
POSTER LOCATION #96

Differentiation in Planetesimals with Applications to Asteroid (16) Psyche  [#1351]

We explore the likely compositional ranges of silicate planetesimal interiors and consider the ramifications for the asteroid Psyche and in the IVA iron meteorites.

Fu R. R.  Elkins-Tanton L. T.

POSTER LOCATION #97

Partially Differentiated Planetesimals may Retain Primitive Crusts  [#1173]

Melts of carbonaceous chondrites are dry and denser than the chondritic crust itself. A primitive surface is therefore expected to survive differentiation.

Komacek T. D.  Ciesla F. J.  Davison T. M.

POSTER LOCATION #98

A Model for the Three-Dimensional Heating of a Planetesimal  [#1359]

We present a 3-D model exploring the effects of radiogenic and impact heating in a planetesimal, displaying model test results and describing future work.

Righter K.

POSTER LOCATION #99

Late Chondritic Additions and Planet and Planetesimal Growth: Evaluation of Physical and Chemical Mechanisms  [#2196]

The hypothesis of late chondritic addition to planets and differentiated bodies will be evaluated using both chemical and physical constraints.

Hirschmann M. M.

POSTER LOCATION #100

Atmosphere/Magma Ocean Interactions: Consequences for Planetary Differentiation and Volatile Evolution  [#2049]

Magma ocean-atmosphere interactions play a key role in the differentiation of terrestrial planets and formation of geochemical reservoirs.

Zhang H.  Withers A. C.  Hirschmann M. M.

POSTER LOCATION #101

Experimental Investigation of the Role of Oxygen Fugacity on Degassing of Planetary Magma Oceans  [#2657]

We present experiments on \( f_{O2} \) variation with pressure in silicate melts to address redox gradients in magma oceans and their influence on planetary evolution.

Mills R. D.

POSTER LOCATION #102

The Effect of Thermal Cycling on Crystal-Liquid Separation During Lunar Magma Ocean Differentiation  [#2317]

Thermal cycling during crystallization of a magma ocean could lead to coarsening of crystals and more efficient fractional crystallization.