

Seminar:**Dynamic self-assembly of biomolecules at high-resolution**

Uri Raviv, Institute of Chemistry

The Hebrew University of Jerusalem

When: **3/6, 14:00**

Where: **K:F**

Abstract:

Using solution x-ray scattering and our unique data analysis program, we resolved at high resolution, how tubulin self-assembles into microtubules under different conditions (Nature Materials, 13, 195) and how wtSV40 packages its 5.2kb circular DNA about 20 histone octamers in the virus capsid. This structure, known as a mini-chromosome, is highly dynamic and could not be resolved by any microscopy methods (NAR, 41, 1569, 2013). Using time-resolved solution SAXS, stopped-flow, and flow-through setups the assembly process of VP1, the major capsid protein of the SV40 virus, with RNA or DNA to form virus-like particles (VLPs) was studied in msec temporal resolution (J. Am. Chem. Soc. 134, 8823, 2012). More recently we extended these studies to follow the assembly of HBV capsid as a function of time.