

for the National Academy of Engineering, are: (1) To provide means of assessing the constantly changing needs of the United States and the technical resources that can and should be applied to them; to sponsor programmes aimed at meeting these needs; and to encourage such engineering research as may be advisable in the national interest. (2) To explore means for promoting co-operation in engineering in the United States and elsewhere, with the view of securing concentration on problems significant to society and encouraging research and development aimed at meeting them. (3) To advise the Congress and the executive branch of the Government, whenever called on by any department or agency thereof, on matters of national import pertinent to engineering. (4) To co-operate with the National Academy of Sciences on matters involving both science and engineering. (5) To serve the nation in other respects in connexion with significant problems in engineering and technology. (6) To recognize outstanding contributions to the nation by leading engineers.

#### Officers

At a meeting held on December 10, by-laws were adopted and the following officers were elected: *President*, Dr. A. B. Kinzel, vice-president (research), Union Carbide Corporation; *Vice-President*, Dr. E. A. Walker, president, Pennsylvania State University; *Secretary*, Dr. H. Work, director of the Research Division and Associate Dean, School of Engineering and Science, New York University; *Treasurer*, Dr. T. C. Kavanagh, Praeger-Kavanagh-Waterbury, Engineers-Architects. The founding membership of the National Academy of Engineering has been formed from a committee of twenty-five appointed by Dr. F. Seitz, president of the U.S. National Academy of Sciences (see *Nature*, 202, 750; 1964), on nomination by the Engineers Joint Council to deal with the primary organizational tasks of the new Academy.

#### Charter Members

THE twenty-five charter members of the National Academy of Engineering are: H. W. Bode, vice-president, Bell Telephone Laboratories, Inc.; Walker L. Cislser, chairman of the Board, Detroit Edison Co.; Hugh L. Dryden, deputy administrator, National Aeronautics and Space Administration; Elmer W. Engstrom, president, Radio Corporation of America; William L. Everitt, dean, College of Engineering, University of Illinois; Antoine M. Gaudin, Richards professor of mineral engineering, Massachusetts Institute of Technology; Michael L. Haider, president, Standard Oil Co. of New Jersey; George E. Holbrook, vice-president, E. I. du Pont de Nemours and Co., Inc.; J. Herbert Holloman, jun., Assistant Secretary of Commerce for Science and Technology; Thomas C. Kavanagh, Praeger-Kavanagh-Waterbury, Engineers-Architects; Augustus B. Kinzel, vice-president (research), Union Carbide Corporation; James N. Landis, vice-president, Bechtel Corporation; Clarence H. Linder, former vice-president and group executive, General Electric Co.; Clark B. Millikan, professor of aeronautics, California Institute of Technology; Nathan M. Newmark, head, Civil Engineering Department, University of Illinois; W. H. Pickering, director, Jet Propulsion Laboratory, California Institute of Technology; Simon Ramo, executive vice-president, Thompson Ramo Wooldridge, Inc.; Arthur E. Raymond, consultant, RAND Corporation; Thomas K. Sherwood, professor of chemical engineering, Massachusetts Institute of Technology; J. A. Stratton, president, Massachusetts Institute of Technology; C. G. Suits, vice-president and director of research, General Electric Co.; F. E. Terman, provost and vice-president, Stanford University; Charles Allen Thomas, chairman of the Board, Monsanto Chemical Co.; Eric A. Walker, president, Pennsylvania State University; and Ernst Weber, president, Polytechnic Institute of Brooklyn.

#### Part-time Course in Chemical Engineering in Britain

NOTWITHSTANDING the present-day shift in emphasis towards full-time education for all capable of being educated, the part-time course, which is a tradition in the technological ways of life in Britain, continues to flourish. In 1962-63, for example, there were 108,000 advanced students taking part-time courses, 53,000 in the day and 55,000 in the evening, as compared with 43,000 full-time advanced students in institutions of further education. More than ten years have elapsed since the Institution of Chemical Engineers first published its *Scheme for a Part-time Course in Chemical Engineering*. The purpose of that publication was to encourage the establishment of Higher National Certificate courses in chemical engineering, and a number of such part-time courses have since been in successful operation. The Institution (in co-operation with the Joint Committee for Higher National Certificate in Chemical Engineering in England and Wales) has now published a completely revised scheme designed for the boy or girl leaving school who wishes to become a chemical engineer by means of part-time study (Pp. 20. London: The Institution of Chemical Engineers, 1964). The student who completes the course for the Higher National Certificate will be considered in future to have qualified academically as a chemical engineering technician. The more ambitious student can proceed, through the endorsement course and Part 3 (Design Problem) of the Institution examination, to become a fully qualified professional chemical engineer, provided he or she can satisfy the experience requirements for corporate membership of the Institution. Copies of the scheme can be obtained free of charge from the Institution of Chemical Engineers, 16 Belgrave Square, London, S.W.1.

#### The Future of the National Parks

THE *Report and News Letter of the Friends of the Lake District* for August 1964, to which are appended the full text of the pamphlet *Traffic in the Lake District* (see *Nature*, 204, 508; 1964) and the statement on the report on future water resources made to the Manchester Corporation by their engineering consultants and issued in April 1964, makes some comments on the future of the National Parks in general (Pp. 21. Ulverston: Friends of the Lake District, 1964). It is urged that any attempt to cater for the more gregarious forms of recreation in National Parks must run counter to their essential character and function, and provisions for such forms of recreation should be made elsewhere. Attention is also directed to the way in which the new large-scale agricultural development also clashes with its surroundings and calls for much more effective control for agricultural buildings than exists at present. On water supply it is urged that the only real protection for the Lake District against further extraction lies in the development of alternative sources of supply and points out that in future the costs of desalinated sea-water are likely to match those of fresh water very closely. (See also p. 113 of this issue of *Nature*.)

#### Scottish Wildlife Trust

THE Scottish Wildlife Trust has recently been established to help to secure conservation in Scotland. The chairman is Sir Charles Connell. The new Trust will act as a co-ordinating body and will endeavour to do on a smaller scale what the Nature Conservancy is doing on a national scale. One of its functions will be to establish wildlife reserves on a small scale throughout Scotland. There are many places in Scotland where particular species occupy a restricted habitat, always in danger of being lost through ignorance or carelessness. There are also areas of special interest, particularly cliffs and forests, which the Trust hopes to protect from exploitation inimical to the maintenance of an attractive countryside and the conservation of its flora and fauna. Further information