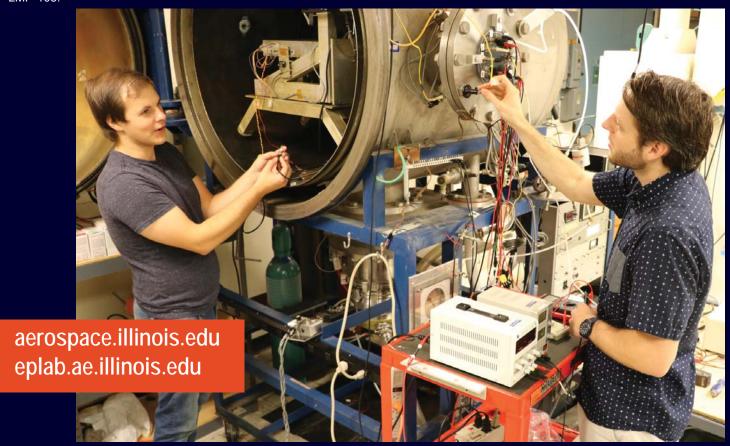


Department of Aerospace Engineering COLLEGE OF ENGINEERING

Postdoctoral Research Associate Advanced Space Propulsion

Required: PhD in Aerospace Engineering or related field. Per University of Illinois policy, eligible candidates must have obtained their PhD degree within 10 years of the start date of the position.

Desirable qualifications: Experience conducting experimental research related to micro space propulsion systems, specifically electrospray. Experimental research experience with green ionic liquid propellants, especially energetic green propellants, e.g., AF-M315E, LMP-103.



The Postdoctoral Research Associate will be part of a two-year, \$1.2M project sponsored by NASA and the National Reconnaissance Office. The postdoc will conduct research on a novel multi-mode micropropulsion concept that combines together into the same system a chemical catalytic thruster and electric electrospray thruster. Research will focus on the electric electrospray mode of operation, and extending and multiplexing well-characterized single capillary emitter results into an advanced manufactured array. Additionally the postdoc will be responsible for attending and publishing conference papers, as well as archival journal publications. The postdoc will work closely with, supervise, and mentor 1-2 PhD students, and will also work closely with a small business partner. It is expected the postdoc will also lead research group meetings, assist with proposal writing, and review and proof publication manuscripts.

The Dept. of Aerospace Engineering at the U of I is ranked 7th and 8th in the U.S. in undergraduate and graduate programs, is home to 33 world-renowned faculty members, 200 graduate, and 520 undergraduate students, and has annual research expenditures of \$10M. The AE department is currently beginning a 3,000 sq ft. addition to expand its space engineering activities.

The Postdoctoral Research Associate is a full-time, benefits-eligible position appointed on a 12-month service basis. The initial appointment is for one year with the possibility of extension based on performance and funding. The expected start date is Jan. 2019. Salary is commensurate with experience and qualifications.

To apply for this position, please submit a send a resume/CV and two representative publications to EPLab Director Dr. Joshua Rovey at rovey@illinois.edu. Full consideration will be given to complete applications received by Oct. 22.