What the British political parties say about science

- Labour and Alliance propose new ministries
- Conservatives promise more of the same

London

As thousands of British scientists unite to press political parties to rescue the country's scientific base from financial crisis, politicians are becoming increasingly aware that, for the first time, science is an election issue. The political parties have all released their policies — some of them sharply contrasting — on research, education, energy and the environment.

The pressure group Save British Science, which represents scientific societies and several thousand individual scientists, including 100 fellows of the Royal Society and 11 Nobel Prize winners, has launched a manifesto of its own. It calls on political parties to plough an additional £100 million a year into top quality research projects, to invest £3,000 million in civil research and development using targeted tax incentives and to establish a long-term strategy by putting scientists in the cabinet and in industry management.

The Labour Party has issued a science manifesto supporting the restoration of research funding as well as a "positive policy" for science. "We need to reduce significantly the proportion of the nation's research and development directed towards military spending and redirect it towards civil priorities as our most successful competitors do", the manifesto states.

Labour aims to reduce the defence share of government research and development from 53 per cent to "about the NATO [North Atlantic Treaty Organisation] average" of 25 per cent. Instead of the present 1.5 per cent of the gross domestic product now spent on civil research and development, Labour would like to see Britain spend 2.5 per cent. This would come from a £400-million increase in the government contribution and a doubling of industry's spending.

Increased spending on research and development is also a feature of the manifesto from the Social Democrat Party/Liberal Alliance. The Alliance also pledges to expand scientific research, and to support the European Communities' joint research programmes. Specific figures for the intended level of investment in science, and their source, are not included.

"A country of our size cannot afford to do everything", the Conservative Party states in the two paragraphs in its manifesto that cover science. It calls for resources to be "better targeted", adding that a Conservative government would support basic research and "contribute where business cannot realistically be expected to carry all the risks".

In the area of higher education, both Labour and the Alliance are promising to increase the number of student places in universities and polytechnics. Both also say they would provide financial support for more science teachers in schools. Labour specifically pledges to invest in research in higher education institutions.

A re-elected Conservative government would carry through its controversial plans to replace the University Grants Committee with a new University Funding Council made up of academics and industry representatives. Funding would be allocated through a system of contracts. The Conservatives would also abolish local authority control of polytechnics, putting these institutions more under the influence of central government — a move opposed by Labour and the Alliance.

Both opposition parties would abandon plans to build a pressurized water reactor at Sizewell, and both favour energy conservation and the development of renewable energy sources. Labour calls for "gradually diminishing Britain's dependence upon nuclear energy", while the Alliance would push for research into the economics and safety of nuclear power. The Conservatives, on the other hand, promise to develop "abundant, low-cost supplies of nuclear electricity".

The Conservatives say they will press ahead with plans to investigate deep disposal of nuclear waste. Labour and the Alliance both call for further research into disposal strategies.

A new Minister of Environmental Protection would be established under both Labour and the Alliance, and both would develop new pollution control processes. Both also say they would take action to combat acid rain. The Conservatives promise to "continue" to combat acid rain, and pledge to introduce new laws on air pollution and hazardous waste.

The protection of animals used in laboratory experiments is mentioned in all three manifestos. Labour says it would eliminate unnecessary experiments using live animals; the Alliance would set up an Animal Protection Commission to control the welfare of laboratory animals, and the Conservatives point to their record in setting up new legislation on animal experiments.

Kathy Johnston

Hospital workers have AIDS virus

Washington

SHOCK waves have been sent through the medical community by an announcement from the US Centers for Disease Control (CDC) that three health-care workers who were exposed to the blood of patients with AIDS (acquired immune deficiency syndrome) now test positive for human immunodeficiency virus (HIV). The workers' contact with the infected blood did not involve a needleprick or cut, the only ways thought to transfer the virus in a clinical setting.

The announcement, made last week in the CDC's Morbidity and Mortality Weekly Report, described accidents involving only skin-surface exposure to contaminated blood. In the first case, blood seeped through gauze that an emergency room nurse held over the insertion site of an arterial catheter during an attempt to resuscitate a dying patient, reaching her chapped, ungloved hands. Further examination revealed that the patient had died of AIDS and the nurse developed flu-like symptoms 20 days after the incident. Sixteen weeks later, when the nurse donated blood, antibodies to HIV were detected.

The second exposure occurred when a vacuum tube being filled by a phlebotomist with blood from an outpatient suspected of having an HIV infection shattered, splattering her face and mouth with blood. She did not develop symptoms, but tested positive for HIV nine months later. The third worker's ungloved hands and forearms were splashed with blood when a blood-separating machine malfunctioned. She also had flu-like symptoms, and tested positive for HIV after three months.

The workers denied exposure to the HIV virus through sexual relations or intravenous drug use, and none had ever had a blood transfusion. The CDC report suggests that these results demonstrate that "exposure of skin or mucous membranes to contaminated blood may rarely result in transmission of HIV".

In a separate CDC study of 298 healthcare workers tested after accidental exposure to HIV-contaminated blood, only one individual was positive for the virus. Eighty-nine per cent of the contacts were through needle-pricks and cuts.

The CDC announcement is expected to tighten adherence to US Public Health Service guidelines for the handling of blood and body fluids from AIDS patients. The guidelines recommend gloves, gowns and goggles to protect medical personnel. But compassionate care is difficult to deliver from behind protective garb, and increased worries about exposure to the virus could further isolate AIDS patients.

Carol Ezzell