

dent. This meeting, which is to honor Desmond Clark, one of this country's most distinguished archeologists, is to be attended by at least half a dozen South African participants. At least one member of the newly constituted British committee is planning to take part in the Berkeley meeting, apparently unconcerned by the inconsistency of his position. ■ **ROGER LEWIN**

## Academy Study Disperses Doubt on Acid Rain

If there were any doubt that sulfur emissions create acid rain, and that acid rain reduces visibility, causes fish to perish and lakes to acidify, then a recent report on acid rain by the National Academy of Sciences should dispel it. The 506-page report,\* after a detailed review of mountains of data, concludes that sulfur emissions cause plenty of environmental problems.

The report is expected to play a role in a meeting scheduled on 18 March (as *Science* goes to press) between President Reagan and Canadian Prime Minister Brian Mulroney. Reagan may adopt a proposal put forth by his personal envoy Drew Lewis to spend more money in developing clean coal technology (*Science*, 24 January, p. 333).

While previous studies have provided snapshots of one aspect or another of acid rain and its effects, the Academy report is a comprehensive and meticulous picture of the problem in the eastern United States. The 14-member panel, which issued the report, did not make any recommendations nor did it analyze the specific role of nearby or distant coal-burning plants.

"The connection between acid rain and environmental damage is real, but it is more variable and complex than many people have supposed," said James H. Gibson, chairman of the committee that issued the report and head of the National Resources Ecology Laboratory at Colorado State University.

The committee found the strongest evidence of acid rain damage in the Adirondacks. Relying partly on a new way to measure the past acidity of lakes, the committee concluded that the acidity of some lakes normally changed 1 pH unit over hundreds or thousands of years. But some lakes in New York have changed this much in 20 to 40 years because of acid rain. This was partly confirmed by a new method developed by the committee to measure lake

acidity in which diatoms from sediment cores are analyzed. The acidity is calculated according to the type and number of diatoms in a sediment layer.

The scientists also noted that acidity changes among lakes in the same region may be different, possibly due to the soil and watershed particular to each lake.

An issue left unresolved by the report is a link between acid rain and forests. Even though red spruce in the northeastern states have been dying at high rates, definitive evidence of the cause is not available, the committee said. Air pollution is likely to be one of several factors at work. ■

**MARJORIE SUN**

## Institute of Medicine Launches Assessment of AIDS Programs

The National Academy of Sciences and the Institute of Medicine have begun a major assessment of national strategies to combat acquired immune deficiency syndrome (AIDS). The study, which is being funded by a consortium of foundations, has been put on a fast track. A report is due in 6 months.

A stellar cast has been assembled to conduct the study. It will be carried out by two panels and the effort will be coordinated by a steering committee jointly chaired by David Baltimore of the Whitehead Institute and Massachusetts Institute of Technology and Sheldon M. Wolff of Tufts University and the New England Medical Center.

One panel, chaired by Baltimore, will examine national research efforts, looking in particular at whether the resources being devoted to AIDS research are adequate and whether sufficient numbers of researchers are being drawn into the field. According to Baltimore, the panel will also look at possible barriers to participation by private industry in areas such as vaccine development and drug therapy.

The second panel, chaired by Wolff, will look at the public health aspects of AIDS, including evidence on the spread of the disease in industrialized and developing countries, the cost and effectiveness of various treatment programs, and the impact of education and public health efforts.

The steering committee will report directly to the councils of the Academy and the Institute of Medicine, which both approved the effort. The study was sparked in part by recommendations made during a day-long meeting on AIDS sponsored last fall by the institute. ■ **COLIN NORMAN**

## Nuclear Reprocessing and "the World's Most Radioactive Sea"

A committee of British members of Parliament has called for a complete reappraisal of the government's plans for the expansion of its nuclear fuel reprocessing plant at Sellafield, Cumbria, in the light of what it describes as "changed circumstances" facing the nuclear industry since the decision to expand was made in the mid-1970's.

It also says that there should be a significant increase in the funds allocated by the government to research on the disposal of low-level radioactive waste, an area in which it says Britain is far behind countries such as France, West Germany, and Canada.

The report, prepared by the all-party environment committee of the House of Commons, does not recommend, as earlier drafts were reported to have done, that British Nuclear Fuels Limited (BNFL) abandon its plans for a \$1.9-billion thermal oxide reprocessing plant at Sellafield. But it concludes that the Irish Sea, which has been receiving discharges from the reprocessing activities on the site since the early 1950's, is now "the most radioactive sea in the world," and it also criticizes the "excessive secrecy" of the British nuclear industry.

Both conclusions have been a considerable embarrassment to the British government. They come at a time when the report of the inquiry held at Sizewell on the government's plans to build a new generation of nuclear power stations, based on the U.S.-designed pressurized water reactor, is in the final stages of preparation.

BNFL has already been heavily criticized in recent weeks over a series of leaks at the Sellafield plant that have resulted in the suspected contamination with low levels of radiation of almost 20 technicians and maintenance workers.

The European Parliament in Luxembourg has passed a resolution saying that the whole plant should be closed down until the safety problems have been solved. The parliamentary report, which is likely to carry greater weight with the government, does not go quite that far, pointing out that so far the leaks have caused very little radiation and have not presented any danger to human life.

The committee's chairman, Hugh Rossi, added that if a detailed inquiry into the financial prospects for reprocessing at Sellafield suggested that the facility should be shut down, proposals should also be abandoned for building a reprocessing plant for spent fuel from fast breeder reactors currently being proposed for Dounreay in the north of Scotland. ■ **DAVID DICKSON**

\**Acid Deposition: Long Term Trends* (National Academy Press, 1986, 2101 Constitution Avenue, NW, Washington, DC 20418).