## UNESCO'S TWENTY YEARS OF WORK FOR PEACE

When UNESCO, the United Nations Educational, Scientific and Cultural Organization, celebrated its twentieth anniversary in November, the Agency was happy to joint in the congratulations sent from all parts of the world. In this case there were special reasons, since UNESCO was interested in the peaceful development of atomic energy before IAEA was set up, and there have been a number of areas of common interest.

UNESCO was formed with the purpose of contributing to peace and security and to encourage universal respect for justice, human rights and the fundamental freedoms. To this end it promoted international collaboration through education, science, culture and information. The possibilities arising from the release of atomic energy were taken into account early in its life. This was shown by the arrangement of meetings to exchange information on the use of isotopes, and the sponsorship of the European Organization for Nuclear Research (CERN). The Convention at which CERN was created was held at UNESCO headquarters.

When IAEA was set up in 1957, members of UNESCO staff were seconded to help with the early organization. Since then there have been a number of examples of help and co-operation, and there have been joint projects where the interests of the two agencies have run parallel. Water studies, meteorites, theoretical physics, nuclear training, exchange of information, oceanography and geological prospecting have been among them.

In 1965 UNESCO initiated the International Hydrological Decade, from which a great deal of information will be accumulated about the behaviour of the world's water in the air, on the surface and below ground. The Agency, which had already included much relevant research in its programme, is participating. Nuclear techniques are used for hydrological purposes to obtain knowledge of rainfall, rivers, water reserves and their history, what happens to snow and glaciers. Some research contracts placed with institutes in different countries have been assisted by UNESCO.

Some of the hydrological studies are of more immediate benefit, particularly in arid regions. One of these is in the Chad Basin in Africa, where IAEA experts are assisting in a UNESCO project to use water resources to best advantage.

Scientific reasons for studying meteorites arise from the fact that these offshoots from outer space are almost certainly linked with the solar system,



Part of the Paris headquarters of UNESCO, showing offices built below ground level. (Photo: UNESCO).

that they provide samples of primordial matter unaffected by earth conditions, that they offer possibilities of learning the effect of direct cosmic radiation and that they are of interest to astronomers, metallurgists, petrographers (who look into crystal structures of rock and metal) and radiochemists. UNESCO has for some years had a working group consisting of outstanding scientists. Because of the special nuclear information carried by meteorites the Agency started some years ago to collect and examine specimens, the hope being that this could be done rapidly before the radioactivity had died out. UNESCO has assisted this work. Meteorites from Turkey and France have provided interesting information.

The fact that the Agency's International Centre for Theoretical Physics in Trieste has in the two years of its existence become a world centre for developing an understanding of the nature of matter is also partly due to UNESCO support. It sponsors fellowships and was responsible for setting up an advanced school at the University of Trieste to assist in improving the background knowledge of fellows.

In the training of nuclear technologists and scientists the two organizations have arranged joint courses directed at agricultural research, nuclear engineering, documentation and nuclear physics (for university teachers in developing countries) in various parts of the world. The IAEA Unit of Radiology is preparing material for a UNESCO book on "New Trends in the Teaching of Biological Sciences". A joint pilot project is planned for biology teaching in Ghana. Trees growing in the desert as a result of re-using waste water. (Photo: UNESCO).



An outstanding UNESCO achievement was the enlistment of world co-operation in preserving the historic monuments of Abu-Simbel which were threatened by an essential water preservation programme. Radioisotope techniques helped in dissection of the sandstone figures for removal to another site. (Photo: UNESCO).



There is also a link with the joint FAO/IAEA Division of Atomic Energy in Agriculture for the preparation of a manual for teachers of related subjects in developing countries.

A further link is provided by oceanography, where the work of the Agency's Monaco Laboratory in examining the effects of marine pollution complements UNESCO-sponsored research in the physical, geological and chemical aspects of oceanography. The Second International Oceanographic Congress, held in Moscow during the summer and organized by the USSR Academy of Sciences together with UNESCO, to which IAEA also made some contribution, provided one forum for the exchange of information on this subject. IAEA also contributed to the "General Scientific Framework for World Ocean Study" published in 1965, of which UNESCO prepared the first draft.