

ing limestone it is altogether probable that the pleonaste is much more widely distributed than is known at present. Pleonaste occurs in rather pure crystalline masses and is also intergrown with calcite and other minerals. Usually the pleonaste occurs in finely-granular aggregates with occasional octahedra. Some specimens reveal well-formed octahedra, some of which may be four, or more, centimeters in length.

A sample was prepared for analysis by carefully crushing some of the better material and screening out the fines. A treatment with dilute hydrochloric acid removed the calcite, and other impurities were then removed by careful sorting under a binocular microscope. Further separation was accomplished through the use of a heavy liquid. The final sample was quite pure. The specific gravity (3.530) was determined by the pycnometer method and the index of refraction ( $1.725 \pm .002$ ) by comparison with index liquids.

## ANALYSIS OF PLEONASTE

	(1) <sup>a</sup>	(2)
	%	%
SiO <sub>2</sub>	2.05	
Al <sub>2</sub> O <sub>3</sub>	66.86	67.93
Fe <sub>2</sub> O <sub>3</sub>	5.72	5.81
Cr <sub>2</sub> O <sub>3</sub>	none	
FeO	2.01	2.04
CaO	none	
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	100.47	100.00

<sup>a</sup> Average of two concordant analyses.

1. Analysis of pleonaste by Wilbur G. Hedquist.
2. Analysis recalculated to 100%, considering the silica as an impurity.

I wish to acknowledge my appreciation of the work of Mr. Wilbur G. Hedquist who prepared the sample and ran the analyses and also aided in the determination of the specific gravity.

## FULL FIELD VIEW OF INTERFERENCE FIGURES

F. H. GOLDMAN

Ordinarily it is not always possible to obtain clear interference figures which will occupy the full field when employing a polarizing microscope such as the Spencer #37. To do so would necessitate either raising the condenser above the stage (this is the combined condenser N. A. 1.40 and N. A. 1.0) or moving the lamp directly under the polarizer. It was found that the equivalent result was obtained with not too great loss of light by inserting a ground glass disc, or plate, directly below the polarizer. In the Spencer #37 there is provided a slot which will accommodate such a disc very nicely.

Such a ground glass plate will also eliminate the central bright spot of light obtained when using a very low-power objective such as a 40 mm. 2.8X without the necessity of removing the condenser.

## MATERIAL DESIRED

We are undertaking, with G.S.A. help, a re-study of plagioclases in order to obtain more complete data. We are finding difficulty in obtaining an adequate variety of material even after exhausting our own field supplies collected for the purpose and all promising samples from various catalogues. We have received generous help and offers of help after the announcement of the G.S.A. grants.

It occurs to us that the interest in more reliable plagioclase data is wide enough that others may be willing to send us samples on hand or be good enough to collect some for the purpose in the coming field season. We have funds to pay only the freight charges at this end.

Our needs are: rock carrying plagioclase of *any* composition but especially between 0–20% anorthite and between 80–100% anorthite. We are concentrating our efforts on routine rocks though pegmatites are acceptable. We are not using altered plagioclase or any with more than a minimum of inclusions. We should have some information about the nature of the occurrence—preferably a statement which we may quote. The size of the sample depends on the per cent of suitable plagioclase present, and ordinarily ranges from 5–10 pounds for pegmatites to 15–20 pounds for a volcanic rock in which the phenocrysts are sought. Any fresh plagioclase-bearing rock in which the plagioclase grain size is 2 mm. or more is suitable. We shall genuinely appreciate specimen contributions. They may be addressed to one of us, freight collect, at Science Hall, Madison, Wisconsin. Freight offices are instructed not to accept “valueless” articles collect. We will send by return mail a guarantee of payment of freight charges at this end, which guarantee we are assured will be accepted in lieu of pre-payment. Please do not make shipments by express.

R. C. Emmons

Robert M. Gates

Edmund Clabaugh

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PROFESSOR ARTHUR F. BUDDINGTON, chairman of the Geology Department of Princeton University and currently President of the Mineralogical Society of America, was the recipient of the honorary degree of Doctor of Science at the 174th annual commencement of Brown University, May 18, 1942.