Tailoring energy transport in molecules by confined photons

Tal Schwartz
School of Chemistry, Tel-Aviv University

Abstract

When molecules are embedded in nano-scale photonic structures, the strong confinement significantly modifies the nature of light-matter interactions. In my talk I will discuss how such a mechanism can be used to control energy transport processes in hybrid photonic-organic systems, and to boost such processes by orders of magnitude, providing exciting opportunities for organic electronics and light-harvesting applications.