GAIL WOLKOWICZ, McMaster University, Department of Mathematics and Statistics, Hamilton, Ontario L8S 4K1
Competition in a chemostat: The effect of delayed response in growth

The chemostat, a laboratory apparatus used for the continuous culture of microorganisms will be described. After first considering the basic mathematical model for n species of microorganisms competing exploitatively for a nutrient that is limiting at both low and high concentrations, under the simplifying assumption that growth based on consumption occurs instantaneously, we explore the effect of delayed response to growth. This represents joint work with Huaxing Xia and Lin Wang.