A. L. Goodson

Application of Graph-Based Chemical Nomenclature to Theoretical and Preparative Chemistry

Graph-based systematic names can be regarded as compact connection tables and can therefore be used in substructure searching, drug design, etc. . . . . 315—324

A. Graovac, O. E. Polansky, and N. N. Tyutyulkov

Acyclic and Characteristic Polynomial of Regular Conjugated Polymers and Their Derivatives

The acyclic polynomial of regular conjugated polymers and some of their derivatives satisfies a recursion formula which contains 2^{l+1} terms where 1 stands for the number of bonds linking the monomer units. The coefficients appearing in the recursion are independent on the degree of polymerization; they are functions only of the acyclic polynomials of the monomer unit graph and its subgraphs obtained by successive deletion of atoms serving as the linking sites. The characteristic polynomial of regular polymers with $1=1$ is also studied . . . . . 325—356

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Topological Properties of Benzenoid Systems. XXI. Theorems, Conjectures, Unsolved Problems

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