## How French 'postdocs' are left out in the cold

UNIVERSITIES have stopped growing in France, as in other western countries, and young scientists who want to make careers in research are feeling the pinch as badly as anywhere else. One paradox of this situation is that, at a time when postdoctoral fellowships are becoming scarce, researchers are increasingly reluctant to accept temporary posts, and less willing to change jobs merely to continue in research. While the problem is international, its French version has some special idiosyncracies.

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Research in France is not as university-based as in some other western countries. A major role is played by the Centre National de la Recherche Scientifique (CNRS), which despite its name is not a place but an institution, financing a large number of research laboratories throughout France. Some of these are located on university campuses and some in the Grandes Ecoles, while others are free-standing. A fairly close analogy would be with the MRC research units in Britain.

Purely academic research is financed partly through the Ministry of Education and partly through the Delegation Générale à la Recherche Scientifique et Technologique (DGRST), a body which fulfils some of the functions of the UK Science Research Council. The DGRST provides a limited amount of finance for hardware, a fairly generous supply of research studentships, but only a very sparse ration of postdoctoral fellowships, a function which largely rests with CNRS. But CNRS does not provide fellowships for academic departments, only for its own laboratories and those 'associated' with it (which together accounted for some 7.600 research workers and 13.400 technicians in 1977). Since it is becoming steadily more difficult for university professors to raise funds for postdoctoral workers, as described later, there is a risk of prolonged contraction of academic research as compared with the CNRS-supported laboratories. DGRST is not now, it seems, in a position extensively to support either university research or that in the Grandes Ecoles, in the way SRC does in Britain by means of research grants (which often include funds for graduate research assistants), research fellowships, advanced fellowships and the like.

In France, all academics with teaching posts, and also employees of bodies like CNRS, are *ipso facto* civil servants (*fonctionnaires*) and as such have permanent tenure. They do not need therefore, and indeed are not entitled, to take part in the state's unemployment insurance scheme, ASSEDIC.

ASSEDIC was designed to cater for workers in private industry or commerce: it has been the subject of much negotiation between government and unions, and its terms were most rerecently improved last March. It is now a thoroughly comprehensive schemewith one vawning omission; it does not cover temporary research workers ('postdocs') in universities, Ecoles, CNRS laboratories or similar establishments. French law is quite firm about this: postdocs are neither fonctionnaires nor are they employees in private industry, and so they slip neatly between the available stools.

French postdocs were not particularly concerned about this state of affairs until 1971 or 1972, when scientific unemployment first became noticeable. Pressure then began to be exerted on behalf of the postdocs by their

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trade unions, such as the Syndicat National de Chercheurs Scientifiques, for temporary research workers to be eligible for unemployment insurance. This was not conceded by the government, but a number of temporary postdocs were converted into a hybrid species, fonctionnaires hors statut (literally, civil servants outside the law), and as such attained tenure. DGRST found itself obliged to meet the cost of these new fonctionnaires and this limited its resources for maintaining posts for those who were still temporary, let alone creating new posts. For this reason, among others, scientific unemployment grew further. The unions became very restive and successfully prevailed upon DGRST to terminate its long established contrats de recherche (broadly similar to SRC research grants) which often incorporated money to pay for postdocs. The main aim was to force government agencies to make all research posts permanent, but the government has done the opposite. It has reduced the number of temporary posts without increasing the number of permanent positions.

Before this happened, industrial concerns had been in the habit of supporting contract research in universities, and financed a number of academic postdocs; but anxiety among young scientists facing the possibility of eventual unemployment without

state unemployment relief as well as union hostility, caused the withdrawal of industrial contracts, and these do not now appear to be a significant source of funds.

An unfortunate quirk of French law, probably dating back to the Napoleonic concept of the university, which provides no proper legal status and thus no insurance for those who are neither civil servants, self-employed nor employees of firms in the private sector, thus has seriously added to the plight of untenured French research workers. Initiatives to set up an unemployment scheme independent of the state do not appear, up to the present, to have met with success.

DGRST, aided by the new science minister, has striven valiantly to fill the gap left by the atrophy of contract research. In addition to some 3,000 2-year studentships for predoctoral students, and some 60 fellowships for tenured academics to enable them to devote some years to fulltime research. DGRST has now begun to provide postdoctoral fellowships available for allocation in the principal research laboratories. But at the time of writing the number available through DGRST is only of the order of 100, which falls a long way short of meeting the need. The greatest hardship is among newly graduated PhD's.

An influential working group of academics, industrialists and administrators presided over by Professor Jacques Friedel has been taking steps to assemble funds for some university fellowships, which have begun to be available at Orsay, Marseille, Strasbourg, Poitiers and Lille; other fellowships have been established in the State laboratories at Saclay and Grenoble. The insurance deadlock has not been resolved, but at least the decay of contracts is beginning to be circumvented.

This situation is however exacerbated by another specifically French problem, the firmly established tradition of young scientists to remain in the department where they researched their theses. Several administrators expressed the view to the author that the difficulty in persuading young scientists to move to other laboratories or to neighbouring disciplines, is the greatest single obstacle, after the insurance laws, to fuller scientific employment: and from a purely scientific standpoint. immobility has the grave disadvantage that the inflow of new ideas and experience into long-established laboratories R. W. Cahn is prevented.

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