

Thursday, March 24, 2016
POSTER SESSION II: IRONS AND STONY IRONS
6:00 p.m. Town Center Exhibit Area

[R618]

Matthes M. van Orman J. A. Fischer-Gödde M. Kleine T. **POSTER LOCATION #262**
[Palladium-Silver Closure Temperature and the Cooling History of Iron Meteorites](#) [#2163]

We determined the Pd-Ag closure temperature in iron meteorites and present a method to determine cooling rates from Pd-Ag data, using Cape York as an example.

Matthes M. Fischer-Gödde M. Kruijjer T. S. Kleine T. **POSTER LOCATION #263**
[Palladium-Silver Isochron for the IVA Iron Muonionalusta: Solar System Initial \$^{107}\text{Pd}/^{108}\text{Pd}\$ and the Cooling of Protoplanetary Cores](#) [#2141]

A Pd-Ag isochron for Muonionalusta leads to a new solar system initial $^{107}\text{Pd}/^{108}\text{Pd}$, and allows resolving time differences in the cooling of protoplanetary cores.

Isa J. Ma C. Rubin A. E. **POSTER LOCATION #264**
[Joegoldsteinite: A New Sulfide Mineral \(\$\text{MnCr}_2\text{S}_4\$ \) from the IVA Iron Meteorite, Social Circle](#) [#1813]

Joegoldsteinite, a new sulfide mineral of endmember formula MnCr_2S_4 , was discovered in the Social Circle IVA iron meteorite.

Brennecka G. A. Kleine T. **POSTER LOCATION #265**
[Measured \$^{238}\text{U}/^{235}\text{U}\$ and a New Absolute Age for the IVA Iron Meteorite Muonionalusta: A Refined Timescale for Planetary Evolution](#) [#1135]

We report the first measured $^{238}\text{U}/^{235}\text{U}$ in planetary core material and discuss the implications of a ~ 7 Myr age adjustment to the Muonionalusta iron meteorite.

Hopp T. Fischer-Gödde M. Kleine T. **POSTER LOCATION #266**
[Ruthenium Isotope Fractionation During Planetary Core Crystallization](#) [#1231]

We use Ru stable isotope analyses of iron meteorites (e.g., IIAB, IIIAB) to investigate Rayleigh isotope fractionation during planetary core crystallization.

Scott E. R. D. Goldstein J. I. **POSTER LOCATION #267**
[Thermal Histories and Origins of Group IIE and IAB Iron Meteorites and Their Parent Asteroids](#) [#2685]

Thermal histories of IIE iron meteorites suggest they are derived from diverse depths in a large asteroid that was disrupted by impact like the IAB parent body.

Hunt A. C. Reger P. M. Cook D. L. Ek M. E. Schönbacher M. **POSTER LOCATION #268**
[Reassessing the Thermal History of the IAB Parent Asteroid Using W and Pt Isotopes](#) [#1867]

We present new Pt and W isotope data for the IAB iron meteorites. Our results indicate a global metal-silicate separation event at 5.6 ± 0.6 Ma after CAI.

Fischer-Gödde M. Kruijjer T. S. Kleine T. Wasson J. T. **POSTER LOCATION #269**
[W, Pt, Mo, and Ru Isotope Systematics of IIE Iron Meteorites](#) [#2704]

We report combined W, Pt, Ru, and Mo isotope data for IIE iron meteorites.

Mayne R. G. McCoy T. J. Greenwood R. C. Franchi I. A. Corrigan C. M. **POSTER LOCATION #270**
[Enon and Puente del Zacate: A Duo of Primitive-Silicate-Bearing Magmatic Irons](#) [#1559]

Clasts in IIIABs / can test if same parent / to the HEDs.

Kirby R. S. King P. L. Henley R. W. Troitzsch U. Ireland T. R. et al. **POSTER LOCATION #271**
[A New Hypothesis for the Evolution of IIE Iron Meteorites based on Geochronology and Petrology of the Miles Meteorite](#) [#1938]

A new proposal based on high-temperature gas-solid-melt reactions that demonstrates that iron meteorites can form through processes other than core-formation.

Boesenberg J. S. Mayne R. G. Humatun M.

Silver A. P. Greenwood R. C. et al.

POSTER LOCATION #272

[Pyroxene-Plagioclase Pallasite Northwest Africa 10019: Where Does It Belong? \[#2297\]](#)

NWA 10019 is a new pallasite with pyx, plag, and the most fractionated metal. Oxygen isotopes match main group, but petrology indicates no relationship.

Wang L. Y. Hsu W. B.

POSTER LOCATION #273

[Three Unusual Clasts Within Dong Ujimqin Qi Mesosiderite \[#2573\]](#)

Symplectites of chromite and orthopyroxene in low-Mg olivine (Fo_{61.4}), and in high-Mg olivine (Fo_{83.2}) and olivine-orthopyroxene-troilite-silica aggregate in DWQ.

Baecker B. Cohen B. A.

POSTER LOCATION #274

[Catching Constraints on the Parent Body Genesis of Mesosiderites and a Possible Link to HED](#)

[\(Howardite-Eucrite-Diogenite\) Meteorites — A New Hope? \[#2179\]](#)

Mesosiderites. / Need integrated approach. / Gas, stones and metal.