

## PRINT ONLY: METEORITES

Alexeev V. A. Ustinova G. K. Gorin V. D.

*Pre-Atmospheric Sizes and Ablation of the Kilabo and Bensour LL6-Chondrites* [#1010]

By using the previously developed methods and the measured data on cosmogenic radionuclides and tracks in the Kilabo and Bensour LL6 chondrites, their preatmospheric sizes, locations of the investigated samples, and ablation are estimated.

Cerón Loayza M. L. Bravo Cabrejos J. A.

*Preliminary Characterization of Samples from the Carancas (Puno, Peru) Meteorite and Its Crater* [#2356]

This paper reports the preliminary results of the elemental and structural characterization of meteorite and crater soil samples of Carancas, Peru. The techniques used were X-ray fluorescence, X-ray diffractometry, and transmission Mössbauer spectroscopy.

Gorin V. D. Alexeev V. A. Ustinova G. K.

*Pre-Atmospheric Size and Orbit of the Bukhara CV3-Chondrite* [#1012]

By using the previously developed methods and the measured data on cosmogenic radionuclides and tracks in the Bukhara CV3-chondrite, its preatmospheric size ( $R \sim 24$  cm), ablation (96.9%), and orbit ( $q' = 2.0 \pm 0.2$  AU) are estimated.

Herd R. K. Herd C. D. K. Nicklin I. Tait K.

*Meteorite Collections in Canada: Collaborating to Support Space Exploration* [#2241]

Major meteorite collections in Canada have begun collaborating, ultimately to help create a national infrastructure of researchers and institutions experienced in space-exploration-critical skills for receiving, curating, handling, and analyzing astromaterials.

Humayun M. Huang S.

*Palladium Isotope Composition of Group IVB Irons: Initial Results* [#1831]

We report new Pd isotopic compositions for group IVB irons, and discuss the use of Pd as a monitor of cosmic-ray neutron fluence.

Ivliev A. I. Kuyunko N. S.

*The Study of Ordinary Chondrites by the Thermoluminescence Method* [#1053]

In the present work, the investigations of TL were made for recent measurements of the equilibrated ordinary chondrites Barwell (L5), Chantonay (L6), Dolgovoli (L6), Kilabo (LL6), Kunya-Urgench (H5), and Tugalin Bullen (H6).

Kashkarov L. L. Ivliev A. I. Kalinina G. V.

*Radiation and Shock-Thermal History of the Kilabo (LL6) Chondrite by the Track and Thermoluminescence Methods* [#1345]

New results of complex analyses with the help of fossil track and artificially induced thermoluminescence methods of the ordinary chondrite Kilabo LL6 are given.

Korochantseva E. V. Trieloff M. Buikin A. I. Hopp J.

*High  $^{40}\text{Ar}/^{36}\text{Ar}$  Ratios of Trapped Argon from Martian Interior and Atmosphere in Shergottites* [#1566]

We performed comprehensive high-resolution  $^{40}\text{Ar}$ - $^{39}\text{Ar}$  stepwise heating analyses on whole rock and mineral separates of martian shergottites (Shergotty, Zagami, SaU 005, Dhofar 019). The presence of trapped argon with high  $^{40}\text{Ar}/^{36}\text{Ar}$  ratios is discussed.

Lavrentjeva Z. A.

*The Water, Volatile Elements and Oxygen Fugacity ( $f\text{O}_2$ ) in SNC Meteorites* [#1031]

Studies of SNC meteorites have shown that martian magmas had a wide range of oxygen fugacities and that this variation is correlated with the variations of La/Yb ratios and isotopic characteristics of the martian basalts.

Lyul A. Yu. Lavrentjeva Z. A. Kolesov G. M.

*Partial Melting of Aubrite Parent Body: Evidence from the Trace Element Contents in Metal and Silicate of the Norton County Aubrite* [#1151]

The two trends of lithophile and siderophile element fractionations were established on the basis of the trace element contents in metal and silicate of the Norton County aubrite.

Mellin M. J. Liu Y. Schnare D. W. Taylor L. A.

*Revised Compositional Estimate of EET A79001 Lithology A Groundmass* [#2150]

We recalculated the groundmass composition of EET A79001 Lithology A by conducting a weighted-average for zoned minerals. Overgrowth rims of olivine and pyroxenes were added back to the groundmass.

Metzler K. Ott U. Welten K. C. Caffee M. W. Franke L.

*The L3-6 Regolith Breccia Northwest Africa 869: Petrology, Noble Gases, and Cosmogenic Radionuclides* [#1120]

Petrographic criteria are given to identify NWA 869 samples. Noble gases and cosmogenic radionuclides on bulk samples and separated lithologies were measured to obtain information on the irradiation history of the meteoroid and its breccia components.

Miyamoto M. Koizumi E. Mikouchi T.

*A Wide Range of the Cooling Rate of Type II Porphyritic Olivine Chondrules in Semarkona (LL3.0)* [#1587]

We applied the model on the basis of Fe-Mg diffusion during olivine crystal growth to calculating the cooling rate of olivines in several different PO chondrules in Semarkona and found that PO chondrules show a wide range of the cooling rate.

Slyuta E. N. Nikitin S. M. Korochantsev A. V. Lorents C. A.

*Physical and Mechanical Properties of Sayh al Uhaymir 001 and Ghubara Meteorites* [#1056]

Volumetric distribution of compressive strength in a sample of the SAUH 001 meteorite is not isotropic.

Ustinova G. K. Alexeev V. A. Gorin V. D.

*Orbits and Probable Parent Body of the Kilabo and Bensour LL6-Chondrites* [#1011]

By using the previously developed approach and the measured contents of  $^{26}\text{Al}$  in the Kilabo and Bensour LL6 chondrites, their orbits are estimated, which allows us to consider the main belt asteroid 3628 Boznemcova as the source of the LL6 chondrites.