

Tuesday, March 19, 2013

[T601]

**POSTER SESSION: GENESIS MISSION:  
TARGET HANDLING AND SOLAR WIND ABUNDANCES  
6:00 p.m. Town Center Exhibit Area**

Allton J. H. Rodriguez M. C. Burkett P. J. Ross D. K. Gonzalez C. P. et al. **POSTER LOCATION #1**  
[Recent Optical and SEM Characterization of Genesis Solar Wind Concentrator  
Diamond-on-Silicon Collector](#) [#2466]

Observations of contaminants and irradiation damage on diamond-on-silicon surface and postsubdivision imaging.

Burkett P. J. Allton J. A. Clemett S. J. Gonzales C. P. Lauer H. V. Jr et al. **POSTER LOCATION #2**  
[Plan for Subdividing Genesis Mission Diamond-on-Silicon 60000 Solar Wind Collector](#) [#2837]

Using innovative laser scribing and cleaving techniques, Genesis sample 60000 was subdivided resulting subsamples for allocation and analysis.

Lauer H. V. Burket P. J. Rodriguez M. C.  
Nakamura-Messenger K. Clemett S. J. et al. **POSTER LOCATION #3**  
[Laser Subdivision of the Genesis Concentrator Target Sample 60000](#) [#2691]

The Genesis Allocation Committee received a request for  $\sim 1 \text{ cm}^2$  of the target sample 60000. We describe the cutting plan used to provide the allocation.

Rodriguez M. R. Allton J. H. Burkett P. J. Gonzalez C. P. **POSTER LOCATION #4**  
[Examples of Optical Assessment of Surface Cleanliness of Genesis Samples](#) [#2515]

We present recent examples of optically surveyed Genesis samples as part of a cleaning plan intended to create a set of "assessed clean" samples for allocation.

Kuhlman K. R. Rodriguez M. C. Gonzalez C. P. Allton J. H. Burnett D. S. **POSTER LOCATION #5**  
[Cleaning Study of Genesis Sample 60487](#) [#2930]

This examination of the efficacy of various cleaning methods was conducted using correlative microscopy of Genesis sample 60487.

Schmeling M. Burnett D. S. Allton J. H. Rodriguez M. Tripa C. E. et al. **POSTER LOCATION #6**  
[Application of CO<sub>2</sub> Snow Jet Cleaning in Conjunction with Laboratory Based Total Reflection X-Ray Fluorescence  
Spectrometry for Genesis Solar Wind Samples](#) [#2465]

Genesis solar wind samples were analyzed using TXRF spectrometry before and after CO<sub>2</sub> jet cleaning to investigate the efficiency of this cleaning method.

Goreva Y. S. Burnett D. S. **POSTER LOCATION #7**  
[TOF-SIMS Ion Imaging for Evaluation of Effectiveness of Genesis Sample Cleaning](#) [#2109]

TOF-SIMS techniques is used to image surfaces of Genesis samples before and after cleaning.

Veryovkin I. V. Schmeling M. Toyoda N. Mashita T. Yamada I. et al. **POSTER LOCATION #8**  
[Gas Cluster Ion Beam Cleaning of Genesis Solar Wind Samples: Further Steps in the Method Evaluation](#) [#2970]

We present new results of cleaning Genesis samples by Gas Cluster Ion Beam irradiation. This cleaning study includes sample characterization by TXRF and RIMS.

Veryovkin I. V. Zinovev A. V. Tripa C. E. Baryshev S. V. Pellin M. J. et al. **POSTER LOCATION #9**  
[Backside Sputter Depth Profiling of Genesis Samples: An Application to Diamond-on-Silicon Collectors](#) [#2247]

We present a new approach to quantitative elemental and isotopic analysis of Genesis Diamond-on-Silicon solar wind collectors by RIMS and SIMS.

Rieck K. D. Jurewicz A. J. G. Burnett D. S. Hervig R. L. Veryovkin I. V. et al. **POSTER LOCATION #10**  
[Genesis Sodium and Potassium Bulk Solar Wind Fluences](#) [#3030]

We present preliminary measurements of bulk solar wind <sup>23</sup>Na and <sup>39</sup>K abundances in the Genesis Si and diamond-on-Si wafers using backside depth profiling by SIMS.

Heber V. S. Burnett D. S. Duprat J. Guan Y. Jurewicz A. J. G. et al. **POSTER LOCATION #11**  
[Carbon, Nitrogen, and Oxygen Abundances in the Bulk Solar Wind and Calibration of Absolute Abundances](#) [#2540]

Updated C, N, and O solar wind abundances measured by backside depth-profiling using SIMS and strategies for their absolute calibration are presented.

Bochsler P. Heber V. S. Burnett D. S. **POSTER LOCATION #12**  
[Solar Abundances of Volatile Elements Revisited After Genesis](#) [#1277]

Significant differences among elemental abundances from different solar sources can be reduced or eliminated when results from the Genesis mission are used.

Ayres T. R. Lyons J. R. Ludwig H.-G. Caffau E. Wedemeyer-Bohm S. **POSTER LOCATION #386**  
[Isotopic CO in the Solar Photosphere, Viewed Through the Lens of 3D Spectrum Synthesis](#) [#3038]

New analyses of CO isotopologue abundances in the solar photosphere are now consistent with Genesis solar wind results, although  $^{17}\text{O}$  error bars are still large.