NEW ACHONDRITE GRA 06128/GRA 06129 — ORIGINS UNKNOWN
8:30 a.m.   Crystal Ballroom A

Chair: C. M. Corrigan

8:30 a.m.   Treiman A. H. *  Morris R. V.  Kring D. A.  Mittlefehldt D. W.  Jones J. H.
Petography and Origin of the Unique Achondrite GRA 06128 and 06129: Preliminary Results [2215]
GRA 06128 and 06129 are paired achondrites, with unique mineral proportions (75% olivoclase), mineral compositions, and oxygen isotope ratios. They appear to be alkalic igneous rock from a hitherto unsampled differentiated parent body.

8:45 a.m.   Arai T. *  Tomiyama T.  Saiki K.  Takeda H.
Unique Achondrites GRA 06128/06129: Andesitic Partial Melt from a Volatile-rich Parent Body [2465]
Unique achondrites GRA 06128/06129 with abundant Na-rich plagioclase and Fe-rich composition likely represent partial melts from a volatile-rich parent body.

GRA 06129: A Meteorite from a New Asteroidal Geochemical Reservoir or Venus? [1825]
We summarize the preliminary findings of our consortium that has applied a wide range of analytical techniques to help decipher the petrogenesis and origin of achondrite GRA 06129.

Petrogenesis of the Differentiated Achondrite GRA 06129: Trace Elements and Chronology [2271]
GRA 06129 is an olivoclase-rich achondrite with subsidiary olivine, cpx, opx and phosphates. Major, trace, and rare Earth element and oxygen and lead isotope analyses suggest that it is an early formed crustal sample from a previously unsampled planetesimal.

Petrology, Geochemistry, and Likely Provenance of Unique Achondrite Graves Nunataks 06128 [2456]
We characterize the petrography, geochemistry, and oxygen isotope ratios of Graves Nunataks 06128, which appears to be a member of the brachinite achondrite group, representing a near-surface breccia of early crystallized flotation cumulate material.