NUCLEAR FUSION

Research being carried out in many countries on the possibility of achieving controlled nuclear fusion has been described in previous issues of the Bulletin — most recently in Vol.12 No.4. The IAEA panel on International Co-operation in Controlled Fusion Research and its Application held in Trieste in June 1970 estimated that the scientific problems in the path of achievement of a controlled fusion reaction might be solved within the next ten years; it should then be possible to build devices in which the energy released by thermonuclear reactions within a mixture of deuterium and tritium would amount to an appreciable fraction of the input power. This, in turn, would enable study of remaining practical problems to be solved before the first fusion power reactor with a positive power output can be built. The panel welcomed the initiative that the IAEA has taken to help fusion research and recommended that the current activities of the IAEA in the field should continue.

The panel has noted that one of the particularly noteworthy contributions of the Agency is the publication of the "*Nuclear Fusion*" journal. A reflection of the growing interest in this research is the decision to increase the frequency of its publication from four issues a year to six, beginning immediately. An editorial note in the December 1970 issue (Vol.10 No.4) announces that it has also been decided to broaden the subject scope to include fusion reactor concepts and technology. *Nuclear Fusion* also accepts papers on computer simulation experiments and plasma diagnostic methods related to fusion research, magnetohydrodynamic energy conversion and plasma thermionic conversion.

The editors say they hope these changes will strengthen the position of the journal, which they believe "is able to meet the expected growth of information in the fusion field".