Were Chondrite Parent Bodies Magnetized by the Early Solar Wind? [#2958]
We test the hypothesis that chondrite parent bodies were magnetized by the solar wind, using magnetohydrodynamic simulations and solar wind measurements data.

Magnetization of CV Meteorites in the Absence of a Parent Body Core Dynamo [#2850]
Magnetization of the CV parent body in the absence of a core dynamo.

Formation of Secondary Ca-Fe–Rich Minerals Assemblages in CV Chondrites [#1396]
Here we present a new survey of Ca-Fe-rich minerals in the CV3 chondrites and their T, aSiO2 stability inferred from equilibrium phase assemblage computation.

Modeling CM Carbonate and Magnetite Compositions [#2763]
We explore two models to explain the O isotopes of bulk CMs, as well as in calcite and magnetite.

Recreating Intercalated Clays of Chondritic Meteorites [#2621]
Combinations of fine grained metals, nontronite, organics, and water were heated to examine the formation of intercalated clays in chondritic meteorites.

Unusual Carbonate-Sulfide Assemblages in Cold Bokkeveld CM Chondrite [#1587]
This study explores the petrography and chemistry of unusual carbonate assemblages in Cold Bokkeveld.

Alteration History of a Large Lithic Inclusion in the Northwest Africa NWA 2364 CV3 OxA Chondrite: Evidence for Hydration Followed by Fluid-Assisted Thermal Metamorphism [#2459]
CV3 chondrite / Altered lithic inclusion / Shows a complex past.

Shock Darkening of H Chondrites Appears to Correlate with Their Cosmic Ray Exposure Age [#2944]
Correlation between CRE age and darkness of 40 H chondrites suggests that the darkening resulted from collision shocks during the meteoroids’ exposure.

Mineralogical, Spectral, and Compositional Changes During Heating of Hydrous Carbonaceous Chondrites [#1954]
We have carried out systematic investigation of mineralogical, spectral, and volatile-compositional features of hydrated and dehydrated carbonaceous chondrites.

Shock-Darkening in Ordinary Chondrites: Modeling of the Pressure-Temperature Conditions [#1012]
We studied shock-darkening in ordinary chondrites using shock physics code iSALE (Wünnemann et al. 2006). Results showed pressures between 40 and 50 GPa.

Shock-Darkening in Ordinary Chondrites - Numerical Calibration of Shock-Recovery Experiments [#1558]
Using ISALE (Wünnemann et al. 2006) we numerically calibrated shock-experiments that will be carried out to study shock-darkening in ordinary chondrites.
Davison T. M. Shivarani E. Collins G. S. O’Brien D. P. Ciesla F. J. et al. POSTER LOCATION #294
Collisional Histories of Small Planetesimals [#2296]
How much compaction / Do small asteroids sustain / Before disruption?

Walton C. R. Anand M. POSTER LOCATION #295
Textural Evidence for Shock-Related Metasomatic Replacement of Olivine by Phosphates in the Chelyabinsk Chondrite [#1487]
Textural evidence from Chelyabinsk phosphates suggest formation via an uncharacterised shock-fracture mediated olivine replacement reaction.

Brenker F. E. Prior D. J. Cayron C. Koch T. Krot A. N. et al. POSTER LOCATION #296
Macrostructural Record of Phase Transformation in Shocked Metal Spheres in CB Chondrite QC 001 [#1967]
In this work we present macrostructural evidence for the fcc-bcc and hcp-bcc phase transformation in CB chondrite QC 001.

Koch T. E. Brenker F. E. Prior D. J. Lilly K. Krot A. N. et al. POSTER LOCATION #297
High Iron Wadsleyite in Shocked Melt Droplets of CB Chondrite QC 001 [#1303]
Wadsleyites with unusual high Fe content are found in silicate melt droplets of a shocked CB chondrite.

Baziotis I. P. Ferrière L. Klemme S. Berndt J. Brandstätter F. et al. POSTER LOCATION #298
New Findings of High-Pressure Polymorphs in the L6 Ordinary Chondrite Château-Renard [#1335]
Here, we report on the first HP polymorphs, ringwoodite, majorite, and wadsleyite observed in Château-Renard ordinary chondrite, a French fall from 1841.

Isa J. Rubin A. E. McKeeegan K. D. POSTER LOCATION #299
Rumuruti Chondrite Opaque Mineral Assemblages: Implications for Parent-Body Processes [#2928]
Hmm 16O-rich / Whether nebular or not / That is the question.

Rubin A. E. POSTER LOCATION #300
A Pervasive Reduction Event on the L-Chondrite Parent Asteroid [#1151]
15% of L6 chondrites have narrow reduction rims on olivine, opx, and FeS grains and fractures within them; narrow rims of kamacite occur at taenite boundaries.

Onda S. Koike M. Takahata N. Ishida A. Sano Y. et al. POSTER LOCATION #301
Pb-Pb Dating and Water Content Measurements of Phosphate Grains in H Chondrites [#2106]
We conducted Pb-Pb dating and water content measurement of phosphate grains in H chondrites by NanoSIMS, to examine thermal history of their parent body.

Krot A. N. Nagashima K. Simon S. B. POSTER LOCATION #302
Diverse Alteration of DOM 08006 (CO3.0) and DOM 08004 (CO3.1) and Its Effect on Oxygen Isotopic Compositions of Grossite-Bearing Refractory Inclusions [#1084]
O-isotope heterogeneity in CAIs from DOM 08004 (CO3.1) may have resulted from postcrystallization isotope exchange during fluid-rock interaction on CO asteroid.

Epichich G. R. Borg L. E. Burkhardt C. POSTER LOCATION #303
Constraints on the Nature and Timing of Post-Formation Alteration of Chondritic Meteorites from 87Sr/86Sr and 143Nd/144Nd Systematics [#2511]
Rb-Sr isotopic analyses of chondritic meteorites indicate metamorphism concentrated around age of ~4.52 Ga, consistent with geochemical and petrologic evidence.

Donohue P. H. Huss G. R. Nagashima K. Telus M. POSTER LOCATION #304
Live(? )60Fe During Aqueous Alteration of Chondrite Parent Bodies: Evidence from UOCs and CV Chondrites [#2307]
60Fe mobile / Aqueously sequestered? / Search in new phases.
McCausland P. J. A.  Tait K. T.  Nicklin I.  Flemming R. L.  
POSTER LOCATION #305  
Regolith Processing on L Chondrite Bodies as Witnessed by NWA 869 [#1826]
L chondrite breccia / With regolith processing / Hot breath of sulphur.

Macke R. J.  Opeil C. P.  Consolmagno G. J.  
POSTER LOCATION #306  
Quantifying Weathering in Ordinary Chondrite Finds Using Heat Capacity [#1486]
Heat capacities / Of ordinary chondrites / May yield weathering.

Brunetto R.  Lantz C.  Dionnet Z.  Borondics F.  Aléon-Toppanni A.  et al.  
POSTER LOCATION #307  
IR Spectral Imaging of Irradiated Carbonaceous Meteorites [#1508]
We present recent experimental results on asteroid surface alteration, with particular emphasis on the spectral trends for weathering dark asteroids.

Thompson M. S.  Zega T. J.  Howe J. Y.  
POSTER LOCATION #308  
TEM Analysis of Space Weathering Features in an Itokawa Soil Grain with a Polyphasic Mineralogy [#2358]
Nanoscale analysis of chemical and structural space weathering features observed in a grain from Itokawa that contains multiple mineral phases.

Matsuoka M.  Nakamura T.  Miyajima N.  Imae N.  Yamaguchi A.  et al.  
POSTER LOCATION #309  
Vis-IR Reflectance Spectroscopy of Hydrous Carbonaceous Chondrites with Variable Heating and Dehydration Degrees [#2050]
We measured the reflectance spectra from ~0.4 to 15 μm of nine carbonaceous chondrites with various heating degrees.

Kiddell C. B.  Cloutis E. A.  Tait K.  Nicklin I.  
POSTER LOCATION #310  
Spectral Reflectance Properties of <5 μm Powder on Carboneceous Chondrites [#2397]
Examination of the spectral properties of carboneceous chondrites attributable to the presence of <5 μm powder coating on bare meteorite slabs.

Kaplan H. H.  Milliken R. E.  Alexander C. M. O’D.  
POSTER LOCATION #311  
Reflectance Spectroscopy of Meteorite Insoluble Organic Matter (IOM) [#1456]
Reflectance spectra of IOM and bulk meteorites are related to organic composition with applications to spectral mapping of asteroids and meteorites.

Verchovsky A. B.  Fisenko A. V.  Semjonova L. F.  
POSTER LOCATION #312  
Isotopically Light Nitrogen in the Q-Enriched Fractions Separated from the Saratov Meteorite [#2226]
In the fractions isolated from Saratov meteorite using physical separation and HF/HCl treatment we found isotopically light N in association with Q noble gases.

Hashiguchi M.  Naraoka H.  
POSTER LOCATION #313  
Organic Compound Imaging on the Surface of CM2 Carbonaceous Chondrites Using Desorption Electrospray Ionization (DESI) with High-Resolution Mass Spectrometer [#2902]
CHN compounds were identified from Murray and Murchison meteorites by high resolution mass imaging using DESI-MS and their spatial distributions were revealed.

Hammer P. G.  Locke D. R.  Burton A. S.  Callahan M. P.  
POSTER LOCATION #314  
Thermal Studies of Ammonium Cyanide Reactions: A Model for Thermal Alteration of Prebiotic Compounds in Meteorite Parent Bodies [#2742]
We analyzed heated ammonium cyanide reactions using ATR-FTIR, TMAH-pyrolysis GC-MS, and HPLC-UV and tracked organic compounds with respect to temperature.

Young J. M.  Glotch T. D.  Yesiltas M.  
POSTER LOCATION #315  
Observation of Thermal Alteration of Polycyclic Aromatic Hydrocarbons in Ordinary Chondrites via Raman Spectroscopy [#2335]
Points laser at rings / Hand over your D-bands now! / Wow! Spectroscopy!