

Abstract Submitted  
for the APR05 Meeting of  
The American Physical Society

**Plasma Generated Spherules** C.J. RANSOM, WAL THORNHILL, Vemasat Research Institute — Z-pinch plasma simulations have been performed that indicate the production of spherules under certain experimental parameters. (A. L. Peratt, private communication) While performing experiments dealing with the impact of plasma discharges on various materials, we observed that spherules were created at the surface of some of the materials. For specific materials and conditions, spherules were always produced. Both individual spherules and joined spherules were created. The size and shapes were nearly identical to items found by the Mars rover, *Opportunity*, and called “blueberries.” *Sky & Telescope*, June 2004, p. 20, among other sources indicated the blueberries were gray spherules composed of hematite. The experiments produced hematite spherules identical in appearance to those found on Mars. These experiments suggest how the newly discovered blueberries were formed on Mars while providing an explanation that does not depend on the presence of water.

C.J. Ransom  
Vemasat Research Institute

Date submitted: 02 Nov 2004

Electronic form version 1.4