on the development of an electrospray ion thruster, including its design (based upon our previous work), and the experimental testing of the thruster. Some work will also be completed on the experimental testing of a chemical thruster.

It is desirable that the person has experience in designing and testing ion thruster technology, preferably electrospray thrusters, a closely related technology such as ion beam experience, or a demonstrated aptitude for learning new fields of research. The person should have a PhD in aerospace engineering, preferably within the field space propulsion, or experimental beam physics. It is desirable that the person has experience of operating large vacuum chamber facilities. Additionally, a strong track record of high-quality journal publications is an advantage.

For further information please see the advert:

<https://jobs.soton.ac.uk/Vacancy.aspx?id=24599&forced=2>

For enquiries, please contact Dr Charlie Ryan, Assistant Professor in Astronautics, University of Southampton, UK. c.n.ryan@soton.ac.uk.