

# Britain to spend £100 million on innovative manufacturing

**London.** Britain's Science and Engineering Research Council (SERC) this week announced a £100-million (US\$150 million) programme on innovative manufacturing to harness the academic community to the needs of manufacturing — a goal set out by the government in this week's White Paper (policy document) on the organization of science (see page 289).

The new programme, known as the Innovative Manufacturing Initiative, aims to focus strategic research in universities and other institutions on themes ranging from pharmaceuticals research to new manufacturing techniques in the construction industry. Included in SERC's plans are proposals to fund a hundred new academic positions. It also intends to create a number of new university-based interdisciplinary research centres.

Under the imminent splitting up of the SERC, responsibility for the initiative would be taken over by the new Engineering and Physics Sciences Research Council. A major role will also be played by the Economic and Social Science Research Council, which is particularly keen to encourage the application of its research into the processes of industrial innovation.

However, in a strategically significant move, the detailed definition of the individual research programmes will be left to industrial participants. The steering committee, which is preparing proposals to be submitted to the full council in October, is chaired by Stuart Miller, director of research and technology at Rolls-Royce.

The new initiative follows a report on

engineering science prepared for the SERC by a special committee headed by Bob Malpas, chairman of the Cookson Group. It identified two strategic priorities for engineering research programmes funded by the council: generating a 'coincidence of purpose' between industry and the academic community and 'managing the interface' between the two.

"We want to steer the scientific community towards strategic research which is both industrially relevant and academically challenging," says Miller. "Our aim is to provide a structure for exercising an 'industry pull' on the SERC, and, through the council, on the academic community."

The SERC intends eventually to contribute about £30 million a year to the new initiative by refocusing the budget of its engineering directorate on research themes proposed by the steering committee. Some of the money is being found through cut-backs in other areas of research, such as semiconductor devices. SERC officials are optimistic that another £20 million will come from other government departments, in particular the Department of Trade and Industry, through schemes such as the LINK programme. And they hope that industry will match the £50 million expected from the government.

The Confederation of British Industry praised the initiative as "just the type of partnership" that industry is seeking with the research community. University scientists are more apprehensive, fearful that there will be less scope for research with no short-term applications. **David Dickson**

## African women form group to increase links

**Washington.** A new association hopes to improve communications among the small number of African women scientists and increase opportunities for African girls to enter science. The Association of African Women in Science will be chaired by Deborah Enilo Ajakaiye, professor of physics at the University of Jos in Nigeria, who says that it will "work to reach a critical mass of women in science in Africa".

Ajakaiye says that such an organization would eliminate the current situation in which she must, for example, communicate with colleagues in Botswana via the Commonwealth Institute in London. "We need something of our own", she says. The idea was discussed last week at a symposium organized by the American Association for the Advancement of Science.

The initial goals of the association, Ajakaiye says, will be to gather data on the

numbers of African women at various levels of science, to document indigenous technologies used by African women and to encourage the production of basic educational material to popularize science among schoolgirls. The group is seeking financial support to carry out these goals as well as to hold additional meetings at which members can share their experiences.

Lydia Makhubu of the University of Swaziland, president of the Third World Organization for Women in Science, told the forum that the under-representation of women "deprives the continent of a substantial input and amounts to a neglect of 50 per cent of the human potential". African women in the United States helped to form the association, and its first secretary is Josephine Beoku-Betts, an assistant professor of sociology at the University of Georgia, Athens.

**Colin Macilwain**

## Europe is split over combining defence research

**Paris.** A proposal to merge European defence research into a single agency finds France and Germany on one side against Britain.

The creation of a European Armaments Agency (EAA) would go some way to forging a common defence research policy and a single European defence industry, say French and German officials. Bureaucracy could be avoided, they say, by giving the EAA its own budget and modelling it on the US Advanced Research Projects Agency (ARPA).

But Britain is not willing to go that far. Speaking earlier this month at a two-day conference on "Science and Defence", Geoffrey Pope, deputy chief scientific adviser at the British Ministry of defence, said that he welcomed looking at EAA as a possible means of managing existing multi-lateral agreements. Extending its role, he warned, would risk compromising national priorities, abandoning Britain's thrifty coupling of research to "real military needs" to the more profligate industrial policies of its continental partners, and weakening existing agreements with France, Germany and the United States.

Pope cites the EUCLID (European cooperation for the long term in defence) programme — set up by 13 European countries in 1989 to foster multinational cooperation in technology — as an example of how not to collaborate. Disagreement about participation and the financial contributions of each government have slowed progress to the point where the technologies being developed could be obsolete before the first projects are even completed (see *Nature* 357, 181; 1992).

Britain's chief concern is that the EAA is being created because of a desire to further the common defence and foreign policies envisaged in the Maastricht agreement rather than because it would improve existing arrangements. Europe's defence ministers are looking for ways to spread the increasing costs of defence research and strengthen the European arms industry. However, Pope reckons this would best be done not through a supranational agency but by increasing collaborations between Britain, France and Germany, which together account for more than four-fifths of Europe's spending on defence research.

France and Germany disagree. "It's not enough to work together only on top priorities", says Norbert Roy, an official in the German Ministry of Defence. "We need a balanced joint R&D programme... we need to develop a supranational policy. Germany is willing to give up its autonomy in defence research", he says. **Declan Butler**