

THE CHICAGO CENTER FOR COSMOCHEMISTRY

COSMOCHEMISTRY/GEOCHEMISTRY POSTDOCTORAL POSITIONS AVAILABLE

The University of Chicago, Argonne National Laboratory, and the Field Museum have established the Chicago Center for Cosmochemistry, which is dedicated to promoting education and research in cosmochemistry. The Center aims to take advantage of the strength of the cosmochemistry community in Chicago and superb research facilities available at the three institutions involved, and will provide support for graduate students, postdoctoral research associates and visiting scientists. Major projects underway include: (1) measurement of meteoritic stardust grains coupled with nucleosynthesis theory to probe stellar processes and the origin of the elements; (2) isotopic and chemical studies of meteorites and rocks to probe the early history of the solar system, planet formation and early earth history; (3) studies of the Sun, planets, asteroids and comets through current and future sample return missions and spaceflight instruments. Research facilities include laser resonant ionization mass spectrometers for extremely high sensitivity isotopic and chemical analyses, a variety of x-ray microanalytical facilities on beam lines at the Advanced Photon Source, several types of mass spectrometers, ion and electron microprobes, electron microscopes, experimental petrology equipment, machine and electronics shops for building new laboratory and spaceflight instruments, and a wide array of computational facilities. For more information, see <http://cosmochemistry.uchicago.edu>.

Three postdoctoral positions will be available in Fall 2004. Although individuals may apply for all three positions, a separate application is required for each position. Applications must be received by October 1, 2004; applications received after this date may be considered if the positions are not filled. The term for each position is one year, renewable for up to three years. A Ph.D. is required for all positions. For each position, send a statement of relevant experience, a curriculum vitae including publications list, and names of three references by email PDF attachment.

1. The Chicago Center for Cosmochemistry has established the C³ Postdoctoral Fellowship. The successful applicant for this fellowship will conduct independent research at any or all of the institutions that are a part of the Center and will be encouraged to collaborate with several staff members, the only requirement being that the research involve cosmochemistry. In addition to a salary of \$48,000, a research budget of \$6,000 will be available. The application materials listed above plus a research plan should be sent to: Dr. Andrew M. Davis, Director (a-davis@uchicago.edu).
2. The Department of the Geophysical Sciences at University of Chicago seeks a postdoctoral Research Associate in early Earth geochemistry-cosmochemistry. Experience in clean laboratory procedures and multicollector inductively coupled plasma mass spectrometry (MC-ICPMS) techniques is especially desirable. The main themes under development are (i) tracing geo-bio cycles and understanding the formation of sediments in the Archaean via mass-dependent isotope variations, (ii) characterizing the heterogeneity of the nebula and possibly identifying new presolar phases using stable isotope anomalies, and (iii) constraining early solar system chronology and galactic chemical evolution models with radiogenic isotopes. Applications should be sent to: Dr. Nicolas Dauphas, Asst. Professor (dauphas@uchicago.edu).
3. The Department of Geology at the Field Museum seeks a postdoctoral Research Associate in cosmochemistry. Ongoing research projects include the development of fine-scale early solar system chronometers based on short-lived radionuclides, as well as characterization of mass dependent fractionation of the stable isotopes of a variety of elements (to constrain nebular and asteroidal processing) and non-mass dependent isotopic anomalies (to identify possible nucleosynthetic sources). The Isotope Geochemistry Laboratory at the Field Museum includes a state-of-the-art MC-ICPMS and an associated clean chemistry laboratory. An excimer laser ablation system has recently been acquired. Experience with mass spectrometry is required; experience in laser ablation techniques, although not a requirement, is desirable. Applications should be sent to: Dr. Meenakshi Wadhwa, Assoc. Curator (mwadhwa@fieldmuseum.org).

The University of Chicago, Argonne National Laboratory, and the Field Museum are Affirmative Action/Equal Opportunity Employers.