No takers

A WEALTHY businessman's plans to give grants to young scientists for basic biological research ended in disenchantment on both sides at a meeting in London recently, when it transpired that he would not consider any applicant who held any sort of religious belief.

Mr Ray Turner had hoped to set up a foundation to award grants to young biologists under 28 years old for "independent fundamental research into outstanding questions relating to the chemical organisation of life". The grants were to be at a rate 20% above the United Kingdom universities non-clinical academic scale with tenure for 5 years initially and the opportunity for repeated extension; in effect allowing the possibility of a lifetime's financial support.

Thirty-six applicants who, under the terms of the application, had been nominated by senior researchers, assembled at the Strand Palace Hotel at Mr Turner's expense for an informal meeting to present their research proposals for selection.

As most of them expected some sort of scientific panel, they were surprised to find only Mr Turner, his wife and Professor Bellamy of the Zoology Department at University College Cardiff, the 'scientific coordinator' who had signed the original circulars inviting applications which were sent to university heads of departments in early June.

Each applicant was asked for a brief resumé of his work and aims, and his ideas of "the single basic facet of the really great scientist". Mr Turner then said that he wished to ask a question which might surprise some people but that the motive would be explained later.

He then asked if anybody had religious beliefs. Four applicants put up their hands and their names were noted. The rest were than asked whether any of them held any belief in a "supernatural plan". More put up their hands and their names were also noted. The remainder resolved, after lively discussion, into what Turner classed as agnostics and atheists.

As it had become clear by now that selection was not going to be made on conventional scientific grounds, most of the participants thought that this might be some sort of 'management selection technique' but during lunch Mr Turner had a private discussion with one of the participants, Peter Leadley, who had put up his hand in the first group. Mr Turner told him that although he was considered among the most promising of those present, he could not be considered for a grant on account of his religious beliefs.

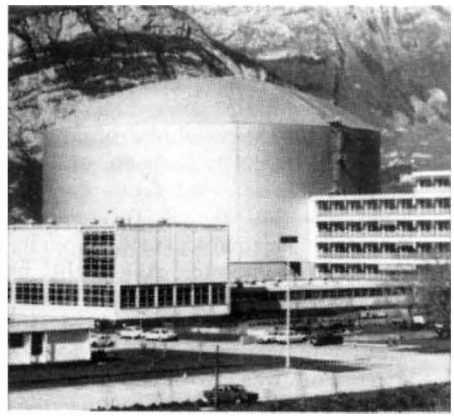
While the scientists were still debating whether even this might be some sort of psychological selection test, Mr Turner announced that he could not consider any of the applicants who had expressed any belief in a religious or supernatural power.

Mr Turner first said that he did not wish to give his reasons but during the three and a half hours discussion that ensued he eventually explained that he felt that if a scientist believed in any sort of supernatural power he would experience conflict in researching problems which enquired into the fundamental nature of life. He therefore thought that the very best scientists, the ones he wished to encourage, could not be religious.

At this point, Professor Bellamy who had taken little part in the proceedings so far, stated his opposition to the method of selection as did several of the 36 scientists, some of whom then left. The rest, according to a participant who stayed, tried to make Mr Turner realise that his sort of criteria could not be used as a basis for selecting scientific work and that it would be unacceptable to the scientific community at large. Mr Turner was asked whether he would consider handing over the money to scientific trustees to administer, but he refused.

Eventually it became obvious that deadlock had been reached and Mr Turner announced that he was withdrawing his offer.

Now it's legal



Reactor in the Alps

IT was a symbolic occasion at Grenoble last week as the ministers from Great Britain, France and West Germany signed an agreement bringing Britain into equal partnership with the other two countries in supporting the high flux neutron beam facility at the Institut von Laue–Langevin. Symbolic, because the partnership has existed *de facto* since January 1973. And yet, such is European collaboration on other things that since then the three countries have been trying hard to find a convenient date for ministers to participate in a ceremony giving tangible evidence that in some fields an international spirit still prevails.

The institute is hardly unfamiliar with symbolism; it exists in large part because France and Germany needed some collaborative scheme in the mid-1960's to patch up relations—indeed folklore goes so far as to say that Professor H. Maier-Leibnitz was asked to propose a project, suggested a high flux reactor and so it was. Not that it is in any way a white elephant. There was an urgent need for such a facility to further research in all fields from nuclear physics to biology, and it is widely agreed that the institute is fulfilling its purpose admirably.

The 57-MW reactor was built by French and German firms and first went critical in August 1971. It delivers a maximum flux of 1.5×10^{15} neutrons cm^{-2} s^{-1} and, in addition to supplying thermal neutrons to up to 50 separate experiments, has a cold source—25 litres of liquid deuterium as a low temperature (25 K) moderator—and a hot source—10 litres of graphite as a high temperature (2,000 K) moderator.

The main use of the neutrons so far has been in the study of condensed matter. Neutron diffraction can determine crystal structures, including the location of light atoms which are inaccessible to X-ray diffraction. Long wavelength neutrons are used to study defects and biological structures. The magnetic moment of the neutron is a valuable tool in understanding magnetic materials, and inelastic scattering is being used in studies of the dynamics of atoms and molecules.

As would be expected the scientific staff is international in character, although the British, who have been pioneers in neutron techniques, face problems in uprooting themselves for a period of several years in that return to a Britain with a depressed job market in high-flying science is bound to cause worries. On the other hand British technicians there speak with enthusiasm of their conditions and salary and some are prepared to stay indefinitely.

The running costs of the reactor and institute are £6 million this year but Professor Mössbauer, the director, is seriously concerned about inflation. Commitments in the newly signed document are inadequate for inflationary times and it has not been possible to hammer out tripartite agreement on including inflation automatically into each country's contribution. "As soon as the ink is dry", he said "I have to go back to the sponsors to negotiate more money for next year".