

at Brown and Columbia Universities, which received support from Government and industry. In addition to providing instruction in the necessary techniques, it will be necessary to indicate the existence of unsolved problems in industry which can lead to interesting mathematical developments. While it is hoped that those mathematicians who have been engaged on engineering problems during the War, having realized the unsuitability of their university training for such work, will, on their return to academic life, adapt the courses accordingly, this will not deal with the whole problem. Since the principle of the sabbatical year has not been accepted in the new Scientific Civil Service and in view of concentration of industrial research associations within reach of London, it would appear desirable and opportune for the University of London to provide suitable postgraduate courses.

THE EGYPTIAN ACADEMY OF SCIENCES

By A. M. MOSHARRAFA PASHA

Dean of the Faculty of Sciences, Fouad I University, Cairo

EGYPTIAN men of science have for some time felt the need for establishing an academy of sciences in Cairo. So far the bulk of research work carried out in Egypt has been published in foreign journals or communicated to learned societies abroad. Although the Institut d'Égypte was founded in 1859 (reviving an older institute founded by Napoleon) and counts among its four sections one for Physical and Mathematical Sciences and another for Medicine, Agronomy and Natural History, its main tendency remained literary and artistic. Thus we find Osman Ghaleb Pasha (1845–1920), the biologist, publishing his work on the migrations of *Filaria rypipleurites* in the *Comptes rendus* of the Paris Academy in 1878. Previously Mahmoud El Falaki Pasha (1830–85), the astronomer and physicist, published his work on terrestrial magnetism in the *Comptes rendus* of the Paris Academy (1856) and the *Mémoires couronnés et mémoires des Savants étrangers* of the Belgian Academy (1856).

With the establishment of the Fouad I University in Cairo in 1925 scientific research in Egypt received a strong impetus. Thus from the Faculty of Science alone more than five hundred papers have already appeared embodying the results of original researches in different fields of pure science. Of these, nearly 350 papers have appeared in scientific journals and proceedings of learned societies abroad (with more than two hundred papers in British journals). The rest, representing only about 30 per cent of the total, were either communicated to learned societies in Egypt or published as bulletins or special publications by the University of Cairo. Other Faculties, such as Medicine and Engineering, have contributed to the growth of pure science in addition to their work in the fields of applied science.

Mention should also be made of scientific and technical departments of the Egyptian Government, such as the technical departments of the Ministry of Agriculture, the Physical Department, etc. These publish their researches as a rule in the form of Government bulletins. The Helwan Observatory

publishes special reports. Other noteworthy publications are the "Flora of Egypt" (Vol. 1, Pteridophyta, Gymnospermæ and Angiospermæ; Part 1, Monocotyledons: Typhaceæ-Graminæ), the tables of Legendre associated functions (with fifty thousand entries) and the special publications of the Marine Biological Station at Hurgada, all of which have been published by the Faculty of Science of the Fouad I University. In addition to the Institut d'Égypte referred to above, the following learned societies, among others, issue publications:

(1) The Fouad I Entomological Society, founded in 1907 and given its charter in 1923 (*Bulletins and Mémoires*).

(2) The Royal Geographical Society of Egypt, founded in 1875, re-organised in 1917 (*Bulletins and Mémoires*).

(3) The Mathematical and Physical Society of Egypt, founded in 1936 (*Proceedings*).

(4) The Egyptian Royal Medical Association, founded in 1919 (*Journal*).

The establishment of the Egyptian Academy of Sciences is thus a natural step in the development of scientific activities in Egypt. Following upon a number of preliminary meetings, the Academy was formally instituted in 1945. The Council consists of ten members representing the different branches of science (three for mathematical, physical and astronomical sciences, one for chemistry, five for the biological sciences and one for geology). The first scientific meeting of the Academy was held in April 1945, and monthly meetings are held on the first Tuesday of every month excluding the period from June to September. The first publication of the Academy is in the press and will appear shortly.

Reference should be made to the Royal Prizes in Science which have graciously been founded by His Majesty King Farouk. These consist of four annual prizes each of value £E. 1,000 (about £1,025), to be awarded for the best contributions to the progress of science. The prizes are one for mathematical and physical sciences, one for biology, one for chemistry and one for geology. A committee, presided over by the Minister of Education, has been appointed to consider the conditions for awarding these prizes.

GEOLOGY IN SCHOOLS

AT a meeting on April 5, the Geologists' Association held a discussion on "Geology in Schools". The weight of opinion seemed to be that geology, at any rate up to the higher certificate stage, should usually be worked in as a side-line rather than included as such in a syllabus, but that much more should be done in this way than at present. The Association is peculiarly fitted to discuss such a proposition, since it includes in its membership many to whom the science remains a side-line or hobby. Among those who were present and spoke or had sent in written contributions were headmasters of schools, school teachers of both sexes, museum curators, university teachers and others with practical experience, while among members present were several who are still at school; one of these last has since sent in an account of the difficulties he encountered when seeking to take geology as a subject for the higher certificate examination: it forms a clear first-hand statement of the position, which needs to be remedied.