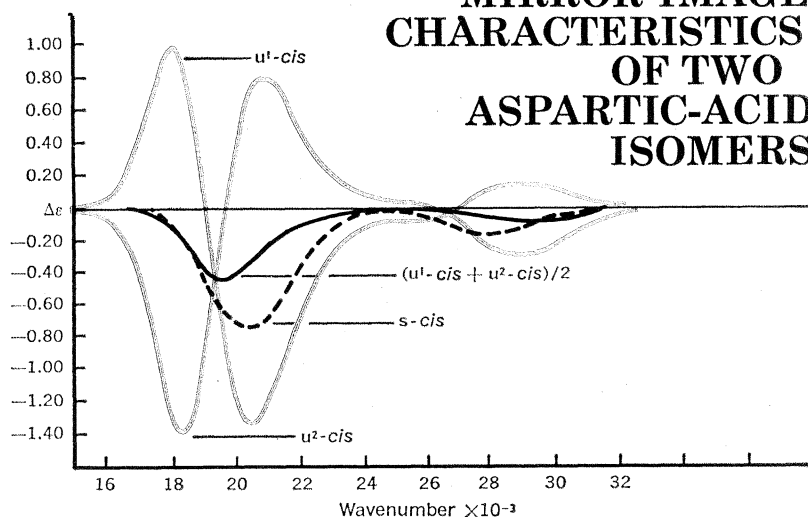


CHEMICAL PROFILES

... drawn by Durrum

PROVING THE MIRROR-IMAGE CHARACTERISTICS OF TWO ASPARTIC-ACID ISOMERS

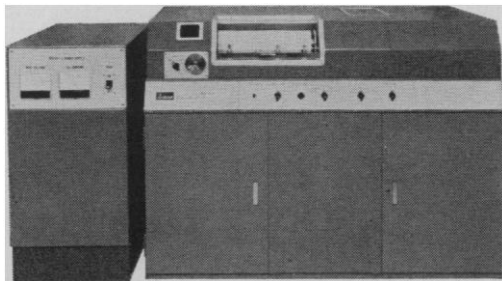


Aspartic acid, with its three donor sites, can form a variety of hard-to-identify chelate isomers. The circular-dichroism profiles drawn here, plotted from data gathered by a Durrum-Jasco CD recorder, are typical of the molecular detective work* that can be achieved with this versatile instrument.

The steric requirements of aspartic acid indicate that in a cobalt-diethylenetriamine complex, three isomers will predominate: one *s-cis* (symmetrical), shown as a dashed-line profile in the drawing above, and two *u-cis* (unsymmetrical) isomers, shown in color. The latter are essentially mirror images of each other, and the Durrum-Jasco instrument provides a way to identify one from the other.

The configurational contributions to the CD traces of the two mirror-image isomers should, in theory, cancel out, leaving an "average" trace that approximates that of the *s-cis* isomer where there are no configurational contributions. As seen here, a very close correlation is achieved, proving that the two *u-cis* isomers are indeed pseudo-mirror images and providing clues as to their specific forms.

The Durrum-Jasco CD recorder is a powerful analytical tool, used throughout the world to classify and identify complex organic and biochemical compounds. In addition to detailing the conformation and configuration of such substances as steroids, alkaloids, proteins, nucleic acids and synthetic polymers, the instrument can serve to measure their concentrations, kinetic properties, and stereochemical characteristics. Durrum-Jasco CD prices start at \$29,600.



*AS REPORTED BY J. IVAN LEGG AND DEAN W. COOKE IN THE DECEMBER 20, 1967 ISSUE OF JOURNAL OF THE AMERICAN CHEMICAL SOCIETY.



DURRUM

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along with Congressmen Kupferman, Saylor, Dent, Scheuer, Button, Cleveland, Farbstein, Walker, Edwards (Calif.), Eilberg, and Podell.

The purpose of the amendment is to define the rights of citizens of this country with respect to the condition of our general environment and to the use and conservation of natural resources. "The right of the people to clean air, pure water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment shall not be abridged." The resolution calls for periodic inventories and evaluation of "natural, scenic, esthetic and historic" resources and restrictions on actions that would adversely affect resource values on public lands. A constitutional statement of the nation's will in respect to resources and environment is essential to provide a legal basis for resolving conservation issues. As it now stands, litigation to protect the public from actions damaging to its environment has been only marginally successful. The courts find insufficient basis in existing statutes to give favorable opinions on behalf of the public in conservation matters, and, since these concerns are relatively new, there is practically no protection in common law. The constitutional amendment would set a guideline which the courts could follow.

The Conservation Bill of Rights, now in the Judiciary Committee, faces a long uphill struggle in Congress, and then it must be ratified by the legislatures of two-thirds of the states. If adopted, it will have far-reaching, positive effects on conservation theory and practice in this country and perhaps on human survival in centuries to come.

JOHN CLARK

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Milkweed Mystery

An unusually large number of the milkweed plants, *Asclepias*, in this area of Nassau County, Long Island, have not formed pods this year. The plants seem to be of average height for this time of year and in all other ways appear normal. Have readers in other areas observed lack of pod formation this year?

WALTER LENER

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