

March 26, 1965

Professor Elbert G. Smith
Department of Chemistry
Mills College
Oakland 13, California

Dear Professor Smith:

Many thanks for the elaboration on "Rule 30".

I am afraid it now eludes my purpose, to attempt a topological interpretation of Wiswesser's original conjecture of a simple choice of initial locant. (Simplicity is not always to be found in cyclic graphs!!)

Has there been a concerted effort to program a code - interpreter, i.e., a system to convert linear code input into some abstract form for computation, such as an incidence matrix?

You may be amused at an example of graphic display output from a first-stage DENDRAL interpreter program.

Would you care to see our computational system sometime? Actually, I am planning a demonstration for Monday afternoon, April 19, when, it happens, Dr. E. Garfield will be visiting.

Sincerely yours,

Joshua Lederberg
Professor of Genetics

P.S. As a matter of topological theory, does new Rule 43 allow a choice between the isomorphs 10A4A vs. 10A4B of the attached figure?

Encl.: Topological mapping of organic molecules. Proc. Nat. Acad. Sci. 53:134-139.