

behaviour. The nature of this effect remains at present unresolved. In this respect, Brown's work with the response of the common planarian worm to weak  $\gamma$ -radiation<sup>6</sup>, to weak electrostatic gradients<sup>7</sup>, and to weak horizontal magnetic fields<sup>8</sup> may be pertinent. The fact that the organism responded to the application of these environmental stimuli was clearly established, but the magnitude and the direction of response—turning away from, or toward, the source of stimulation—depended on such variables as orientation in the Earth's geographic field, season, lunar phase, and time of day.

In terms of process or mechanism which would provide predictable effects of geophysical parameters on organic behaviour, it is difficult to consider the present findings as adding further definition. In our previous report<sup>1</sup> it was suggested that the relationship of geomagnetic parameters to a gross index of human psychic disturbance could be consonant with the conception that organic behaviour was significantly influenced, through the direct-current control system, by external fields of force. Only if the cosmic ray indexes, neutron counts, used in the present investigation, are considered as indirect measures of some field of force, either one not as yet considered or a geomagnetic parameter, do the present findings become

consistent with the previous speculation, for neutrons *per se* could have little significant effect on the direct current electrical system. In view of the growing body of empirical findings and occasional experimental investigations in the area of the biological effects of magnetic fields<sup>9-11</sup>, it would seem that the most fruitful interpretation would lie in the possibility that the cosmic ray indexes provide a measure of some geomagnetic parameter.

Further investigation must now lie in the direction of longitudinal individual examination as well as in the experimental production and control of geophysical variables to determine relationship to human behaviour and psychological processes.

<sup>1</sup> Friedman, H., Becker, R. O., and Bachman, C. H., *Nature*, **200**, 626 (1963).  
<sup>2</sup> Massey, H. S. W., and Boyd, R. L. F., *The Upper Atmosphere* (Hutchinson, London, 1961).

<sup>3</sup> Winckler, J. R., *Radiat. Res.*, **14**, 521 (1961).

<sup>4</sup> Bartels, J., *Annals Intern. Geophys. Year*, **4**, 215 (1957).

<sup>5</sup> Gorham, D. R., and Betz, Barbara J., *Amer. J. Psychiat.*, **119**, 164 (1962).

<sup>6</sup> Brown, jun., F. A., *Biol. Bull.*, **125**, 206 (1963).

<sup>7</sup> Brown, jun., F. A., *Biol. Bull.*, **123**, 282 (1962).

<sup>8</sup> Brown, jun., F. A., *Biol. Bull.*, **123**, 264 (1962).

<sup>9</sup> Becker, R. O., *Med. Electron. Biol. Engng.*, **1**, 293 (1963).

<sup>10</sup> Becker, R. O., *N.Y. State J. Med.*, **63**, 2215 (1963).

<sup>11</sup> Davis, L. D., Pappajohn, K., and Plavnieks, I. M., *Fed. Proc.*, **21**, 5, Part 2 (1962).

## NEWS and VIEWS

### Science Journal

In these days of ever-increasing specialization it is pleasant to find among the ranks of newly established scientific journals one which cuts across the whole frontier of science. The new monthly, *Science Journal*, does even more than this, for it sets out from the start in an eye-catching style to champion technology as well as science. This policy is certainly praiseworthy and well in line with present-day thinking, both in academic and Government circles. In fact, besides appointing Mr. Robin Clarke as editor of this new enterprise, Associated Iliffe Press, Ltd., has appointed Mr. W. T. Gunston as full-time technology editor. This lavishly produced, multi-colour illustrated journal will obviously not only prove a popular source of scientific information, but will also provide scientists and technologists with a means of keeping abreast of adjacent and distant fields of science, and the intelligent layman of keeping himself informed of the trends in modern science. The Prime Minister contributes a message of welcome to the first issue of the *Journal*, in which he stresses the importance of this cross-fertilization of ideas (*Science Journal*, 1, No. 1; March 1965. Pp. 1-122. Annual subscriptions (including postage): U.K. 60s.; Overseas 80s.; U.S.A. 12 dollars. Single issues 4s. London: Associated Iliffe Press, Ltd., 1964).

Certainly there is much to whet the appetite of scientist, technologist and informed layman alike in this first issue, which opens with a number of items of "Science and Technology News". These are followed by "Focus", a monthly series of comment on the scientific scene by Mr. Gordon Rattray Taylor (one of the three consultant editors), and articles contributed by Dr. A. H. Meleka, Prof. H. J. Eysenck, Mr. M. Biddle, Dr. C. W. Kilminster, Dr. Alex Comfort, Sir Graham Sutton, Lord Rothschild and Prof. J. D. Bernal. A short section on reports of meetings is included, also a "Conference Calendar". The "Book Reviews" section contains seven reviews (including a review article by Dr. S. Toulmin), a number of short review notes and a list of "Some Books Received". All in all, an excellent balance of material has been achieved in this the first issue. *Nature* takes this opportunity of extending its welcome to *Science Journal* and wishes Associated Iliffe Press, Ltd., every success in this new venture.

### Queen's Medal for Applied Science

THE Council of the Royal Society of London has received with great pleasure intimation that H.M. The Queen has been graciously pleased to approve that a Queen's Medal should be awarded annually for distinguished contributions in the applied sciences. This Medal is to be awarded on the recommendation of the Council of the Royal Society in exactly the same way as the existing medals in physical and biological sciences. The new Medal is to be similar in design to the present ones, bearing the effigy of the Sovereign on the obverse and an effigy of Newton on the reverse.

The existing two Royal Medals were founded by H.M. King George IV, the proposal to found them being conveyed in a letter from Sir Robert Peel to Sir Humphry Davy dated December 3, 1825, and the first awards were made in 1826, to John Dalton and James Ivory. They are awarded annually by the Sovereign on the recommendation of the Council, for the two most important contributions to the advancement of natural knowledge, published originally in Her Majesty's Dominions within a period of not more than ten years, and of not less than one year of the date of the award. One is given in each year to each of the two great divisions of natural science. The awards are presented each year at the Anniversary Meeting of the Royal Society on November 30.

### The Royal Society of Edinburgh

At the sixth ordinary meeting of the Royal Society of Edinburgh, the following were elected Fellows of the Society: Mr. W. G. Alexander, deputy secretary, the Agricultural Research Council; Prof. G. R. Bishop, Department of Natural Philosophy, University of Glasgow; Prof. J. N. Black, Department of Forestry and Natural Resources, University of Edinburgh; Dr. K. L. Blaxter, deputy chief scientific officer, Hannah Dairy Research Institute; Prof. W. Cochran, Department of Physics, University of Edinburgh; Sir Charles Gibson Connell, Writer to the Signet; Mr. R. A. Eden, District Geologist, Geological Survey and Museum; Prof. Manfred Gordon, Department of Physical Chemistry, University of Strathclyde; Dr. C. T. Greenwood, lecturer in chemistry, University of Edinburgh; Prof. A. St. G. J. M. Huggett,