

but those wishing to participate in the post-session excursions are urged to apply not later than May 5.

AWARDS OF THE ALFRED P. SLOAN FOUNDATION

THE Alfred P. Sloan Foundation has made a grant of \$25,000 to the Automotive Safety Foundation. With this gift fellowships will be established to give seven state highway engineers and twelve state policemen training at Yale University or Northwestern University for the academic year 1939-40. The awards provide for tuition, living and field expenses.

Twelve Sloan fellows at the Northwestern University Traffic Institute and seven at the Yale Bureau for Street Traffic Research now are completing their courses of study and this year will return to the official positions from which they received leaves of absence. The official announcement reads:

The fellowship awards have been made available for the second year in the belief that the traffic problem will yield to the broad application of proved techniques and that progress in traffic control will be measurably accelerated when the services of adequate numbers of trained men are made available. Scientific methods and professionally trained personnel have contributed so much to the advancement of the economic value of motor transportation that commensurate relief for the traffic problem through these factors may be confidently anticipated.

The foundation had previously made a grant of \$32,500 to the Massachusetts Institute of Technology for the award of fellowships to ten young industrial executives to take up special social and economic training there next June. The awards range from \$1,750 for single men to \$2,750 for those who are married.

The fellows, who will have a year's leave of absence from their present positions, have been selected on a competitive basis. They are between the ages of 25 and 35 and have had at least five years' industrial experience, part of it in an executive capacity. They are required to be graduates with high academic records in science or engineering of an accredited college or university. Emphasis is placed on managerial ability, seasoned intellectual capacity and a sensitivity to the social and civic implications of industry.

ELECTION OF FELLOWS OF THE ROYAL SOCIETY, LONDON

At a meeting of the Royal Society held at Burlington House, London, on March 16, the following fellows were elected:

ADAIR, G. S., assistant director of research in physiology, Cambridge, distinguished for his researches on the physical chemistry of proteins, particularly in connection with haemoglobin.

ANDREWES, C. H., pathologist, National Institute for

Medical Research, distinguished for his work on filtrable viruses and the bacteriophage, particularly in relation to the neutralization of viruses by antisera, and his studies on filtrable tumors.

BORN, M., Tait professor of natural philosophy, University of Edinburgh, distinguished for his work in many branches of mathematical physics and particularly for his contributions to quantum theory and its applications to physics and chemical physics.

BRADLEY, A. J., assistant director of research in crystallography, Cavendish Laboratory, Cambridge, distinguished for his methods of applying x-ray crystallography to elucidate the structure of metals and particularly the gamma phase and order and disorder in alloys.

BRUNT, D., professor of meteorology, Imperial College, London, distinguished for his contributions to analytical and dynamical meteorology, and particularly to the theory of the transfer of heat in the atmosphere.

CREW, F. A. E., Buchanan chair of animal genetics, University of Edinburgh, distinguished for his work on sex reversal in frogs and birds and on the genetics of many animals, especially *Drosophila* and budgerigars.

EDWARDS, F. W., department of entomology, British Museum, distinguished for his extensive researches on the order Diptera and for his studies on larval characters in relation to classification.

JONES, B. M., Mond professor of aeronautical engineering, Cambridge, distinguished for his researches in aeronautical science and for the elucidation of problems of design, such as the control at slow speeds and the determination of drag on full-scale structures.

KAYE, G. W. C., superintendent, department of physics, National Physical Laboratory, distinguished for his pioneer work in x-ray measurements and for his studies on acoustics and physical constants; has rendered valuable service to the Radium Protection Committee and the National Radium Commission.

LIDDELL, E. G. T., fellow of Trinity College, Oxford, distinguished for his researches upon the physiology of muscle movement and posture in mammals, and upon their control during the normal and abnormal functioning of central nervous mechanisms.

MASKELL, E. J., lecturer in plant physiology, Cambridge, distinguished for his work in the realm of plant physiology, especially in relation to problems of translocation.

MASSON, I., vice-chancellor of the University of Sheffield, formerly professor of chemistry, University of Durham, distinguished for his researches in physical chemistry, particularly on the physical interaction of mixed gases and on new aspects of the chemistry of iodine.

MEES, C. E. K., vice-president of the Eastman Kodak Company, Rochester, N. Y., distinguished for his influence on the technology of photography, thereby assisting advance in many branches of science.

NEWMAN, M. H. A., lecturer in mathematics, Cambridge, distinguished for his contributions to pure mathematics, particularly in the field of topology and group theory.

READ, H. H., professor of geology, Imperial College, London, distinguished for original work, especially in

connection with the tectonic and petrological problems of the igneous and metamorphic rocks of northern Scotland.

STAPLEDON, SIR R. G., professor of agricultural botany and director of the Welsh Plant Breeding Station, Aberystwyth, distinguished as the founder of the Welsh Plant Breeding Station where, with a team of workers, he has undertaken studies of far-reaching importance on the improvement of pastures.

TURNBULL, H. M., professor of morbid anatomy and director of the Bernhard Baron Institute of Pathology, London Hospital, distinguished for his work on morbid histology, particularly in relation to vascular disease, encephalitis, toxic hepatitis, diseases of bone, and normal and abnormal haemopoiesis.

TURNER, E. E., head of the department of organic chemistry, Bedford College, London, distinguished for his contributions to the stereochemistry of organic compounds, especially in connection with asymmetry in derivatives of diphenyl and with dissymmetry in the phenoxarsines.

WIGGLESWORTH, V. B., reader in medical entomology, London School of Hygiene and Tropical Medicine, distinguished for his researches on insect physiology, especially in relation to digestion, tracheal respiration, excretion and possible endocrine secretion.

WILLIAMS, E. J., professor of physics, University of Wales, Aberystwyth, distinguished for his researches on the passage of electric particles through matter, and on individual collision processes, which have provided evidence for the existence of the heavy electron.

THE ESTABLISHMENT OF AN INSTITUTE OF TECHNOLOGY AT NORTH-WESTERN UNIVERSITY

THE trustees of Northwestern University have approved the establishment of an Institute of Technology which is to be conducted on the cooperative basis under which students will spend alternate periods, in school and in industries. This plan was originated by Professor Herman Schneider,¹ of the University of Cincinnati, and has now been adopted in a number of schools.

The institute has been made possible by the offer of the Walter P. Murphy Foundation, an Illinois corporation founded by Walter Patten Murphy, a Chicago manufacturer of railway equipment, to build and equip the unit, the total cost of which will be approximately \$6,500,000. It will provide for about eight hundred students in the departments of civil, mechanical, electrical and chemical engineering.

Work on the physical plant will commence immediately. It will house the institute as well as the present departments of physics and chemistry of the university. The new unit will be built at Evanston on the land immediately to the south of the present men's quadrangles. It will have a frontage of approximately five hundred feet along Sheridan Road.

¹ Dr. Schneider died on March 28.

The school will adopt the cooperative plan of engineering education now in operation at several leading engineering schools. It will be conducted in conjunction with the other schools and departments of the university, and will share their present social, academic and research facilities.

It will embrace a research laboratory and, at the outset, four main divisions: civil, mechanical, electrical and chemical. Provision has been made, however, for adding more divisions, particularly those of applied arts, economics, metallurgy and aeronautics. Other departments and bureaus of research will be set up from time to time as deemed advisable to meet educational and engineering needs.

A careful check-system of selecting freshmen will be adopted at the outset, to provide a student body of exceptional intelligence and capabilities. Although entrance requirements will be high, other factors such as aptitude for work, character, resourcefulness, personality, will also bulk large in the selective process.

The courses will be designed so that each student will be provided with the necessary elements of a true liberal education. Training in the arts and social sciences, as well as in mathematics and the basic physical sciences, will be rigorously required.

The students' advisers will have ample time for frequent interviews with each student, to study his development and to help him to solve his problems. Each student will have careful supervision while he is working in industry. Care will be taken not to place too many students in a single firm, in order that they may receive more adequate individual supervision.

Students will be afforded ample opportunities to engage in social, athletic and intellectual activities outside the classroom. They will live in dormitories occupied by students from other schools during the period of work in industry as well as during that spent on the campus.

The progress and expansion of the new school will be subject to close scrutiny, and changes in curriculum and organization will be made slowly as time and differing conditions require.

Dr. Walter Dill Scott, president of the university, has made the following statement:

Northwestern University and its trustees are exceedingly grateful for this munificent gift and the trust that has been placed with this institution.

The foundation's decision to establish this institute of technology at Northwestern is motivated by a desire to make the greatest possible contribution to the social, industrial and educational advancement of this nation. They have made this decision after a long, exhaustive survey by a corps of men who personally investigated institutions and educational plans from coast to coast before recommending the establishment of the new institute at Northwestern.