



Distribution: limited

UNESCO/NS/ST/1962/4  
Paris, 4 June 1962  
English only

UNITED NATIONS EDUCATIONAL  
SCIENTIFIC AND CULTURAL ORGANIZATION

UNESCO SPONSORED INTERNATIONAL POST-GRADUATE TRAINING  
COURSES FOR RESEARCH AND EDUCATION IN BASIC SCIENCES

---

WS/0662.26

UNESCO SPONSORED INTERNATIONAL POST-GRADUATE TRAINING  
COURSES FOR RESEARCH AND EDUCATION IN BASIC SCIENCES

Introduction

Unesco, unlike some foundations, is not primarily an agency for making grants. Its relatively small funds must be used as "seed" money. Unesco has two significant roles which are not easily measured in terms of money. It is a "catalyzer" of new projects, and an "internationalizer". The international post-graduate courses described below should be considered in the light of this introduction.

- I. The aim of the international post-graduate training courses, to be organized by Member States with Unesco's sponsorship and collaboration, is the following:
  1. Train university staff, mainly from developing countries, in modern research techniques in the field of basic sciences (mathematics, physics, chemistry, biology, zoology, botany, geology).
  2. Provide participants with possibilities for participation in experimental research work under the guidance of highly qualified specialists.
  3. Familiarize participants with methods of organizing research projects and specialized laboratories and with the way of teaching graduate and under-graduate students.
  4. Give an opportunity to participants to get acquainted with research being carried out in the host country, in their particular field of science, and to establish personal contact with scientists.
- II. The duration of each course is foreseen for one academic year (at least eight months). This comparatively long period is necessary to fulfill the aims of the course. Since the majority of participants will be selected from universities where very little or no research work is yet carried out, they will have to be trained in a series of basic research techniques. This will enable them to participate actively, upon their return, in the organization of research programmes in their home university Department.
- III. Participants (15 to 25 for each course) will have to be young scientists (preferably not more than 40 years old). Candidates should be associated with teaching and/or research in a university or national laboratory.
- IV. The language of the course should be one of the following. English, French, or Spanish. Facilities for interpretation into a second of those languages would be useful.
- V. The programme of the course can be flexible and adapted to the requirements of the specific field of science considered. In principle, an introductory lecture-course concentrated into the first two months of the courses, would be desirable. This would not necessarily occupy the participants full time. Thus, they will be able to prepare and take up gradually

during this period, suggested research projects, under tutorial guidance, in the laboratory or laboratories associated with the course. Research projects will be selected after careful interviews with the participants. These may be distributed, in small groups, among different laboratories, according to available facilities and the personal abilities and wishes of each participant. It is understood that the programme of any particular one-year course may include training in as many research techniques as are considered essential for acquiring experience to build up research programmes in a particular field of science. Each participant is expected to carry out a limited project in one of the existing research groups, under the guidance of a senior scientist. It is considered desirable to hold weekly seminar discussions of actual problems, whereby participants are associated with the whole programme of the research group in which they work. A very important task of the course will be to discuss the possibilities and to plan for a research project to be taken up by each participant on his return to his home country. For courses held in countries whose language is not English, French, or Spanish, it would be useful to offer a language course for the benefit of participants who wish to learn the national language of the host country. A programme of visits to university laboratories, research institutions and relevant industrial laboratories should be concentrated preferably at the end of the course.

VI. Facilities offered to participants by the organizers of the course.

The organizers of the course will print a leaflet describing the aims of the course, giving details of admission requirements, programme, facilities offered to fellows, and mentioning the address where applications should be sent with indication of the date limit. (A leaflet devoted to the International Seminar for Research and Education in Physics, Uppsala, is attached). All applicants accepted for the course will be given fellowships offered by the scientific institution organizing the course. These fellowships will cover the air fare, tourist class, for their round trip from home country, board and lodging, as well as a small monthly allowance for current expenses. Necessary budget provision for this should be made by the host country, taking into account that Unesco's financial contribution towards the organization of the course will be comparatively small (at most the equivalent of US\$5,000.). For countries where foreign currency is limited, this contribution could be payable in US dollars, whereby part of the travel expenses of fellows could be covered.

VII. Unesco's contribution will include, in addition to the small grant mentioned above, cooperation in the planning of the course and help in publicizing the course in developing countries so as to provoke the widest possible interest among eligible candidates and collaboration in the final selection of fellows. It is considered that the fact that a course is sponsored by Unesco will increase its international prestige and may also induce other international or national institutions and foundations to provide financial support.

VIII. Planning for the future should take into account experience acquired during the first course with a view to considering the possibility of establishing it on a permanent yearly or two-yearly basis.