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Some Data on Book Prices

REPORTS

Geomorphology and Sediment Stability of a Segment of the U.S. Continental Slope off New Jersey: J. M. Robb, J. C. Hampton, Jr., D. C. Twichell

Azidoatrazine: Photoaffinity Label for the Site of Triazine Herbicide Action in Chloroplasts: G. Gardner

Pelagic Sedimentation of Aragonite: Its Geochemical Significance: R. A. Berner and S. Honjo

Retinal Chromophore of Rhodopsin Photoisomerizes Within Picoseconds: G. Hayward et al.

Electrochemical Reduction of Horse Heart Ferricytochrome c at Chemically Derivatized Electrodes: N. S. Lewis and M. S. Wrighton

Insulin as a Potent, Specific Growth Factor in a Rat Hepatoma Cell Line: J. W. Koonz and M. Iwahashi

Rapid Induction of Cellular Strain Specificity by Newly Acquired Cytoplasmic Components in Amoebas: I. J. Lorch and K. W. Jean

Tris(dichloropropyl)phosphate, a Mutagenic Flame Retardant: T. Hudec et al.

Electroretinographic Responses to Alternating Gratings Before and After Section of the Optic Nerve: L. Maffei and A. Fiorentini

Essential Hypertension: Central and Peripheral Norepinephrine: C. R. Lake et al.

Prenatal Exposure to Ethanol Alters the Organization of Hippocampal Mossy Fibers in Rats: J. R. West, C. A. Hodges, A. C. Black, Jr.


PRODUCTS AND MATERIALS

Circulating Bath; Epidermal Growth Factor; Membrane Filters; Scanning Microscope Photometer; Research Software System; Monitor for Pipettor Accuracy; Timers; Porometer; Literature

COVER

Stick-insect, or phasmatid (Didymuria violescens). This is one of a large number of herbivorous insects that may cause considerable damage to Eucalyptus trees in southeast Australia, sometimes producing widespread defoliation. Many of these herbivore species have generalized diets, but may function as specialists in local communities. See page 887. [P. A. Morrow, Department of Ecology and Behavioral Biology, University of Minnesota]
The Threshold of Pain: Coping with Frugality

Early signals from Budget Director Stockman's stronghold are sending anticipatory shivers through the scientific community. News stories trumpet forthcoming cutbacks, rollbacks, and redirections of budgets for scientific and engineering research. How, when, and to what ends are the concerned societies to react?

Evidence accumulates that research budgets are expected to contribute to the inflation blood bank. Whether they will hemorrhage is a different matter. For the scientific community to react on warning would be precipitous and unthinking.

Some perspectives are in order. The national economy, in which science and technology play no trivial part, is struggling. The President has been in office less than a month. He has no science adviser at this critical juncture, which is itself a cause for deep concern, and the key scientific posts in the government are being kept on hold. To go after science budgets in the absence of these advisers may not be the best way to conduct decision-making, but public expectations for fiscal restraint are running high while the economic indicators are running down. Inflation has been no friend of science. There is ample justification for taking a firm and fast grip on the problem.

Whether research budgets will be treated too roughly, relative to everything else, remains to be seen. Science hardly can be considered untouchable relative to resource protection, transportation, immigration, support, foreign assistance, or other legitimate claims on the budget. What lies at the heart of the whole matter is the question of equity. That question cannot be answered until the full array of budget decisions sees the light of day. If science is clearly wronged, remedies can be sought from Congress. Just as there is a time for protest, there is a time for cool consideration of science's interests in the larger framework of the national interest. There is time. Fiscal year 1982 will not even begin for 7 months.

At best, the prospect for the President's tough economic program is not one of sweet national unity. If expansionary budgets are in bad favor, recessive budgets invariably are unpopular. Vested claims on benefits and subsidies besiege the whole budget, and despite a facade of consensus on the need for strong fiscal medicine, economies are resisted bitterly and usually beaten off. Such roughhouse politics do not rest well with science. Even less can be said for the spectacle of this community producing its own "hit list" of rival programs as candidates for execution in order to spare research. Things must not come to that.

The scientific societies face a trying test of their objectivity and political maturity. It is to be hoped that they will focus attention on the equities of the new budget policy and avoid pleading for immunity. What can be debated are the relative share of grief to be inflicted on science and engineering and where surgery is to be taken. The incidence of the cuts can and ought to be argued on the merits, and surely will be. For its part, the government should recognize the differences between investment in science and investment in capital assets like transportation. Science is a long-term creative process, and a multiyear retrenchment would damage seriously the nation's science and technology base. Investment for R & D has its place in supply-side economics. Capping their growth for the duration of the war on inflation would be shortsighted.

The new Administration has set itself a thankless and difficult task. It is entitled to a hearing. It will not have the last word. The system of checks and balances will see to that. As for the scientific community, how it approaches the budget crisis, by reflex or with reason, will tell us much about its ability to cope with stress.—William D. Carey