

"RECOGNIZED SCHOOLS OF PHARMACY" AND THE PREREQUISITE
FOR EXAMINATION AND REGISTRATION.

During the few months of office of the present Chairman of the Executive Committee of the American Conference of Pharmaceutical Faculties a number of facts have come to his attention which are of the gravest concern for the future standing and influence of the Conference. Early in the year a letter was received from the Secretary of the State Board of Pharmacy of one of our most progressive states in which he complains of the standing of one of the Conference Schools in a nearby state. According to the statement of the Secretary, the Board of Pharmacy had refused to permit the graduates of this institution to take their examination for licensure. This refusal was based upon the assumption that this school was not maintaining proper standards. In the Secretary's letter to the Chairman appears this statement:

"Our Board of Pharmacy has a ruling requiring graduation from a *recognized* school of Pharmacy as a prerequisite to examination and registration in this state. Assuming that the following definition would suffice to shut out all inferior schools we defined 'recognized school' as one which was a member of, or eligible to membership in the American Conference of Pharmaceutical Faculties. Within the last month one of its (the school's in question) graduates applied for reciprocal registration and another for examination. I at once turned them down. Immediately the dean of the school 'went to the mat' with me, informing me that his school was a member of the American Conference of Pharmaceutical Faculties. It was then up to me to handle the matter as gracefully as I could as I saw by our own ruling I was beaten and his graduates must be admitted." Then follows this significant sentence: "Of course we were wrong in assuming that membership in the Conference was evidence of the standing we desired."

The Chairman of the Executive Committee is not as yet in a position to say whether the school in question is maintaining Conference standards. This in itself is of little concern. The serious aspect of the whole matter is the charge implied in the Secretary's statement. This charge amounts practically to this—that membership in the Conference means nothing.

It is a matter of common knowledge that for a number of years the Conference has used every dignified means possible to induce the Carnegie Foundation to make a systematic investigation and classification of the schools of Pharmacy. This has failed and the time has come when an investigation and classification is imperative. The Chairman believes that a plan must be devised for making such a study by the Conference itself. He grants that it would be most desirable to have this investigation conducted by an outside agency. This, however, does not seem probable of realization. The medical schools holding membership in the Association of American Medical Colleges have not hesitated to make their own investigation and classification. Their work was productive of much good.

The Chairman believes that the Conference should at once begin to plan to set its own house in order. In the near future he will himself suggest a plan of investigation and classification for the purpose of provoking constructive criticism. In the meantime he hopes for suggestions upon any phase of the subject

either in the columns of the JOURNAL or to him personally. He is earnestly desirous of knowing what is in the minds of the Conference membership. A definite plan must be presented for action at the next meeting of the Conference at New Orleans. This is necessary in order that Conference membership may mean something and in order that the Conference may exert a greater influence in matters educational and legislative.

(Signed) R. A. LYMAN,

Chairman Executive Committee,

American Conference of Pharmaceutical Faculties.

THE APPLICATION OF OPTICAL METHODS TO THE EXAMINATION OF INSECTICIDES AND FUNGICIDES.*

BY GEO. L. KEENAN.

In the course of the microscopical examination of products for the Insecticide and Fungicide Board, the writer has found it advantageous to make use of optical (and microchemical) tests for the identification of the ingredients contained in the various samples submitted. The application of optical-crystallographic measurements has heretofore been largely employed for the identification of minerals, especially as they occur in rocks or as they are produced synthetically. Recently Dr. Edgar T. Wherry, Crystallographer of the Bureau of Chemistry, has extensively used optical-crystallographic methods in the identification of alkaloids and other organic compounds. Such determinations have been found to be of considerable assistance to the chemist in the identification of these products. The success attending the use of such data led the writer to consider their application to the identification of ingredients commonly found in insecticides and fungicides.

A large number of the insecticides and fungicides submitted for microscopical examination are simple mixtures, consisting of some powdered vegetable materials, with or without varying proportions of inorganic and organic substances, or consisting wholly of inorganic materials. The product is often of such a nature that it can be readily separated into portions by sifting through a 40-mesh or 60-mesh sieve. The very fine powder which passes through the sieve is subjected to close scrutiny under the microscope. The coarser portions remaining upon the sieve are spread upon a sheet of paper and examined with the aid of a hand lens (magnifying about 10 diameters). Various separations can be made with the aid of forceps and particles removed which can be examined as to their optical properties.

For the purpose of studying the optical properties of any crystalline fragments, it is essential that the microanalyst be provided with a microscope equipped with nicol prisms. An ocular with cross-hairs, a 4-millimeter, an 8-millimeter, and a 16-millimeter objective are usually all the necessary lenses that are required. A slit should be provided in the microscope tube above the objective and below the upper nicol prism for the insertion of a selenite plate, commonly designated as "red, 1st order." A rotating stage, an Abbé condenser, and a substage iris

* Contribution from Insecticide and Fungicide Board and Bureau of Chemistry, Department of Agriculture, Washington, D. C.