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## MASTERS' COURSE

(Continued from page 1)

veloped by Mr. Arthur D. Little '85, a member of the Corporation of the Institute, ex-president of the American Chemical Society, and a member of the original board of The Tech. Since the beginning of the European War the importance of chemically trained men has been more and more recognized by all the big companies engaged in the manufacture of war commodities. Mr. Little realized this and also that in order to maintain the important place in the commerce of the world that this country is rapidly assuming while the war continues, a still stronger call for the "potential" chemical engineer will come with the end of the war.

Proper facilities for the instruction of such an engineer have never been possible, not on account of the lack of the necessary apparatus, but rather on account of the great expense with running such an apparatus on a commercial basis. The difficulties that confront the practicing engineer when carrying on a process on a manufacturing scale are not the ones which give trouble to the man working on the same process in a laboratory.

The new School of Practice is the first important step toward this goal and gives the student a decided advantage over one working in a laboratory equipped only for instruction.

The committee in charge of this course has arranged for five different stations, each one including a laboratory, drafting and conference rooms, with the necessary drawings, models and library. Each station is to be in charge of a member of the Institute faculty.

Station "A" is located at Bangor, Maine, and is connected with the Eastern Manufacturing Company. The operations to be studied there are electrolysis, absorption of gas of low partial pressure, agitation of both heavy and light liquids, and the sedimentation of sludge. The manufacture of bleached spruce pulp by the sulfite process and of poplar pulp by the soda process, together with the boiling, beating and bleaching of rags for paper stock are also to be taken up in detail by the Bangor section.

Station "B" is with the New England Coke Company of Everett, Mass., where every opportunity is given the men to study the reaction of hydrogen and the hydro-carbons and all the apparatus necessary for the recovery of benzol, toluol, tar and ammonia, etc.

Station "C" is in connection with the Carborundum Company of Niagara Falls, where high temperature electro-chemistry can be studied in all its phases.

Station "D" is located at Stamford, Connecticut, with the American Synthetic Color Company. Here the chemical engineering of organic chemistry is to be studied; fractional distillation, alkali fusion, and nitration being a few of the processes dealt with.

Station "E" is with the Atlas Portland Cement Company, Allentown, Pennsylvania. At the kilns there a thorough study of the chemistry of combustion and furnace control can be taken up to great advantage, while crushing and grinding machines of many types offer an extended field for study.

Although it is intended that the students shall get as much of the industrial part of the work as possible, by having them work in the regular shift and become familiar with the routine of the industry, they will not be in the employment of the factory but under the direction of the Institute instructor. A certain part of the work will be accomplished in the conferences and drawing exercises. In return for the use of the factory the Institute has planned to establish and maintain a research organization for the purpose of solving the respective problems of the companies involved.

On Friday and Saturday of last week the Directors of the five stations held a conference with Professor W. H. Walker, in charge of the new school, and a definite outline for the year's work was discussed. Professor Walker has written in his article upon the School of Practice for The Journal of Industrial and Engineering Chemistry, "The earning power of industrial research is now too firmly established to require any argument to demonstrate the possibilities for co-operative service which the plan possesses. It is earnestly hoped that in it may be found an effective method by which science may be more closely linked to industry, for the lasting benefit of both."

As an indication of the interest taken in the matter, the following quotation from last week's issue of the Electrical Review is printed:

Bringing Research and Business in Contact

"The value of industrial research is gradually coming into fuller recognition in this country. Manufacturers who never before considered this element of development work have established research laboratories and a number of influences have come into action to direct general attention to the benefits to be derived from this course of action. It

is also recognized to some extent that even where manufacturers and other business men do not establish facilities of this kind for their own immediate use, advantage can nevertheless be gained by an intimate knowledge of the general advances which are being made by research laboratories of a public character, such as those connected with educational institutions and with some of our government bureaus. The means of keeping the business and industrial world in touch with the activities of the scientists are not, however, of the best, and it is the exception rather than the rule when the one class makes a visit to the haunts of the other or invites a representative of the other to come to a meeting of its own members and give a discussion of the problems which may affect both.

"It is consequently of interest to note a new departure which has been instituted in England, where the war has brought about many changes and has opened the eyes of the people of the nation to the necessity of utilizing every avenue of progress toward industrial efficiency. About a month ago, upon the invitation of the universities at Leeds and at Sheffield, a party of journalists visited them and inspected the work which was going on. The party was made up largely of representatives of the scientific, technical and trade press, the object being to keep such journalists informed of the work going on at the universities so that they in turn might bring this information before the manufacturers of the country. A similar visit had previously been made to the Imperial College of Science in London and it is proposed to extend the practice to reach other educational centers. It is recognized that the technical journals are in a position to provide wide dissemination for such information of what the colleges and universities may be doing as is of interest to manufacturers and other business classes, and that the proper utilization of such channels may bring about a wider appreciation of the benefits of applied science to industry and an appreciation of the benefits of applied science to industry and an earlier application of useful knowledge than would come about were there no such direct channel.

"It would seem that the same idea might perhaps be applied with advantage in this country and lead to useful results. There is at present a notable lack of appreciation of the importance of scientific research to industry and our universities are very generally looked upon as purely educational institutions in the narrower sense of the term. Men of science in this country do not have the high public regard which is accorded to their contemporaries in European nations, and the appreciation of the industrial and commercial world might also have the effect of stimulating more productive work in the field of research."

## DORMITORY COMMITTEE MEETING

Student Regulation for Dormitory Discussed

On Wednesday evening the Dormitory Committee held a meeting at which various rules and regulations for the men who are in the Dormitories were talked over. No definite action could be taken as any rule of the Dormitory Committee must be approved of by the Institute Committee. A committee of four will be chosen by the chairmen of the different sections, which committee will take charge of a house warming to be held at an early date. Chairman Brooks also instructed the Senior House Committee to draw up a constitution as soon as possible.

## WANDERING GREEKS

All fraternity men now at Technology who are not affiliated with a chapter at the Institute, are requested to leave their names and the name of their fraternity and college in the Technique Office in the basement of Building 1. This information should be addressed to H. M. Blank '18.

## TECHNIQUE ELECTION

Technique 1918 announces the election of K. H. Kaiser '18 as the assistant Art Editor of Technique. Kaiser was successful in the competition which was held for the position.

## COOPERATIVE PAYS DIVIDENDS

The Harvard Cooperative Society began paying dividends for the fiscal year 1915-1916 to its Harvard members last Wednesday. This has been the largest business in the Society's history, and the total amount to be paid is \$16,614, which is an increase of \$1,538 over the amount paid a year ago. Two rates of dividends have been declared, one of nine per cent on cash purchases, and one of seven per cent on credit purchases.

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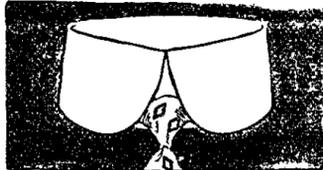
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