

Abstract

In this presentation an overview will be given of recent developments in modelling of postharvest operations. First lumped parameter models to describe the dynamics of quality attributes of fruit and vegetables will be discussed. It will then be shown that when the spatial distribution of a variable cannot be ignored, for example in the case of gas transport inside fruit, a distributed parameter model is required. A recent development is multiscale models to describe phenomena for which different length scales are relevant. Some advances in this area are discussed as well. The concept of variability will be introduced, and it will be shown how randomness can be incorporated into existing quality kinetics models.