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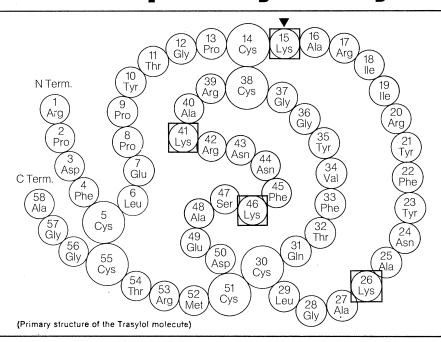


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1) S. R. Bloom: Hormones of the Gastrointestinal Tract. Brit. Med. Bull. 30, 62–67 (1974)
2) A. M. Eisentraut, N. Whissen and R. H. Unger: Incubation Damage in the Radioimmunoassay for Human Plasma Glucagon and its Prevention with "Trasylol". Amer. J. med. Sci. 255, 137–142 (1968).

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#### 28 October 1977

Volume 198, No. 4315

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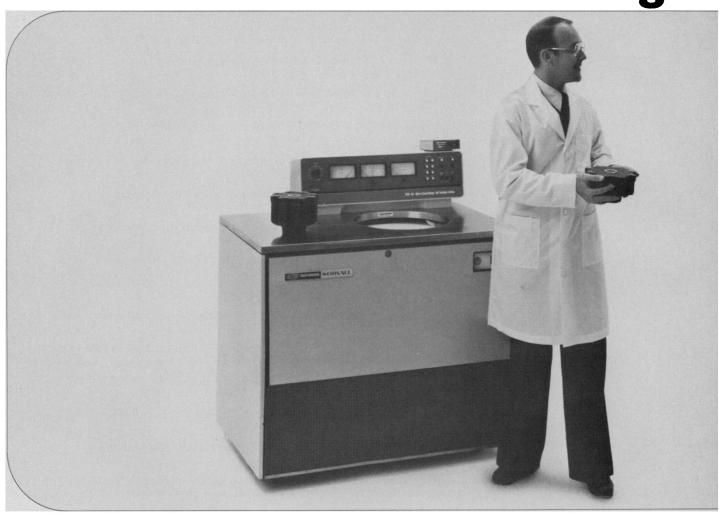
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#### COVER

Asbestiform magnesium chain silicates from Chester, Vermont. Anthophyllite (yellow) has partially reacted to form the newly discovered minerals chesterite (blue and green) and jimthompsonite (pink). Streaked areas are regions of extreme structural disorder. (Optical micrograph of section 45 micrometers thick, cross-polarized light, × 650.) See page 359. [David R. Veblen and Peter R. Buseck, Arizona State University, Tempe; Charles W. Burnham, Harvard University, Cambridge, Massachusetts]

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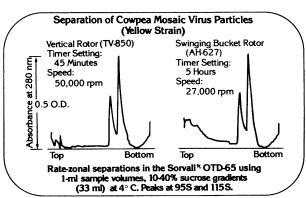


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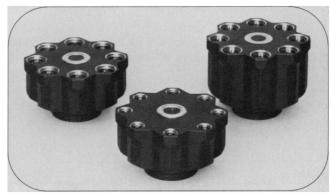
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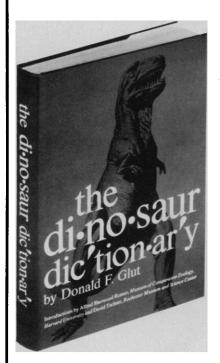
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#### THE DI • NO • SAUR DIC • TION • AR 'Y

#### BY Donald F. Glut

Introductions by Alfred Sherwood Romer, Museum of Comparative Zoology, Harvard University and David Techter, Rochester Museum and Science Center.



The dinosaurs were the most successful animals ever to walk this planet. For approximately 120 million years these creatures, which ranged from the size of a chicken to the largest land animals of all time, dominated the earth. Their peculiar forms and the tremendous sizes some of the dinosaurs attained have made them objects of particular fascination.

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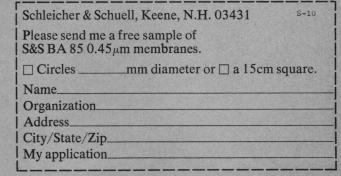
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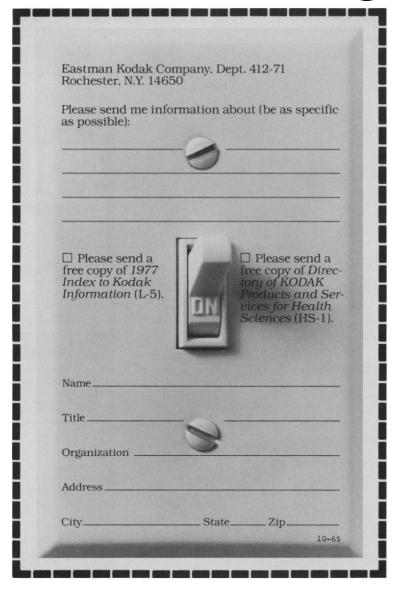
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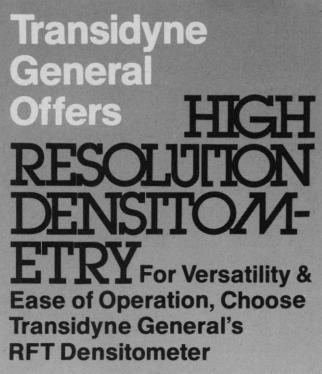
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- (1) Kosower *et al.*, BBA, 363 261 (1974)(2) Lustig *et al.*, PNAS(US), in press.
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356

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#### **Recombinant DNA Legislation—What Next?**

In a surprise move, Senator Edward M. Kennedy (D-Mass.) announced on 27 September that he would withdraw his controversial bill S1217 on the regulation of recombinant DNA research. In a speech before the Medical Writers Association, Kennedy referred to recent scientific evidence suggesting that the risks associated with recombinant DNA research have been overstated. He applauded the participation of scientists and the public thus far in national debate of the issues, and proposed that the NIH guidelines, as revised and updated from time to time, be the basis for new legislation. Kennedy called for a 1-year extension of current NIH guidelines to all parties engaged in recombinant DNA research. He also asked that there be continued lay involvement in the process of "evaluation, development and implementation of our national policy toward science and medical research."

There has been a need for caution and careful deliberation all along as the different positions on recombinant DNA legislation have emerged. Among the positions enunciated, perhaps the most tenable have been those set forth as "nine principles" and ratified by the governing council of the American Society for Microbiology.\* The nine principles address major aspects of the proposed legislation, bills S1217 and HR7897, namely (i) the need for a national commission, whose powers were defined as greater than those of the Secretary of Health, Education, and Welfare, to regulate recombinant DNA research; (ii) local or state preemption that would create a "patchwork" of regulations across the nation; and (iii) the imposition of fines against individual scientists who fail to comply with the letter of the law.

In June, members of the Inter-Society Council for Biology and Medicine actively sought, through biomedical professional societies, to assess the sentiment of the scientific community regarding recombinant DNA legislation. The result was impressive: a coalition of scientific organizations, elected officers of such organizations, and individual scientists rallied to the support of the nine principles. Congressman Paul Rogers (D-Fla.), sponsor of HR7897, moderated his original bill to accommodate most of the nine principles.

On 2 August, Senator Gaylord Nelson (D-Wis.) introduced an amendment to S1217. He pointed out that his amendment differed from the Rogers and Kennedy bills on a number of major issues, including the nature and extent of regulation necessary, definition of activities to be regulated, penalties for noncompliance, and state and local preemption. The reasonable positions set forth in the Nelson amendment quickly gained the support of other senators.

Among the Senators to come forward was Adlai Stevenson (D-III.), who is to be commended for his statesmanlike perspective. The Congressional Record of 22 September records an exchange of letters between Stevenson and the Science Adviser to the President, Dr. Frank Press. Stevenson skillfully reviewed the concerns of scientists and the public regarding recombinant DNA research from 1973 to the present, and placed the early concerns and later alarms in proper relation to one another. Because of data indicating a need for moderation in the assessment of hazard and risk. Stevenson is urging his senatorial colleagues to "enact legislation which is essentially interim in character and which permits great flexibility in accommodating to the scientific evidence as it is developed.'

There is need now for a new era of openness in the dialogue between the scientific segment of our nation and those who represent us in the Legislative Branch. No longer dare we flaunt our perceived power or underestimate the genuine efforts of concerned citizens to protect themselves from risk. The treasured freedom of scientific inquiry can be rapidly eroded if "come on too strong" with self-serving pronouncements and overzealous protective positions. It is a time to speak, but it is also a time to listen—carefully.—HARLYN O. HALVORSON, Rosenstiel Basic Sciences Research Center, Brandeis University, Waltham, Massachusetts 02154

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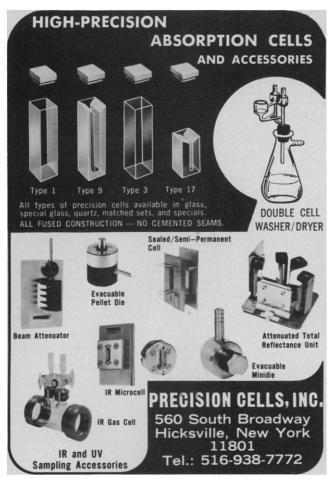
#### Literature

Spectroscopy Standards include solutions for atomic absorption, flame emission, x-ray fluorescence, and optical emission spectroscopy in organo-elemental form. Chemplex Industries. Circle 696.

Scintillation Counting Medium describes Optisol which is formulated especially for assaying samples with low activity. Isolab. Circle 697.

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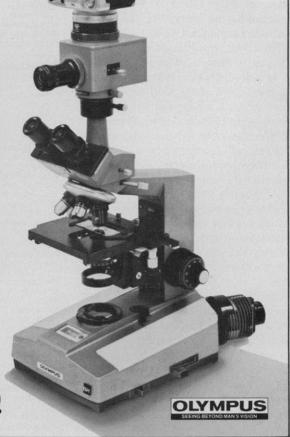
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