

QSAR STUDY ON TOXICITY OF INSECTICIDES : A MOLECULAR CONNECTIVITY APPROACH

SANJAY KARMARKAR¹, VIJAY K. AGRAWAL¹ AND PADMAKAR V. KHADIKAR^{2*}

Toxicities of a series of insecticides were modelled using molecular connectivity indices (${}^0\chi$, ${}^1\chi$, ${}^2\chi$). The results have shown that ${}^0\chi$ is appropriate for this purpose. The multiple regression analysis has shown that a bi-parametric model containing ${}^0\chi$ and ${}^1\chi$ is the best model for modelling toxicity.