

# Mathematical Approach to Metabolic Control Analysis

Mustafa Bayram\*

\* Yildiz Technical University, Chemical and Metallurgy  
Faculty - Istanbul, Turkey

## **Resumo**

The chemical changes that take place in a cell or an organism that produce energy and basic materials needed for important life processes. MCA investigates the relationship between the variables and parameters in a biochemical network systems. The problems of engineering increased flux in metabolic pathways are analyzed in terms of the understanding provided by metabolic control analysis. Metabolic control analysis allows one to quantify the behaviour of a metabolic pathway in steady state in terms of dimensionless coefficients. The solution to this problem is to develop computer software to automatically carry out this procedure.