1:30 p.m.  Bennett K. A.  Hill J. R.  Murray K. C.  Edwards C. S.  Bell J. F. III  et al.  THEMIS-VIS Color and Morphologic Investigations at Gale Crater [#2153]
THEMIS-VIS grayscale and false color mosaics were used to analyze color variations and morphology in Gale Crater and the surrounding region.

1:45 p.m.  Fedo C. M.  Grotzinger J. P.  Gupta S.  Stein N. T.  Watkins J.  et al.  Facies Analysis and Basin Architecture of the Upper Part of the Murray Formation, Gale Crater, Mars [#1689]
The Murray formation, Gale Crater, Mars presently can be divided into sedimentary facies that represent lake and lake margin environments.

2:00 p.m.  Minitti M. E.  Kennedy M. R.  Krezoski G. M.  Rowland S. K.  Schieber J.  et al.  Using MARDI Twilight Images to Assess Variations in the Murray Formation with Elevation, Gale Crater, Mars [#2622]
MARDI images provide a systematic record of Murray formation characteristics, observing variations in lamination, veins, and diagenetic textures with elevation.

2:15 p.m.  Stein N.  Grotzinger J. P.  Schieber J.  Mangold N.  Newsom H.  et al.  Candidate Desiccation Cracks in the Upper Murray Formation, Gale Crater, Mars [#2387]
The Curiosity rover team recently investigated polygonal features in the upper Murray formation. The features are interpreted to likely be desiccation cracks.

2:30 p.m.  Cofield S.  Stack K. M.  Fraeman A. A.  Geologic Mapping and Stratigraphic Analysis of the “Clay Trough” of Mount Sharp, Gale Crater, Mars [#2531]
High-resolution orbital geologic map of the clay-bearing trough in lower units of Mount Sharp for MSL Curiosity rover’s newly extended mission traverse.

2:45 p.m.  Watkins J. A.  Grotzinger J. P.  Avouac J.-P.  Fracture Formation by Compaction-Related Burial in Gale Crater, Mars: Implications for the Origin of Aeolis Mons [#3019]
We test a mechanical model of fracture formation by compaction-related burial within Gale Crater, Mars in order to constrain the regional stress history.

3:00 p.m.  Fox V. K.  Arvidson R. E.  Fraeman A. A.  Mineralogy of Mount Sharp, Gale Crater, Using Along-Track Oversampled CRISM Observations to Support Path Planning for the Curiosity Rover [#1454]
Detailed mineral maps using 12 m/pixel CRISM observations will help the Curiosity rover identify routes that reach scientifically important out-crops.

Mineralogical variations in lacustrine mudstone samples in Gale Crater suggest diverse depositional and diagenetic environments.
Surveying Clay Mineral Diversity in the Murray Formation, Gale Crater, Mars [#2462]
Mars Science Laboratory has documented dioctahedral smectite clay minerals in the upper part of the Murray Formation, with implications for ancient Mars conditions.

3:45 p.m.  Thompson L. M.  *  MSL APXS and Science Teams  
Compositional Characteristics and Trends Identified by APXS Within the Murray Formation, Gale Crater, Mars:  Implications for Provenance, Diagenesis and Alteration History [#3020]
APXS chemical characteristics and trends elucidate provenance, depositional environment, diagenesis, and alteration processes within martian Murray Fm mudstones.

4:00 p.m.  Mangold N.  *  Dehouck E.  Forni O.  Le Deit L.  Rivera-Hernandez F.  et al.  
Aqueous Alteration in Mt. Sharp Mudstones Evidenced by ChemCam, Curiosity [#1894]
ChemCam analyses of the Murray mudstones show high values (55–60) of the chemical index of alteration (CIA) likely resulting of enhanced weathering conditions.

ChemCam Survey of Volatile Elements in the Murray Formation, Gale Crater, Mars [#2756]
We apply new lab LIBS results to the MSL ChemCam data to measure H, Cl, C, and S and to identify cementing salts and diagenesis in the Murray mudstone.

4:30 p.m.  Sutter B.  *  McAdam A. C.  Rampe E. B.  Thompson L. M.  Ming D. W.  et al.  
Evolved Gas Analysis of the Murray Formation in Gale Crater, Mars:  Results of the Curiosity Rover’s Sample Analysis at Mars (SAM) Instrument [#3009]
The sulfate, nitrate, carbon, and (per)chlorate chemistry of the Murray formation will be evaluated.