Paul Manning ’17 Honored in N. Y.

Paul D. V. Manning, M.S. ’17, was recently elected to a fellowship in the New York Academy of Sciences. Election to a fellowship in the academy is conferred upon a limited number of active members who, in the estimation of the academy council, have done outstanding work towards the advancement of science.

Dr. Manning, now vice-president in charge of research for International Minerals & Chemical Corporation, was invited to join this organization in 1941 to organize and administer a new research program which has subsequently filled a vital role in the expansion and diversification of the company’s efforts in the production and utilization of phosphate, potash, amino acid products, and in the field of agronomy.

Inaugurating a new section in E&S, short biographies of two faculty members are here presented. In this issue the Department of Electrical Engineering is represented by its senior member and by the professor most recently arrived at C.I.T.

Royal W. Sorensen

One of the most recent of many honors accorded Professor Royal W. Sorensen, head of the Department of Electrical Engineering, was his appointment a year ago as one of six prominent American scientists who visited Japan last summer. This group, the Scientific Advisory Committee, selected by the National Academy of Sciences, was sent to survey the reorganization of scientific and industrial development in Japan and to advise General MacArthur’s staff concerning the proper evaluation of plans for the continued advancement of research in that country.

Consultation and research have long been specialties of Dr. Sorensen. After his graduation from the University of Colorado in 1905, he entered the General Electric Company, where he worked with design research and the solution of special problems until he joined the faculty of Throop Polytechnic Institute in 1910 to undertake the development of a Department of Electrical Engineering. Since that time, Sorensen has designed the high voltage laboratory which was built at the Institute in 1921 and taken a very prominent part in the design of many of the transmission lines so necessary for Southern California’s industrial development.

Dr. Sorensen includes “thirty-seven years learning from students and faculty of the California Institute of Technology” as a very significant part of his technical education. In recognition of these many years of post-graduate learning and of his services to the profession, the University of Colorado conferred the honorary D.Sc. degree on him in 1938.

GILBERT D. McCANN

Appointed full professor of electrical engineering July 1, 1947, Gilbert D. McCann joined the Institute’s faculty in 1946 as associate professor.

Dr. McCann first came to CalTech in the early 1930s, receiving his B.S. degree in ’34, his M.S. in ’35, and his Ph.D. in ’39. From 1935 to 1938, he was also a teaching fellow in electrical engineering.

In 1938, Dr. McCann joined the Westinghouse Corporation in Pittsburgh as central station engineer. In 1941, he became transmission engineer in charge of lightning research and in 1946 was made consulting transmission engineer in charge of their Analysis Laboratory and lightning research, in which position he remained until joining the Electrical Engineering Department at CalTech in 1946.

At the Institute, McCann has continued the development of an electric analog computer and is engaged in a high voltage research program on the dielectric recovery characteristics of power system insulation. The high voltage research program is being supported cooperatively by the Southern California Edison Company, the Kelman Electric Company, and the Department of Water and Power, City of Los Angeles. The analog computer, which was described in a talk before the alumni in 1947 (“The Development of an Electrical Calculator”), is now being used on engineering problems for the Institute and numerous engineering organizations in Southern California.

A member of AIEE, ASME, Sigma Xi, and Tau Beta Pi, Dr. McCann was awarded the AIEE National Best Paper Prizes in 1941 and 1946, and received honorable mention for the Eta Kappa Nu award for “the outstanding young electrical engineer in the United States” in 1942.
With the Board

IT WAS WITH great pleasure that the Board of Directors recently voted Professor Sorensen an honorary member of the Association. This action, although a sincere attempt to express heartfelt gratitude to a great and good friend, seems inadequate as a means of expressing the appreciation and good wishes felt by all alumni. We know however, that Professor Sorensen will understand that this action bespeaks friendship and respect beyond the ability of any medium to convey fully.

Fred Schell told plans that Fred Peterson is making for an Alumni field trip in May. The place to be visited had not been decided by deadline time, but perhaps by now you know. Our bet, based on the discussion, is that it will be a good trip.

Fred Schell also told plans for the annual banquet and of his attempt to hold this at the Athenaeum. In the past there has been a horn of a dilemma; either he holds it at the Athenaeum and has to reject some early applicants with tickets or by now you know. Our bet, based on the discussion, is that it will be a good trip.

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By the time this appears the Annual Seminar will have been held and an experiment which now seems very attractive will have been tried. As a result we shall have some information on the desirability of providing a program for alumni wives. When Carl Tutschule started to prepare a wives’ program he wasn’t fully convinced that it would be popular. As he got into his planning, however, he found that the wives who were asked were very enthusiastic in supporting and cooperating in the arrangement of such a program.

The Board of Directors and Seminar Committee would appreciate receiving your opinion of this experiment as an aid in guiding future Seminar Committees. A card to the Editor will do it.

H. K. F.

Professional Engineering Registration in California

(Continued from Page 2)

under the direction of a Civil engineer legally qualified to practice. All applicants must be of good character and Civil engineers must be at least 25 years old.

Since engineers other than Civil engineers may practice engineering in California without registration one may well ask, “Should engineers register?” The number of applications received by the Board since September 19, 1947 as listed below, in round numbers, may serve to answer the question for some.

Number of applications for Professional engineering registration September 1947 to March 31, 1948:

- Chemical: 300
- Electrical: 750
- Mechanical: 1300
- Petroleum: 300

About 1,000 Civil engineers applied for registration during 1947 and the applications filed to date indicate the same number for 1948.

Civil engineers have been registering in California since the passing of the original Act in 1939. That act has been amended several times. The first amendment provided special registration for Civil engineers acting as structural engineers, and the last one, September 19, 1947, provided for registration of Chemical, Electrical, Mechanical, and Petroleum engineers.

Who is qualified for Registration? Obviously the first requirement is excellence of character.

The second is a proper knowledge of the fundamental sciences, and the mathematics that are the tools of the engineer.

The third is a conception of the principles of engineering in terms of the physical use and dimension parameter of the material and methods involved.

In evaluating these characteristics, it is obvious the many persons not engineers use engineering methods to a limited degree and are thereby often specialty technicians rather than engineers. So long as these men do not call themselves engineers they have no reason for registration, and by the same token should not per se consider a knowledge of codes as qualification for professional engineering registration.

Those who have operated under the registration act viz the Civil engineers have found the act good and it is the opinion of the writer that the engineers now registering will, as time passes, learn that much has been gained in fixing the standards of the engineering profession.

The writer is a member of the present Board of Registration, but the views expressed are solely his own individual opinions and should not be construed in any way as official Board regulations.

PERSONALS

1920

WILLIAM C. RENSHAVER, formerly with the San Francisco Water Department’s engineering organization, has recently been appointed water engineer for Inglewood, California.

1927

ROBERT B. VAILE, JR., Ph.D. ’36, is now employed in a supervisory capacity by the Armour Research Foundation, Chicago. From June 1941 to October 1945, Bob was on the staff of the Naval Ordnance Laboratory as chief of the Applications Subdivision of the Research Division, engaged in research and development of naval ordinance.

1930

HERBERT H. DEARDORFF, with the State Division of Highways, has recently been transferred from San Francisco to the Sacramento office of the Division.

WALTER C. MICHELS, Ph.D., has returned to Bryn Mawr College, where he is professor of physics. In 1941 and 1942, Michels was with the Naval Ordnance Laboratory. After September 1942 he entered the office of the Chief of Naval Operations, first as a civilian and later as a naval officer, serving a short term with a Naval Technical Mission to Japan.

1931

LUCAS A. ALDEN, Ph.D. ’35, is assistant treasurer in International Trade, Shipping & Banking at W. R. Grace & Company, New York.

1932

LYNN H. RUMBAUGH, Ph.D., is chief of the Research Department of the Naval Ordnance Laboratory in Washington, D. C. From October 1940 to December 1941 Rumbaugh was engaged in degaussing work at the NOL and then spent the major part of 1942 in the South