

**CURATION OF ANTARCTIC METEORITES AT NASA JOHNSON SPACE CENTER**

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The U.S. Antarctic meteorite program began in the 1970's and has provided more than 18,000 samples in over three decades. The program is based on a three agency agreement between NASA, the National Science Foundation, and the Smithsonian Institution. The collection, stored at the Johnson Space Center and the Smithsonian, is one of the largest collections of meteorites in the world and features samples from the moon and Mars, asteroids, and material from the early solar system. A brief consideration of the collection shows that it contains 92.2% ordinary chondrites, 3.2% carbonaceous chondrites, 3.7% achondrites (1.7% HED), as well as many puzzling ungrouped meteorites. JSC has sent splits of nearly 20,000 meteorite samples to more than 500 scientists around the world since 1977.

After the meteorites are collected in Antarctica, they are shipped frozen to JSC in Houston, usually arriving in April following the field season. The Astromaterials Curation Office at JSC is responsible for:

- receiving the frozen meteorites.
- staging: repackaging and changing the samples' field identification numbers with official names.
- submitting the names to the Nomenclature Committee of the Meteoritical Society for approval as new meteorites.
- initial processing: weighing, measuring, describing and photographing the sample and providing a chip for classification to the Smithsonian Institution staff.
- the issuing of two newsletters per year, announcing hundreds of new meteorites.
- the handling of requests from the scientific community and the allocation of those requests that are approved.
- providing supplies and tools for the field team such as teflon bags and tape, aluminum foil, clean tweezers and tongs.
- maintaining the meteorite database with more than 76,000 sample splits.
- making petrographic thin and thick sections for the JSC library and scientific investigators.
- providing storage and handling of the meteorites in a class 10,000 clean room.

Samples that have not been requested for three years are sent to the Smithsonian for permanent storage. There have been several seasons in recent years with two field teams, increasing the number of acquired samples (>1000 in a few seasons). We have recently increased our storage space and additional staff to better serve the scientific community.