

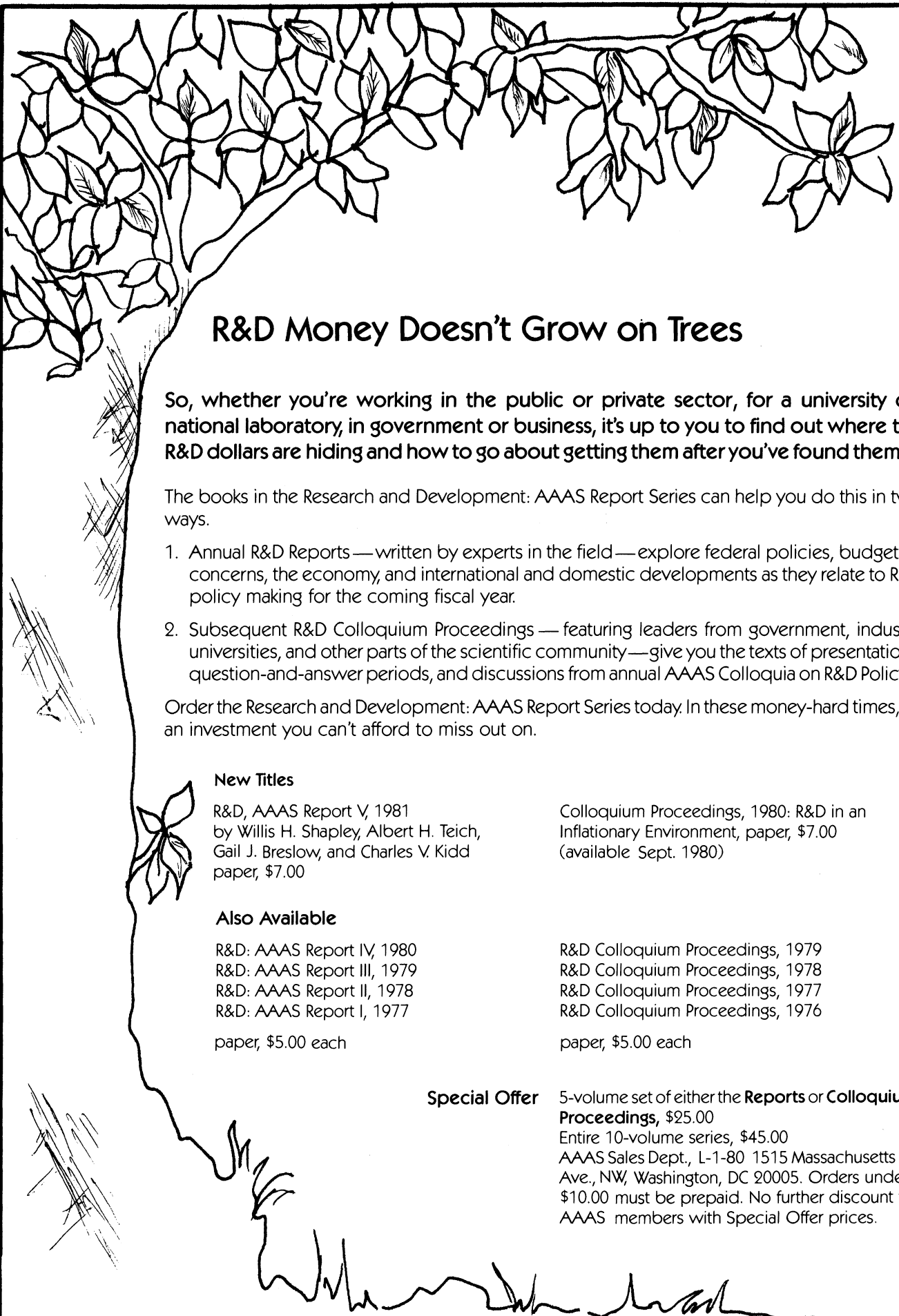
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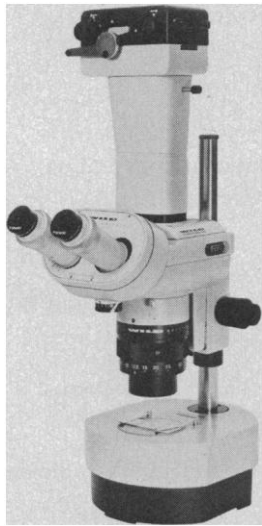
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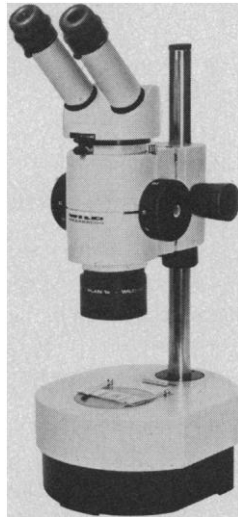
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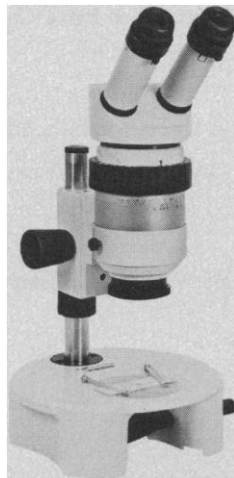
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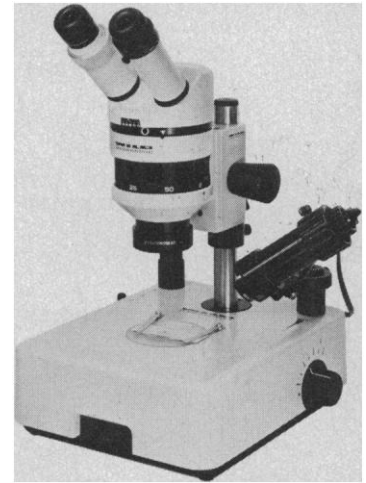


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Mountains in Dufek Massif, Antarctica, in the lowest exposed part of section of the Dufek mafic intrusion. Horizontal layers are apparent. Dark bands are pyroxenite layers. Picture was taken during the aeromagnetic and radio ice-sounding survey. See page 1014. [John C. Behrendt, U.S. Geological Survey, Denver, Colorado]

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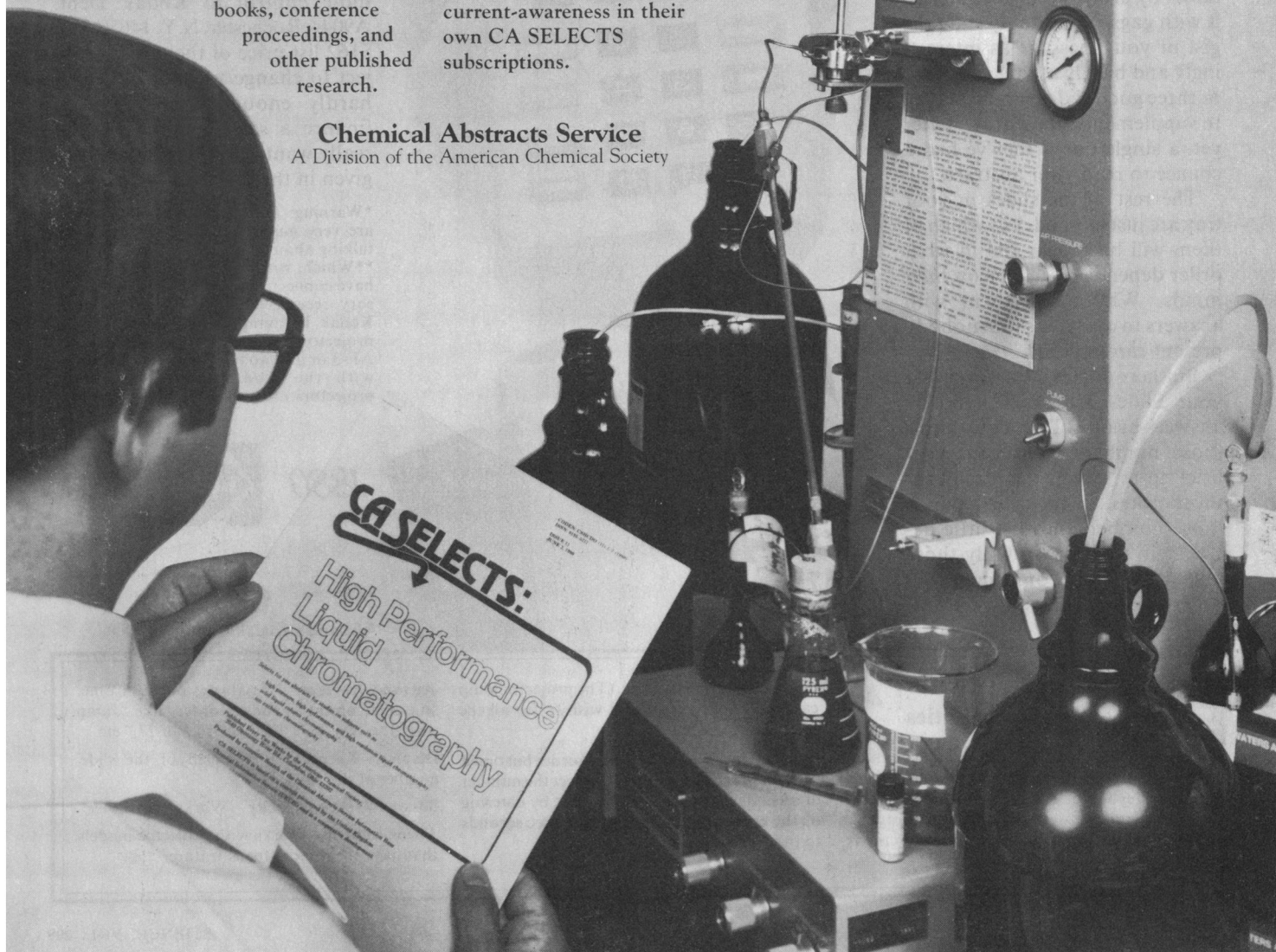
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Environmental Regulation

A decade ago, the Environmental Protection Agency (EPA) was established at the height of popular support for environmental action. The mission of the new agency was to protect and enhance the environment to the fullest extent possible under laws enacted by Congress. In the intervening years, obvious sources of pollution have been identified and remedies initiated. But we have entered a more difficult phase of environmental concerns. Refinements in research and monitoring have made it possible to detect pollutants at incredibly low concentrations. The observations made thus far suggest that many chemicals (some of them suspected to be carcinogenic) may be ubiquitous, usually in very low concentrations. Nevertheless, even the lowest concentrations continue to be a matter of concern to some.

These discoveries have complicated the development of environmental regulations to comply with stringent legislative mandates. Other factors have made the implementation of such regulations increasingly difficult. Congress has been accused of passing laws with unrealistic and conflicting requirements. It has been further accused of failing to appropriate the resources necessary to implement these laws. The result, according to a former deputy administrator, is that EPA is severely overloaded and cannot meet its responsibilities.

Environmental groups urge the agency to enforce strict controls. EPA's detractors argue that regulations are established arbitrarily to meet legislative deadlines and are based on inadequate scientific and technical information. Until recently, there has been little consideration of the economic cost and social impact of environmental protection. The implementation of regulations has become characterized by adversary relationships that inhibit objective use of the best scientific data available and the development of technically optimal solutions.

Remedies have been attempted. In 1977, the National Academy of Sciences undertook a study of decision-making at EPA; some of its recommendations have been implemented. President Carter issued an Executive Order in 1978 instituting specific steps to improve regulation. The General Accounting Office published a report in 1979 on improving the use of scientific and technical information at EPA. There are currently at least three bills under consideration by Congress on regulatory reform and risk assessment.

Each of these measures deals with one or another aspect of environmental regulation; none, however, examines the full range of regulatory activities. What is needed at this time is a comprehensive reexamination of the development and implementation of environmental regulations, based on the knowledge and experience that have been acquired in recent years.

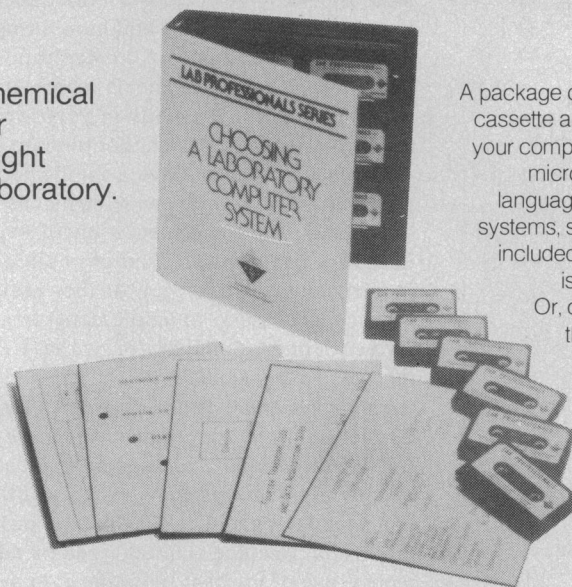
A national commission should be established to develop a consensus among all concerned parties on how environmental protection can best be pursued in the next two decades. The commission should be composed of wise and discerning representatives from each sector involved in regulatory activities—Congress, environmental organizations, industry, the scientific community, EPA administration, and the legal profession. It should examine regulatory activities—from legislation through implementation—by a variety of means, including regional and national conferences. It should make recommendations to Congress for a new, more effective means of achieving environmental protection in which all parties can cooperate.

Public attitudes toward environmental regulation are shifting; much of the progress we have made in environmental protection could be lost. One function of the commission would be to provide a measured response to the current problems of achieving environmental protection. It would provide a forum where both risks and costs could be examined in an open and thoughtful manner. We have learned much about environmental protection in the last decade. It is time to apply that experience and knowledge to the continued improvement of public well-being.—RICHARD C. ATKINSON, Chancellor, University of California, San Diego, La Jolla 92037

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