

# Proceedings of the Iowa Academy of Science

---

Volume 32 | Annual Issue

Article 66

---

1925

## An Unusual Oölite Near Hayfield, Frederick County, Virginia

A. S. Furcron  
*State University of Iowa*

*Let us know how access to this document benefits you*

Copyright ©1925 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Furcron, A. S. (1925) "An Unusual Oölite Near Hayfield, Frederick County, Virginia," *Proceedings of the Iowa Academy of Science*, 32(1), 360-360.

Available at: <https://scholarworks.uni.edu/pias/vol32/iss1/66>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

in temperature and rainfall which characterize places at different elevations and distances from the coast. The exclusively basic composition of the volcanic rocks, the great porosity of these rocks, the abundant rainfall, generally warm air and lack of freezing temperatures combine to produce through the agency of weathering and stream erosion a remarkable and distinctive series of physiographic forms.

STATE UNIVERSITY OF IOWA.

---

AN UNUSUAL OÖLITE NEAR HAYFIELD, FREDERICK  
COUNTY, VIRGINIA

A. S. FURCRON

(*ABSTRACT*)

A microscopic study of this peculiar sediment has been made from two small specimens sent to the author by Dr. A. W. Giles of the University of Virginia. The samples were collected from the base of the Romney formation of Devonian age. The rock is dark, compact and fine textured, consisting of angular grains of quartz and flattened oörites usually less than one millimeter in diameter.

In thin section the oörites show concentric banding and quartz nuclei. They are brownish-green in color and show a black revolving cross and aggregate polarization under crossed nicols. The oörites are very resistant to acids, but when boiled in *aqua regia* they become decolorized.

The shape of the oörites, the lack of residual carbonates, and the character of the inclusions in the quartz nuclei, point to a primary origin for the oörites.

STATE UNIVERSITY OF IOWA.

---

SEDIMENTARY PROCESSES ON VOLCANIC ISLANDS

CHESTER K. WENTWORTH

(*ABSTRACT*)

The fundamental geologic structures of Hawaii are wholly igneous in origin. With the building of the volcanic piles up to wave base sedimentary processes commence and these are enormously augmented when volcanic accumulation reaches above the level of the sea. Nearly all the known sedimentary processes are