Wednesday, March 23, 2016 **[W406]**
ORIGINS OF THE SOLAR SYSTEM:
ISOTOPE COSMOCHEMISTRY
8:30 a.m. Montgomery Ballroom

Chairs: **Subrata Chakraborty**
Katherine Bermingham

8:30 a.m. Dwarkadas V. V. * Dauphas N. Meyer B. S.
Investigating a Stellar Wind Origin for High ^{26}Al and Low ^{60}Fe in the Early Solar System **[#1717]**
Using numerical simulations and analytical methods, we test if the high ^{26}Al/^{60}Fe ratio in the early solar system is due to enrichment from massive star winds.

8:45 a.m. Krabbe N. * Kruijer T. S. Kleine T.
Tungsten Stable Isotope Variations in Meteorites and Terrestrial Samples by Double Spike MC-ICPMS **[#2451]**
Tungsten stable isotope variations in meteorites and terrestrial samples are limited, suggesting that high temperature processes induce small mass-dependent effects.

9:00 a.m. Greber N. D. * Dauphas N. Millet M. A. Puchtel I. S.
The Titanium Isotopic Composition of Chondrites and Earth **[#1448]**
We present mass-dependent Ti isotope data for chondrites, komatiites, and USGS reference materials and discuss the state of knowledge for this isotope system.

9:15 a.m. Williams C. D. * Sanborn M. E. Yin Q.-Z.
Tracing Petrogenetic Links Among Planetary Materials with Ti-Cr-O Systematics **[#1538]**
We report mass-independent Ti-Cr-O variations in bulk meteorites to further elucidate potential petrogenetic links among planetary materials.

9:30 a.m. Nagai Y. * Yokoyama T.
Molybdenum Isotope Anomalies in Non-Carbonaceous Meteorites **[#1888]**
Molybdenum isotope anomalies for non-carbonaceous meteorites suggest two reservoirs of distinct Mo isotopic compositions in the solar nebula.

9:45 a.m. Bermingham K. R. * Worsham E. A. Walker R. J.
Refining the Mo-Ru Cosmic Correlation **[#1488]**
Refinement of the Mo-Ru cosmic correlation using new high precision Mo and Ru isotope data.

10:00 a.m. Mayer B. * Humayun M.
Nucleosynthetic Anomalies in Palladium from Bulk Meteorites **[#2047]**
Nucleosynthetic anomalies in Pd from bulk meteorites are correlated with other elements and differences are discussed in light of solar nebula processes.

10:15 a.m. Fukai R. * Yokoyama T.
Nucleosynthetic Neodymium Isotope Anomalies in Carbonaceous and Ordinary Chondrites **[#1298]**
Our results indicate that negative μ^{142}Nd values observed in chondrites simply reflect the heterogeneous distribution of s- plus p-process nuclides.

10:30 a.m. Tissot F. L. H. * Dauphas N. Grossman L.
Evidence for a Single Environment of r-Process Nucleosynthesis from Live ^{247}Cm in the Early Solar System **[#1605]**
We show that ^{247}Cm was present in meteorites at a level of $(1.1 \pm 0.3) \times 10^{-4}$, which is consistent with a single stellar environment of *r*-process nucleosynthesis.

10:45 a.m. Wang K. * Jacobsen S. B.
Potassium Isotope Cosmochemistry Revisited **[#1667]**
We report new high-precision K isotope data for chondrites and discuss implications for the volatile element depletion of inner solar system bodies.

11:00 a.m. Meshik A. * Pravdivtseva O. Hohenberg C.
Micro-Distribution of Fission Xenon Isotopes: A Possible Explanation of Xenon Composition in Phase Q **[#3038]**
Micro-distribution of fission Xe is isotope-specific. It can modifies apparent fission yields and provide a new interpretation of Xe composition in phase-Q .

11:15 a.m. Chakraborty S. * Kehoe H. Thiemens M. H.
New Experimental Evidence of Silicate Formation with Meteorite Like Oxygen Isotopes on a Dust Surface Analog **[#2242]**
New experimental results showing a chemical pathway to form silicate with meteorite-like O-isotopic composition (slope ~1 in three-isotope space) on grain surface.

11:30 a.m. Smith R. L. * Blake G. A. Boogert A. C. A. Pontoppidan K. M. Lockwood A. C.
High-Resolution Observations of CO Toward Massive Young Stellar Objects: Investigations of Protoplanetary Carbon and Oxygen in the Galaxy **[#3028]**
In the galaxy / Near and far, far away… / Massive YSOs observed with Keck / Carbon and oxygen isotopes / May evolve differently than their solar-type neighbors.