

## OLD WORLD

# University Interest Aroused

SEVERAL university departments have submitted applications to the Science Research Council for grants to work on superconducting a.c. generators following a report by an SRC working party on the subject last November (see *Nature*, **240**, 175; 1972). Among these are the Universities of Oxford, Southampton and Leeds; other requests for support are on the way.

The Oxford application is from the mechanical engineering department to work on the cryogenic aspect of a.c. generation, Southampton's interest comes from both the mechanical and electrical departments, and the Leeds application is also from the engineering department.

Those applications that reached the SRC's Electrical and Systems Engineering Committee by the last closing date for applications (December 15, 1972) will be considered by the committee in March after the working party, which is to be reconvened, has offered its opinion on them in February, and after the council, in the same month, has decided its attitude to the working party's report and how much money to make available.

Other applications which reach the SRC by its next closing date for applications, the beginning of April, will be considered in that month, and the committee hopes to see at least three or four groups working on the lines recommended in the report by the end of 1973, although a spokesman for the SRC was unwilling to discuss individual applications last week.

When the committee circulated the report, it asked for comments on it and for suggestions of other fields to which superconductivity could be applied. Reaction so far has been largely favourable. Most consider that the report is a reasoned assessment of the situation, although some feel that the case for initiating research on superconducting generators has not been proven. Nobody, it appears, is of the opinion that the working party was too timorous in its suggestion that research should start quickly, but on a comparatively small scale.

The request for suggestions of other areas to which superconductivity could be applied has been disappointing. One or two ideas have been put forward, but with the exception of a.c. generation and d.c. motors, superconductivity at present appears not to be as useful a phenomenon as it seems to be at first glance.

The Electrical and Systems Engineering Committee is also examining other areas of its brief in an effort to redefine the direction of its work. A report on electrical machines other than superconductors is due shortly, and the committee is also to examine work on solid state devices and telecommunications.

But superconductivity looms largest on the committee's agenda at present, as it does at International Research and Development in Newcastle where £1.5 million has been spent on research into a.c. and d.c. superconducting machines in the past ten years.

IRD, under the enthusiastic guidance of Mr A. D. Appleton, its head of electrical engineering, has undertaken much of the industrial superconducting work in Britain. Its greatest success has been with d.c. machines, but since 1968 a.c. generation has also played a large part in its work. The company will be closely involved in the planning and coordination of the research on a.c. generation that the SRC is to

finance, for one of the strongest stipulations of the working party's report is that research must be closely linked to industry.

IRD has examined generator designs up to 2,000 MW, and is already talking to many of the academics interested in undertaking work in the field. IRD—as was made plain by the SRC working party on which Mr Appleton represented the company—is eager to build a 60 MW generator, at a cost of about £2 million. Such a machine would be by far the largest superconducting generator ever built, the only competition being the Westinghouse 5 MW machine. Mr Appleton points out that a 60 MW machine is big enough to give a real idea of the problems involved (unlike a 5 MW machine) as well as having the advantage that it can be installed in a power station to replace one of the 60 MW sets that the Central Electricity Generating Board is currently phasing out, thus providing genuine working conditions and removing the not inconsiderable problem

### OPEN UNIVERSITY

## First Degrees Awarded

THE Open University announced the award of its first degrees last week. Eight hundred and sixty-seven students have qualified for the university's BA degree and can now go on to acquire an honours degree after a further one or two years.

The Open University is at pains to point out that the 867 are atypical students. All have passed their degree in just two years, acquiring the six credits necessary by being given two or three credit exemptions (for previous academic qualifications) and by obtaining two further credits each year—the maximum. Next year's graduates should be much more typical.

The university has remarkably few statistics available about its graduates. These are all in the computer at present is the claim, so that it is not even known whether the new graduates are predominantly science-based or arts-based.

Seven out of ten of the university's other students gained credits in the 1972 examinations. A total of 36,076 foundation and second level examinations were taken by 25,203 students; 23,578 passed one or more course examinations, thereby gaining a credit, and 33,458 credits were awarded in all. The overall course pass rate for the year

was 71.4 per cent for foundation level courses and 70.5 per cent for second level.

While it is not yet possible to calculate how many students have dropped out of the Open University since it started—students can accumulate the credits needed for their degrees over several years—the dropout rate on courses is less than 25 per cent. Seventy-eight per cent of students who started courses took the examinations, and of those who took them, 91.7 per cent passed.

The Open University is well pleased with the results which are published just as it launches the largest part of this year's advertising campaign to encourage applications. About £20,000 of the £35,000 advertising budget is to be spent in the next few weeks on advertisements in regional and national newspapers and on the university's first venture into television commercials. Advertisements will be run on Border Television starting this week and their effect assessed as a pilot scheme for a fuller use of television. Although advertisements will appear in more than fifty national and local papers, the university is concentrating its efforts on those parts of Britain which have had a poorer application rate so far—the north, Wales, the west midlands and the north-west.