Tuesday, August 9, 2016

POSTER SESSION:  METEORITES, HOW DO THEY GET HERE,
AND HOW DO WE COLLECT THEM?
5:30 p.m.   Poster Area

Mézsáros M.   Leya I.   Hofmann B. A.
Noble Gases in the two Lunar Meteorites AaU 012 and Shişr 166 [6129]
AaU 012 and Shişr 166 possess a very similar bulk composition, implying a possible launch pairing. The aim of our study was to obtain information on the exposure histories to further proof or reject launch pairing of these two lunar meteorites.

McCoy T. J.
Meteoritic Archaeologic Objects as a Key to Understanding Trade in Ancient Eastern North America [6486]
Meteoritic metal beads from the Havana, Illinois, Hopewell site (~300 BCE), were formed from the Anoka, Minnesota, iron. These beads support the the Hopewell Interaction Sphere with transport via rivers and manufacture near the find site.

Pourkhorsandi H.   Rochette P.   Gattacceca J.   D’Orazio M.   Mirnejad H.
Lut Desert (Iran) Meteorites:  Distribution, Classification and Weathering [6195]
The number of meteorites recovered from Lut desert (Iran) is increasing. Here we report the distribution, classification and weathering of these meteorites.

Smith T.   Leya I.   Hofmann B.   Merchel S.   Rugel G.   Pavetich S.   Scharf A.
Preatmospheric Size and Terrestrial Age of the Twannberg Meteorite (IIG) [6187]
Samples from the Twannberg meteorite were measured for noble gas and radionuclide concentrations. Terrestrial age has been calculated to better understand its relation to the last glaciation events in Europe. Preatmospheric mass has been estimated.

Cosmogenic and Trapped Noble Gases from Csátalja H4-5 [6495]
New noble gas data on Csátalja H4-5 have been deconvolved to cosmogenic, radiogenic, and trapped components. The estimated CRE ages are of typical H chondrites.

Chennaoui Aoudjehane H.   Agee C. B.   Aaranson A.   Bouragaa A.
Sidi Ali Ou Azza (L4):  A New Moroccan Fall [6120]
Sidi Ali Ou Azza is the latest meteorite fall in Morocco, it occurred on 28th July 2015 very close (about 40 km) to Tissint martian shergottite fall that occurred on 18th of July 2011. It’s one of the small group of 23 L4 ordinary chondrite falls.

Welten K. C.   Nishiizumi K.   Caffee M. W.
Terrestrial Ages and Pairing of Antarctic HED Meteorites [6512]
Cosmogenic radionuclides in Antarctic HED meteorites yield terrestrial ages up to 450 kyr, with one exceptionally old age of 1.3 Myr for the LAR 12326 howardite. The old age of LAR 12326 may indicate that achondrites weather slower than chondrites.

Ebert S.   Bischoff A.
The Stubenberg (Bavaria) Ordinary Chondrite Breccia:  The Latest German Meteorite Fall [6137]
Stubenberg is the latest meteorite fall in Germany. First fragments of the meteorite were found six days after the fall. The first mineralogical data are presented.

Density, Porosity and Magnetic Susceptibility of the Murrili Meteorite Recovered by the Desert Fireball Network [6147]
We measured physical properties of the meteorite Murrili, which despite being retrieved shortly after landfall, exhibits signs of terrestrial weathering from its corrosive landing spot.
New Insights in Preservation of Meteorites in Hot Deserts: The Oldest Hot Desert Meteorite Collection.
Terrestrial ages of a subset of a chilean meteorite collection have been determined with cosmogenic nuclides. We show here that provided the environment is favorable enough, hot desert meteorites can survive over a million year.

Satterwhite C. E. Funk R. C. Righter K. Harrington R. H.
40 Years of Processing Pieces of Space
This year marks the 40th year anniversary for the Antarctic Search for Meteorite (ANSMET) program. Since 1976, more than 22,000 meteorite samples have been recovered. These meteorites come from asteroids, planets and other bodies of the solar system.

Martin E. Schmitz B.
A Stranger in the Midst: Searching for Relict Grains from Rare Meteorite Types in Mid-Ordovician Limestone Strata
A layer of Mid-Ordovician limestone harbors exceptional amounts of L-chondritic chromite grains. The layer also contains grains from potentially rarer types of meteorites, following the discovery of the fossil meteorite Österplana 065.

Fe-57 Mössbauer Study of the Murrili Ordinary Chondrite
The Murrili meteorite fell in Lake Eyre South, South Australia, after being imaged and located by the Desert Fireball Network. It displays an unusual heterogeneous weathering throughout the stone, here quantified using 57Fe Mössbauer spectroscopy.

Bischoff A. Ebert S. Patzek M. Horstmann M. Pack A. Decker S.
Almahata Sitta News: Well-Known Varieties and New Species in the Zoo
Mineralogical characteristics of 18 new samples from the Almahata Sitta strewn field are presented. Among the samples are 5 E chondrites, 12 samples of ureilitic origin (including a new trachyandesite), and an enstatite- and metal-rich achondrite.

Muravyev L. A. Grokhovsky V. I.
Statistical Evaluation of Tsarev Meteorite Shower Dispersion
We identify the Tsarev scattering regularities that will establish completeness of its material collection in the area of the fall and assume the most promising areas for the future search.

Rosén Å. V. von Sivers M. Hofmann B. A. Schumann M. Pathak D.
Cosmogenic Radionuclides in the Komar Gaon Meteorite Measured in a New Low-Background Gamma-Ray Spectrometry Facility, GeMSE
Radionuclide activities in the Komar Gaon meteorite measured using a new gamma-ray spectrometry facility, GeMSE. Implications.

Search and Recover of Antarctic Meteorites from Lomonosov Mountains, Queen Maud Land by the First Russian Meteorite Expedition
We represent result of a field work of UrFU team and discover new areas of meteorites concentration near the Novolazarevskaya Antarctic station.

Losiak A.
Weathering of Antarctic Eucrites
The study compares secondary phases resulting from aqueous processes and aqueous corrosion features developed in a set of eucrites from different ANSMET meteorite fields.
Ströbele F. Broschat K. Koeberl C. Zipfel J. Hassan H. Eckmann C.

Meteoritic Origin of a Dagger Among the Iron Objects of Tutanchamun [#6508]

Chemical analyses confirm the meteoritic origin of the famous iron dagger from the tomb of King Tut.

Vinnikov V. Gritsevich M.

Statistical Approach to Estimate Initial Meteoroid Shape from Empirical Mass Distribution of Recovered Meteorite Fragments [#6552]

We estimate the proportions of a pre-fragmented meteoroid for the cases with large number of recovered meteorite fragments.

Ouknine L. Kliri F. Ibhi A.

Study of the Circumstance of Meteorites “Northwest Africa” Finds Contribution to an Appropriate Renomenclature [#6557]

This work tries to respond to solicitations from researchers of the region to highlight the meteorites recovered in Morocco and neighboring countries. The objectives assigned to this study are the contextualization of the finds of meteorites NWA.