

July 3, 2008

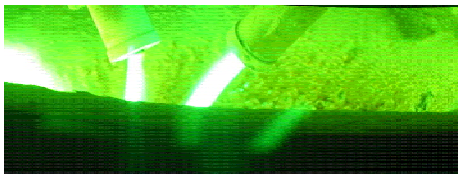


Introducing the production of multi-ton quantities of high fidelity lunar simulant components from Zybek Advanced Products, Inc., in Boulder, Colorado www.zybekap.com/plasma.

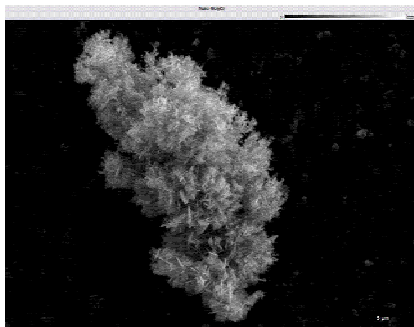
“ There are no hardware stores on the Moon!”

Lunar simulants are absolutely necessary for testing actual hardware bound for a lunar colony and also for proving the accuracy of modeling and simulations. High fidelity simulants are important because minor constituents will in some cases have major effects.

Zybek Advanced Products, Inc., has developed a proprietary system which can produce multi-ton quantities of lunar simulants from various sources.



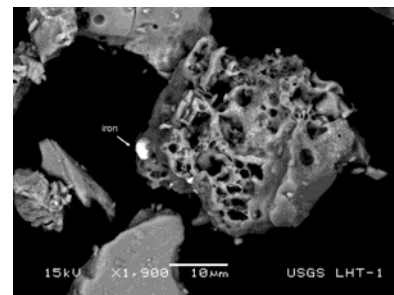
ZAP's proprietary plasma production process is used to generate glass, agglutinates, re-crystallized bricks, fiber and melt breccias synthetic plagioclase material (AN100 -if requested). Dust sized material and fiberized material for lunar building products have also been produced successfully.



Agglutinates can comprise as much as 40% of the lunar surface. The agglutinate structure can

cause unique mechanical challenges for engineers designing equipment for lunar applications. The agglutinate is used as a component to the USGS / NASA LHT series simulants. USGS/NASA LHT-series simulants are designed for equipment and processes that are planned for the lunar highlands deployment. ZAP's proprietary production facilities manufacture the USGS/NASA's LHT series simulant component. The LHT series is a **high fidelity** product that chemically and structurally approximates the actual lunar material closer than its predecessors.

During meteoroid impact, iron vapor is produced, condenses and re-deposits onto lunar surface. Particles from a few nanometers to more than one hundred nanometers are deposited. These particles are FeO particles.



ZAP successfully incorporated 50nanometer and smaller elemental Fe particles within the agglutinate. Work is being done to verify the particle size below this level. Motors will most clearly be magnets for Fe on the moon. Our proprietary plasma system will be tested to create custom formulated synthetic anorthite (synthetic plagioclase) material soon. This is an AN100 Na-free material. Oxygen extraction equipment requires such a chemically accurate simulant.

Not only has ZAP worked directly with the USGS to produce the next generation of NASA's lunar simulants (LHT series), but also with NORCAT to melt their glass for their OB1 material. Zybek Advanced Products is interested in using our proprietary system for additional material production.

Zybek Advanced Products is actively marketing all forms of its production capabilities, is interested in collaborative R&D efforts, and is looking forward to other custom formulations that the scientific community may want to create.

For information, email: Sheryl@zybekap.com