

Tuesday, March 20, 2018

[T330]

## POSTER SESSION I: PROTOPLANETARY DISKS III

6:00 p.m. Town Center Exhibit Area

Marhas K. K. Mishra R. K. *POSTER LOCATION #449*  
[The Vanguard of Irradiation: The Fourth Element](#) [#1646]

To evaluate and constrain the irradiation scenario of genesis of SLNs in the solar system, we carried out Li-Be-B isotope systematics in two B1 CAIs from Efremovka.

Mishra R. K. Marhas K. K. Trieloff M. *POSTER LOCATION #450*  
[<sup>26</sup>Al-<sup>26</sup>Mg Isotope Systematics in Leoville CAIs and Chainpur Chondrule](#) [#1633]

<sup>26</sup>Al-<sup>26</sup>Mg isotope systematics in CAIs from Leoville and an Al-rich chondrule from Chainpur.

Hertwig A. T. Kimura M. Ushikubo T. Defouilloy C. Kita N. T. *POSTER LOCATION #451*  
[Al-Mg Chronology of FeO-Rich \(Type II\) Chondrules from Acfer 094](#) [#2061]

Initial <sup>27</sup>Al/<sup>26</sup>Al ratios of FeO-rich chondrules, determined by SIMS Al-Mg isotope analysis, are indistinguishable from those of FeO-poor chondrules.

Homma Y. Iizuka T. *POSTER LOCATION #452*  
[Hf-W Chronology of the Brenham Pallasite](#) [#1847]

We determined the Hf-W model age of the Brenham pallasite to be  $2.0 \pm 2.9$  Myrs by considering the nucleosynthetic and neutron capture effects.

Ruzicka A. M. Hellmann J. L. Kleine T. *POSTER LOCATION #453*  
[Hf-W Chronology of Large Igneous Inclusions from Ordinary Chondrites](#) [#1714]

Hf-W ages for eight large igneous inclusions suggest diverse formation times, with some inclusions forming as megachondrules and some as impact melts.

Worsham E. A. Burkhardt C. Budde G. Fischer-Gödde M. *POSTER LOCATION #454*  
 Kruijer T. S. et al. *POSTER LOCATION #454*  
[Distinct Evolution of the Carbonaceous and Non-Carbonaceous Reservoirs: Insights from Ru, Mo, and W Isotopes](#) [#2720]

Ru, Mo, and W isotope data indicate that nucleosynthetic heterogeneity in the CC and NC isotopic reservoirs evolved under different thermal and redox conditions.

Scott E. R. D. Krot A. N. Sanders I. S. *POSTER LOCATION #455*  
[Isotopic Dichotomy Among Meteorites and Implications for the Evolution of the Protoplanetary Disk](#) [#1713]

Mass-independent isotopic variations among meteorites favor formation either side of Jupiter. We discuss implications for chondrule, CAI, and asteroid origins.

Zolensky M. Johnson J. Ziegler K. Chan Q. Kebukawa Y. et al. *POSTER LOCATION #456*  
[Meteoritic Evidence for Injection of Trans-Neptunian Objects into the Inner Solar System](#) [#1789]

Evidence for giant planet migration recorded in meteorites.

Kita N. T. Hertwig A. T. Defouilloy C. Kitajima K. Spicuzza M. J. *POSTER LOCATION #457*  
[Improvements of SIMS Mg Isotope Analyses for Meteoritic and Cometary Samples Using RF Plasma Ion Source](#) [#2441]

New ion source allows smaller, faster, and better Mg isotope analyses at WiscSIMS. Results of multi-collection EM and E12 ohm FC amplifier are reported.

Smith L. R. Panto E. M. Gudipati M. S. Smith R. L. *POSTER LOCATION #458*  
[Exploring <sup>12</sup>CO/<sup>13</sup>CO Ice-Gas Fractionation Through Interstellar Ice-Analog Experiments](#) [#1187]

New CO interstellar ice-analog experiments reveal a CO sublimation point of 28.5K, and preliminarily no photodesorption preference of <sup>12</sup>CO vs. <sup>13</sup>CO ice at 30K.

Lyons J. R. Gharib-Nezhad E. Ayres T. R. **POSTER LOCATION #459**  
[The Carbon Isotope Ratio of the Sun and Implications for the Solar Nebula](#) [#2907]  
 The solar C isotope ratio is -45‰ PDB. The  $^{13}\text{C}$  enrichment of the terrestrial planets may be due to CO self-shielding in the nebula or parent cloud.

Smith R. L. Blake G. A. Boogert A. C. A. **POSTER LOCATION #460**  
 Pontoppidan K. M. Tucker M. A. **POSTER LOCATION #460**  
[An Observational Study of Protoplanetary Carbon from the Galactic Center to the Local Solar Neighborhood](#) [#2985]  
 Keck observations of CO across the Galaxy show  $^{12}\text{C}/^{13}\text{C}$  variations in cold vs. warm gas, and low- vs. massive YSOs. Cold CO follows a general metallicity trend.

Donohue P. H. Huss G. R. **POSTER LOCATION #461**  
[Synthesizing Calcite and Dolomite for Mn/Cr Relative Sensitivity Corrections: A Progress Report](#) [#1569]  
 We report our advances in growing calcite and dolomite with Mn and Cr for matrix correction of  $^{53}\text{Mn}$ - $^{53}\text{Cr}$  chronology measurements by SIMS.

Biersteker J. B. Weiss B. P. Heinisch P. Herčík D. **POSTER LOCATION #462**  
 Glassmeier K.-H. et al. **POSTER LOCATION #462**  
[Constraints on Magnetic Field Intensity in the Outer Solar Nebula During Formation of Comet 67P/Churyumov-Gerasimenko from Philae Magnetometry](#) [#2642]  
 Absence of detected remanent magnetism on Comet 67P/Churyumov-Gerasimenko constrains magnetic field intensity in the outer solar nebula during comet formation.

Dunham E. T. Kita N. T. Defouilloy C. Simon S. B. Wadhwa M. **POSTER LOCATION #463**  
[Investigations of Oxygen Isotope Compositions Combined with Be-B and Al-Mg Systematics in CV3 CAIs](#) [#2497]  
 Beryllium-10 / and CAI oxygen / not correlated.

Krot A. N. Ma C. Nagashima K. Davis A. M. Beckett J. R. et al. **POSTER LOCATION #464**  
[Mineralogy, Petrography, and Oxygen Isotopic Compositions of Ultrarefractory Inclusions from Carbonaceous Chondrites](#) [#2416]  
 We report on the mineralogy, petrography, and oxygen-isotope compositions of ~20 ultrarefractory inclusions from CR, CM, CO, CV, and CH carbonaceous chondrites.

Weiss B. P. **POSTER LOCATION #465**  
[Meteorite Evidence for Formation of Jupiter by Core Accretion](#) [#1111]  
 Meteorites paleomagnetic and isotopic constraints on the solar nebula indicate that Jupiter formed by core accretion.

Cannon K. M. Britt D. T. **POSTER LOCATION #466**  
[Colloidal Dispersions in the Early Solar System](#) [#1188]  
 Upon melting, carbonaceous chondrite matrix material may have formed colloidal dispersions with unique properties and rheologies.

Nielsen S. G. Righter K. Wu F. Owens J. D. Prytulak J. et al. **POSTER LOCATION #467**  
[Nucleosynthetic Heterogeneity Controls Vanadium Isotope Variation in Bulk Chondrites](#) [#1450]  
 Vanadium isotope compositions in carbonaceous chondrites correlate with nucleosynthetic  $^{54}\text{Cr}$  isotope anomalies.