A microbial community is often complex consisting of several populations which can interact with each other by antagonistic or cooperative processes. In our current society, where sustainability and climate compatibility are at the forefront, many microbial community-dominated processes are considered to be superior to other processes. As such, the availability of tools and models for behavior prediction and the proper management of such complex microbial communities, commonly referred to as Microbial Resource Management (MRM), is increasingly of interest. At the Center for Microbial Ecology and Technology (CMET), Prof. Boon is leading the Microbial Community Engineering group (MiCE). This MiCE group examines the biodiversity-stability relationship and the effect of biodiversity on ecosystem functioning under different environmental conditions have become major research foci. Since the interactions between microorganisms within a community is essential for developing MRM tools and models, CMET also studies microbial interactions (cell-cell communication, horizontal gen transfer, biofilm formation, etc.). The results from this strategic research confirmed in engineered as well as natural environments.

See also <http://www.cmet.ugent.be/users/prof-dr-ir-nico-boon>