

Postdoc Position in Processing of Amino Acids from Ice Radiation Experiments at NASA/GSFC

The Cosmic Ice Lab at NASA Goddard Space Flight Center (Greenbelt, MD) is seeking candidates for a postdoctoral position in the field of astrochemistry. This research will involve a systematic study of the formation of prebiotic molecules through a combination of experimental ice radiation and aqueous chemistry. The successful candidate will perform high-vacuum ice irradiation experiments, aqueous chemistry in high pressure reaction cells, and will analyze the results using liquid chromatography coupled with mass spectrometry.

This research will focus on organic compounds of astrobiological interest formed by ice radiation chemistry. Additionally, it will examine the role of hydrothermal processing in modifying these organics, comparing the findings to organic materials previously detected in extraterrestrial samples (e.g., meteorites).

The applicants should have a PhD in chemistry or a related field at the start of the position and must be within five years of the receipt of their doctoral degree. Ideally, candidates will have experience with some or all of the following:

- cryo-vacuum apparatus
- radiation chemistry
- infrared spectroscopy
- ultrahigh-performance liquid chromatography with UV fluorescence and time of flight mass spectrometry detection (LC-FD/ToF-MS)
- high-pressure reaction cells

Applicants should provide cover letter, curriculum vitae, 3-page statement of research interests, publication list, and arrange to have one to three letters of recommendation submitted. The deadline to apply is January 31, 2020. Late applications will be considered at the discretion of the committee. To apply send all documents to:

Katherine McKee, CRESST II Program Coordinator
katherine.s.mckee@nasa.gov
(301) 286-3063
Mail Code 660.8 NASA/GSFC, Greenbelt, MD 20771

Salary and benefits are competitive, commensurate with experience and qualifications. Approximate start date around May 2020 is preferred; later start dates may be negotiated. For more information about the proposed research, contact Dr. Christopher Materese (christopher.k.materese@nasa.gov).

For information on CRESST II or Howard University, contact Dr. Marcus Alfred (maralfred@howard.edu). We are committed to building a diverse group and encourage applications from women, racial and ethnic minorities, individuals with disabilities and veterans.

Howard University is an Affirmative Action, Equal Opportunity Employer.