Eccentric connectivity index of chemical trees

ABSTRACT

The eccentric connectivity index \( \xi_c \) is a distance–based molecular structure descriptor that was recently used for mathematical modelling of biological activities of diverse nature. We prove that the broom has maximum \( \xi_c \) among trees with a fixed maximum vertex degree, and characterize such trees with minimum \( \xi_c \). In addition, we propose a simple linear algorithm for calculating \( \xi_c \) of trees

Keyword: -