

Thursday, March 24, 2016
POSTER SESSION II: CHONDRITES: PARENT BODY ALTERATION
 6:00 p.m. Town Center Exhibit Area

[R606]

Alexander C. M. O'D.

POSTER LOCATION #111[Determining Petrologic Types of CM Chondrites](#) [#1273]

The use of serpentine compositions are compared to other methods for classifying CMs.

Greenwood R. C. Franchi I. A. Alexander C. M. O'D. Howard K. T.

POSTER LOCATION #112[Continuing the Search for the Most Primitive CO Chondrites: The Oxygen Isotope Perspective](#) [#2206]

Primitive Antarctic CO chondrites have oxygen isotope compositions that are distinct from higher grade COs and may represent the elusive CM2 precursor material.

Fujjya W. Fukuda K. Koike M. Ishida A. Sano Y.

POSTER LOCATION #113[Oxygen and Carbon Isotopic Ratios of Carbonates in the Nogoya CM Chondrite](#) [#1712]

Oxygen and C isotopic ratios of carbonates in Nogoya suggest the Rayleigh-type isotopic fractionation of C in the later stages of aqueous alteration.

Hidaka H. Higuchi T. Yoneda S.

POSTER LOCATION #114[Redistribution of Alkaline Elements in Chondrules of the Sayama \(CM2\) Meteorite: Possible Alteration Effect in Association with Aqueous Activity in the Early Solar System](#) [#1782]

SHRIMP analyses were done for the determination of elemental abundances of alkaline elements and of the Ba isotopic ratios of the Sayama meteorite chondrules.

Friedrich J. M. Abreu N. M. Troiano J. M. Wolf S. F. Stanek G. L.

POSTER LOCATION #115[Chemical Studies of CM Chondrites: Exploring Potential Compositional Differences Associated with Progressive Aqueous Alteration](#) [#2162]

We present an examination of the isochemical nature of progressive aqueous alteration in CM chondrites.

Singerling S. A. Brearley A. J.

POSTER LOCATION #116[Altered Primary Sulfides in CR and CM Carbonaceous Chondrites: Formation by Dissolution and Pseudomorphic Replacement](#) [#1718]

We present observations of aqueously altered primary iron sulfides in CR and CM chondrites and argue they formed by dissolution or pseudomorphic replacement.

Gilmour C. M. Herd C. D. K. Cloutis E. A. Cuddy M. Mann P.

POSTER LOCATION #117[Water Abundance in the Tagish Lake Meteorite from TGA and IR Spectroscopy: Evaluation of Aqueous Alteration](#) [#1765]

TGA and IR spectroscopy were used to evaluate whether water abundances among different Tagish Lake samples reflect the previously reported alteration sequence.

Seitz H.-M. Schoelmerich M. O. Gaspers N.

Marco L. Hofer H. E. et al.

POSTER LOCATION #118[Duration of Chondrite Parent Body Peak Metamorphic Conditions Deduced from Lithium Partitioning Between Chondrules and Matrix in Unequilibrated and Equilibrated Carbonaceous and Ordinary Chondrites](#) [#1459]

Lithium can be used as a speedometer to estimate the duration of CPB metamorphic peak conditions, which prolonged over a timescales of 0.5 Ma to 5 Ma years.

Telus M. Alexander C. M. O'D. Hauri E. H. Wang J.

POSTER LOCATION #119[H Isotopic Composition of Phosphates in H4 Chondrites](#) [#1742]

We analyzed the H isotopic composition of phosphate grains from H4 chondrites Ste. Marguerite and Sena. We find Cl-apatite grains from Sena are enriched in D.

Dunn T. L. Ivanova M. Gross J.

POSTER LOCATION #120

[Magnetite as an Indicator of Equilibration in the CK Chondrites](#) [#2101]

Magnetite says that / Dhofar 015 is CK4 / Despite its texture.

Lewis J. A. Jones R. H. Brearley A. J.

POSTER LOCATION #121

[Alkali Feldspar Exsolution in Ordinary Chondrites: Alkali Metasomatism, Metamorphism, and Cooling Rates](#) [#2559]

We compare the occurrences and textures of K-feldspar exsolution in a range of ordinary chondrites and discuss implications for metasomatism and cooling rates.