

and seismology. It would be the first of its kind in Europe.

Dr A. Zátópek from Czechoslovakia, an expert in seismology, assembled and analysed macro- and micro-seismic data with the conclusion that the epicentral intensity was IX MCS and the focal depth 5 km at Skopje, the epicentre. In all, the shaken area covered 105 km<sup>2</sup>. The earthquake was described in general terms as a superficial or shallow tectonic, composed of several shocks, with typical small block structure mechanism within the epicentral area. Dr Zátópek recommended that there should be detailed studies of the seismology of Yugoslavia.

The final part of the report was produced by Dr A. A. Sorsky of the University of Moscow, who studied the geological and tectonic factors of the 1963 earthquake. His conclusions include the fact that Skopje is on a seismologically dangerous area, and earthquakes are liable to occur there again. Seismological and geological data are being collected by Yugoslav scientists so that a microregionalization map can be compiled, from which can be worked out the areas of most movement and consequently most seismological danger. Provided building sites are chosen according to this map, Dr Sorsky believes that building should continue on the present site of the city.

## Keeping Physicists Aware

COMPARATIVELY recently there has emerged a new type of indexing journal, aimed at alerting readers quickly to titles of papers written in their respective fields. In their simplest form, current awareness journals, as they are called, consist of a collection of facsimile reproductions of contents tables of individual journals. The weekly list, *Current Contents*, published by the Institute for Scientific Information, Philadelphia, since 1958, is a well known example of a journal of this type. The Polish Academy of Sciences produces a similar key to the Polish literature. A more sophisticated example of a current title index is provided by the semi-monthly *Chemical Titles*, a product of the Chemical Abstracts service, which is a computer produced keyword index.

In January 1966, the Institution of Electrical Engineers (IEE), in association with the American Institute of Physics (AIP), inaugurated a new current awareness journal called *Current Papers in Physics* to be used in conjunction with *Physics Abstracts* produced by the same institutions. The IEE also publishes two other current awareness journals, *Current Papers on Control* and *Current Papers in Electrotechnology*; and two other abstract journals, *Control Abstracts* and *Electrical and Electronics Abstracts*—together the journals are known as INSPEC (Information Service in Physics, Electrotechnology and Control).

It was decided, before *Current Papers in Physics* (CPP) began publication, that it would be sensible to assess the need for this new journal and its usefulness. During its first year of publication (1966) a joint study was therefore undertaken in Britain by the Aslib Research Department for the IEE and in the United States by the then Documentation Research Project staff of AIP. The first report of this study has recently been published (*Results of Questionnaire on Current Awareness Methods used by Physicists prior to Publication of "Current Papers in Physics"*).

Panels of physicists were set up in Britain (268 physicists) and the United States (682 physicists). Before CPP appeared, the panel members received the first of a series of three tests. This initial questionnaire covered panel composition; methods used by physicists to keep up to date before CPP; and expectations of a current awareness journal in the field of physics. Results of this questionnaire are given in this report. Two later questionnaires covered physicists' comments on CPP and suggested improvements, and a record of the actual use made of the publication and the order in which sections were scanned. Reports of these studies are to be published later.

The results of the first survey show that current awareness journals were not much used by panel members before CPP appeared. In general, the use tended to follow the pattern of the country of publication. The journals published in the UK—*British Technology Index* and *Current Papers for the Professional Electrical and Electronics Engineer* (now *Current Papers in Electrotechnology*) were more used in the UK than in the US, and the reverse was true for the US physicists in terms of *Chemical Titles*, *Current Contents: Physical Sciences*, for example. Physicists co-operating in the study seemed to rely mainly on scanning current issues of journals as a means of keeping up to date before CPP. It was thought to be the best method by 36 per cent of the British physicists, while 37 per cent of United States physicists ranked this method in first place. The physicists indicated, however, that they would welcome a publication that would relieve them of the chore of actually scanning journals, provided that "nothing relevant" was missed. There were various constructive suggestions about the requirements of a current awareness journal, and also comments about available abstract journals. The IEE must be satisfied with the discovery that *Physics Abstracts* was the most widely used publication in the field, in both Britain and the United States. As the report puts it, "the heavy usage of this existing IEE publication in physics augurs well for the success of a complementary current awareness journal from the same publishers". The next two reports may well show if this is indeed the case. At the moment the IEE appears to be satisfied with the sale of CPP in Britain and in the United States.

## Fish Farming

Fish farming has been shown to be practicable, but the "rate at which the prospects are converted into reality will depend critically on the research effort we are able to mount". This was the conclusion of Dr H. A. Cole, Director of Fishery Research at Lowestoft, who addressed the Royal Society of Arts last week on the artificial cultivation of sea and shell fish and described the research which must be done before a successful intensive rearing system can be built. There must be "systematic optimization of the environmental factors present in the system followed by scientific breeding to provide animals highly adapted to culture conditions".

The depletion of fish supplies accessible to British fishermen has led to the investigation of alternative sources, and to the realization that artificial cultivation can lead to advantages in processing and marketing, with possibilities for export. Plaice was one of the