

Tuesday, March 20, 2018

[T333]

POSTER SESSION I: GENESIS: LATEST RESULTS

6:00 p.m. Town Center Exhibit Area

Schmeling M. Jurewicz A. J. G. Gonzalez C. Allums K. K. Allton J. H. **POSTER LOCATION #488**
[Development of Chemical and Mechanical Cleaning Procedures for Genesis Solar Wind Samples](#) [#1533]

Cleaning procedures for sapphire Genesis solar wind samples were evaluated using optical microscopy and total reflection X-ray fluorescence.

Rieck K. D. Jurewicz A. J. G. Burnett D. S. Guan Y. Nogan J. et al. **POSTER LOCATION #489**
[Cleaning and Preserving the Surfaces of Genesis Solar Wind Collectors for Bulk and Regime Carbon, Nitrogen, and Oxygen Analysis](#) [#2875]

We tested new solvents for cleaning Genesis Si wafers, and tested if Si film deposition can preserve and protect clean wafer surfaces for solar wind analysis.

Welten K. C. Bixler A. J. Nishiizumi K. Caffee M. W.
 Jurewicz A. J. G. et al.

POSTER LOCATION #490

[Cleaning Studies of Genesis Sapphire Target 61530](#) [#2660]

We discuss first cleaning studies of a sapphire collector flown on the Genesis mission using a combination of megasonic cleaning, SEM imaging, and ICP analysis.

Janakiraman Paramasivan G. Sharma M. Jurewicz A. Burnett D.

POSTER LOCATION #491

[A Procedure to Cleanly Separate Solar Wind Osmium Embedded in Genesis Silicon Collectors](#) [#2886]

We present a novel technique to clean Genesis silicon wafers with the goal to measure Os isotope composition of solar wind.

Veryovkin I. V. Tripa C. E.

POSTER LOCATION #492

[The Challenge of Measuring Ultra-Low Elemental Abundances in Genesis Solar Wind Collectors](#) [#2824]

We discuss challenges of measuring low abundance elements in the mass range 80–100 in the Genesis solar wind collectors with RIMS technique.

Koeman-Shields E. C. Huss G. R. Westphal A. J. Ogliore R. C.
 Jurewicz A. J. G. et al.

POSTER LOCATION #493

[Measuring Magnesium Isotopes in Genesis Silicon Collectors Using Rastered Ion Imaging](#) [#2475]

Using backside ion imaging to measure solar wind Mg in Si detectors, we show the isotopic ratios in solar wind Mg are within a few percent of terrestrial values.

Jurewicz A. J. G. Koeman-Shields E. Huss G. Daghlán C.

POSTER LOCATION #494

[Raman as a Tool for Quantifying SIMS Analyses of Genesis DoS Collectors](#) [#2058]

Genesis returned solar wind, solar material reflecting the solar nebula, for analysis. SW in DoS is but difficult to analyze by SIMS without an aid like Raman.

Meshik A. P. Pravdictseva O. V. Burnett D. S.

POSTER LOCATION #495

[New Analyses of Solar Wind Xenon: Confirmation of Earlier Genesis Mission Results and Their Implications](#) [#2883]

New isotopic analyses of Solar Wind Xe delivered by Genesis mission verified earlier results and interpretation of Xe-Q composition.

Hofmann A. E. Paque J. M. Burnett D. S. Guan Y.
 Jurewicz A. J. G. et al.

POSTER LOCATION #496

[Genesis Solar Wind Aluminum Abundance: Challenges with Electron Microprobe Analyses of Al in Olivine](#) [#1526]

Major problems in microprobe Al trace element analysis of olivine are mitigated, enabling accurate SIMS analyses of Genesis and pallasite samples.

Olinger C. T. Dragland E. J. Martino A. J.

POSTER LOCATION #497

[Interpreting Measured Genesis Solar Wind Profiles Through Simulation](#) [#2861]

Monte Carlo simulations of solar wind implantation can aid in interpretation of measured depth profiles for Genesis and correct for contamination.

Allton J. H. Calaway M. J. Nyquist L. E. Jurewicz A. J. G. Burnett D. S.

POSTER LOCATION #498

[Three Proposed Compendia for Genesis Solar Wind Samples: Science Results, Collector Materials Characterization, and Cleaning Techniques](#) [#1671]

Discussion of types of content and organization of a compendium that would be most helpful to planetary scientists and cosmochemists who plan to use Genesis solar wind samples.