
Abstract:

The dynamics of enzyme catalyzed reactions and biochemical reaction systems have received growing attention in the last few years. We introduce the variety of dynamical behaviours which are found in a single enzyme reaction, the peroxidase-oxidase reaction and the dynamical behaviours of a biochemical pathway involving receptors, enzymes, ion channels and pumps: the calcium signalling pathway. We discuss the importance and the implications of dynamic behaviour for the understanding of the functioning of biochemical networks in the cell.