1067-92-461   **Frederic Mazenc** (`Frederic.Mazenc@lss.supelec.fr`), Projet INRIA DISCO, CNRS-Supelec, 3 rue Joliot Curie, 91192, Gif-sur-Yvette, France, and **Michael Malisoff*** (`malisoff@lsu.edu`), Department of Mathematics, 303 Lockett Hall, Louisiana State University, Baton Rouge, LA 70803-4918. *Recent Results on Control Problems for Chemostats.*

I will summarize my joint research with Frederic Mazenc on feedback stabilization of coexistence behaviors in chemostats with multiple species and one limiting substrate. Our results are largely based on Lyapunov functions, and they can determine the effects of actuator errors, feedback delays, and model uncertainty. (Received September 11, 2010)