tral department of minerals and metals" under government auspices to collect and impart information bearing on the sources of minerals and the production of metals, as being imperatively necessary in the public interest. This is advanced in a letter sent to the chairman of the "advisory council of scientific and industrial research" by the presidents of the "institution of mining engineers," "institute of mining and metallurgy" and "institute of metals." The letter points out that there is at present no connecting link between various organizations, that there is considerable overlapping and much waste and confusion. If a properly organized and efficiently conducted department of minerals and metals had been in existence much valuable time, many lives and vast sums of money would have been saved to the nation in the conduct of the present war, and much of the cost and inconvenience to British industries depending largely for their raw material on mineral products would have been saved. The following are some of the duties suggested by the new department: Arrangement for expediting the completion of mineral surveys of the United Kingdom and crown colonies and other British possessions. Systematic collection and coordination of information bearing on the occurrence, uses and economical value of minerals and their products; special attention being devoted to securing industrial applications for newly discovered minerals or metallurgical products and to finding mineral materials required for new metallurgical products or inventions.

According to *Nature* the *Gazette de Hollande* emphasizes the use made in Germany of geological advice in trench warfare, and Professor Salomon, of Heidelberg, is said to have urged the formation of a special organization of geologists in connection with the army. It is said that excellent use has been made by the British military authorities of the Geological Survey staff, members of which have been of technical assistance in fields as wide apart as the deeply dissected strata of Gallipoli and the undulating Cretaceous expanses of the Paris-Brussels basin. The geologist has been found of service in military mining as well as in questions of water supply, and the memoir recently issued by the Geological Survey on "Sources of Temporary Water Supply in the South of England and Neighboring Parts of the Continent" was drawn up specially to meet the needs of camps.

UNIVERSITY AND EDUCATIONAL NEWS

Muskingum College, New Concord, Ohio, has received an anonymous gift of $150,000 for endowment and buildings, on condition that the college pay an equal amount.

With the desire to encourage the study of Russian, in view of the commercial intercourse between Russia and Hull, Capt. H. Samman has expressed to the Hull Chamber of Commerce his willingness to start an endowment fund for the purpose with a sum of £10,000.

O. R. Sweeney, Ph.D. (Penna.), for the past six years instructor in qualitative analysis at the University of Pennsylvania has been appointed instructor in industrial chemistry at the Ohio State University where he formerly graduated from the chemical engineering course.

C. H. Snyder, the consulting structural engineer, has been appointed lecturer in civil engineering in the University of California.

DISCUSSION AND CORRESPONDENCE

PHOSPHATES

Some experimental results in a comparison of different phosphates at the Tennessee Agricultural Experiment Station have recently been referred to by Dr. C. G. Hopkins[1] in such a way as to be easily misunderstood. The writer wishes to say that neither now nor in the past have these results allowed us to advocate, as intimated by Dr. Hopkins, the use of unacidulated bone meal. From the standpoint of economy the data obtained here have been

[1] Science, p. 652, November 3, 1916.

decidedly in favor of acid phosphate as compared with either bone meal or phosphate rock. In Dr. Hopkins's article omission was made of the fact that in the table referred to —Bulletin 90, p. 89, Tennessee Agricultural Experiment Station—every $1.00 invested in acid phosphate gave on the average a calculated profit of $4.28 where the cowpea crops were turned under, and of $5.42 where they were removed for hay. Phosphate rock, on the other hand, gave by a similar calculation a profit of only $2.58 where the pea crops were turned under and the same amount where they were removed for hay. These results are the average of three series of experiments, one conducted for five years at the Knoxville Station, another conducted for four years at the Ford farm in Knox County and the third conducted for three years at the Weaver farm in Warren County.

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SOIL SOLUTION

IN an article on "Acidity and Adsorption in Soils as Measured by the Hydrogen Electrode,"[1] Sharp and Hoagland truly say, as far as the literature is concerned, "Our present methods do not enable us to study the soil solution itself" (p. 127), but the writer hopes that the Van Suchetelen and Itano method as developed in this laboratory will forward this study. Description of this method will be published soon by this station. The soil solution thus obtained is considered as closely representing the one in the soil. The writer is using this soil solution for bacteriological studies of soils and sees no reason why it should not be used in the study of other soil conditions. This method by which sufficient solution can be obtained for the study of chemical composition, physical properties, etc., should be an aid in the study of soil fertility.

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[1] *Journal of Agricultural Research*, Vol. VII., No. 3, 1916, pp. 123–143.

OLIGAEROBE, HISTANAEROBE

THERE has lately come into use the word microaerophilic[1] to designate the oxygen requirements of a class of microorganisms (*Meningococcus, Gonococcus, Bacillus abortus*) that require free oxygen for their growth, but which succeed best only when the oxygen is in less amount than it is in the atmosphere.

From the etymologic standpoint, the word appears fairly satisfactory, although μικρός is more applicable to smallness of size than quantity. It seems unfortunate that a word based on the form of the well-established aerobe and anaerobe was not coined. In its place I would suggest the word oligaerobe, from ὀλίγος, meaning few, with special reference to number or quantity.

For organisms like *Treponema pallidum* that require a small piece of sterile tissue added to the medium in addition to anaerobic conditions, the word histanaerobe would appear to be a suitable designation.

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FILEABLE ANNOUNCEMENTS OF NEW BOOKS

TO THE EDITOR OF SCIENCE: One who receives the numerous advertising circulars of book publishers is often at a loss to decide how much of this material to keep and how to file it, and the result is that when some particular information is wanted it is not always easy to get at it quickly. Having found the card system such a time and labor saver for such data as needs filing in a chemical laboratory, I have long wished that I might have a catalogue of all new books bearing on the subjects in which I am interested. It has seemed to me that the publishers in general would gain much if, instead of sending out the usual leaflets and circulars which vary in size and make-up as widely as the territory over which they are scattered, they would send out 3×5 cards giving the complete title, name of author, size of book, number of pages and of illustrations, table of contents, and a short paragraph indicating the scope of the work. If all publishers

[1] Dorland, The American Illustrated Medical Dictionary, p. 580, 1916. Cohen and Markle, *Jour. Amer. Med. Ass.*, Vol. 67, p. 1302, October 28, 1916.