POSTER LOCATION #116
The Effect of Thermal Gradients on the Major and Trace Element Distribution in Fe-Ni-O Melts: Implications for Chemical Redistribution During Planetary Accretion [1273]
Fe-Ni-O melt subject to a thermal gradient develops a compositional profile. The magnitude of this profile helps describe element partitioning during accretion.

POSTER LOCATION #117
Melting and Mixing of Fe/Ni Projectiles and Chondritic-Like Target Bodies During Impact [1850]
Hypervelocity impact experiments set out to test the current formation theories for the silicate-bearing IIE iron meteorites.

POSTER LOCATION #118
The Effect of Light Elements in Metallic Liquids on Partitioning Behavior [1165]
Partitioning behaviors in the Fe-Ni system were determined experimentally and used in new parameterization expressions for the S-, P-, and C-bearing systems.

POSTER LOCATION #119
Effect of Pressure on Fe$^{3+}$/Fe$^{2+}$ in Silicate Liquids, Accurate Determination of Fe$^{3+}$/Fe$^{2+}$ in Silicate Glasses by Mössbauer Spectroscopy, and Applications to Magma Oceans [2442]
We determine Fe$^{3+}$/Fe$^{2+}$ accurately in silicate glasses and investigate the pressure effect on $f$O$_2$ in a magma ocean, with consequences for planetary differentiation.

POSTER LOCATION #120
Speciation and Solubility of C-O-H Volatiles in Reduced Basaltic Melts: Implications for Planetary Volcanism and Magma Oceans [2591]
Most C in lunar and martian basalts may be contained in reduced CO-species; a potentially N- and C-bearing species is important for a terrestrial magma ocean.

POSTER LOCATION #121
Heat Pipe Planets [1951]
When volcanism dominates heat transport, a terrestrial body enters a heat-pipe mode, in which hot magma moves through the lithosphere in narrow channels.

POSTER LOCATION #122
Simulating Planetary Igneous Crystallization Environments (SPICEs): A Suite of Igneous Crystallization Programs [1111]
Long-established, reliable programs for calculating magma evolution have been given a facelift and used for modeling the crystallization of Apollo 17 basalts.