



ICEE (In situ Carbon Evolution Experiments) Facility

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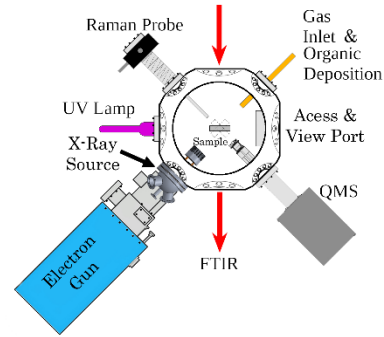
Website <https://www.nasa.gov/in-situ-carbon-evolution-experiments-icee/>

Description of Facility

- ICEE is a state of the art facility dedicated to replicating conditions relevant to Planetary Science.
- ICEE consists of an Ultra High Vacuum (UHV) Chamber with in situ Raman, FTIR, and Mass Spectroscopic capabilities, a Raman microscope, FTRaman, FTIR, and DRIFTS (Diffuse Reflection Infrared Fourier Transform Spectroscopy) instrumentation.
- ICEE has committed 25% of its time to the Planetary Science Community
- Analysis is performed by facility personnel
- Access is restricted, visitor passes are necessary.

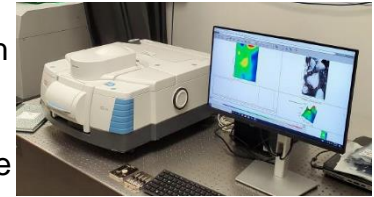
How to use the facility

- Access requests are through the website (update in progress)
- Staff meet on a bi-weekly basis to evaluate applications based on the application criteria.
- Prioritization: 1st active PSD R&A awards; 2nd Research relevant to PSD programs; 3rd Other (e.g., Lab. Astro., Earth Science, Mission concepts)
- PSEF budget contains costs for consumables; if a large amount are needed customers may be charged. Customers may be charged for fabrication of specialized equipment. Projects requiring significant time will be requested to submit an R&A grant to PSD.



Above: ICEE UHV chamber showing radiation sources and in situ instruments.

Below: Raman Microscope with Linkam Temperature and atmosphere Stage



Above: FTRaman, FTIR, and DRIFTS station. In the FTRaman configuration.

Contact information:

- The facility is located in the heart of Silicon Valley, at the NASA Ames Research Center, Moffett Field, CA.
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