Short-term Visit Report: Samares Pal

Macroalgae and corals compete for the space available in seabed in coral reefs. Several benthic macroalgae species produce allelopathic chemical compounds that are detrimental to corals. Release of allelochemicals by macroalgae influence the microbes in the water nearby causing coral diseases. The abundance of macroalgae can change the community structure towards a macroalgae dominated reef ecosystem. Using mathematical modeling, Samares Pal and Suzanne Lenhart have begun to investigate black band disease in corals in a reef system with microalgae.