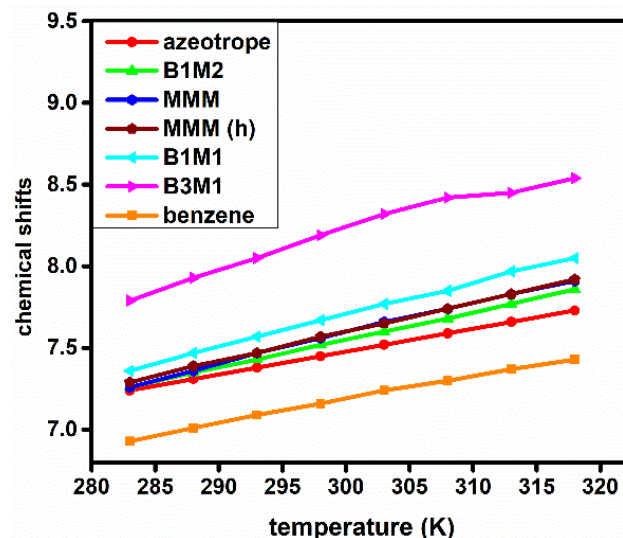
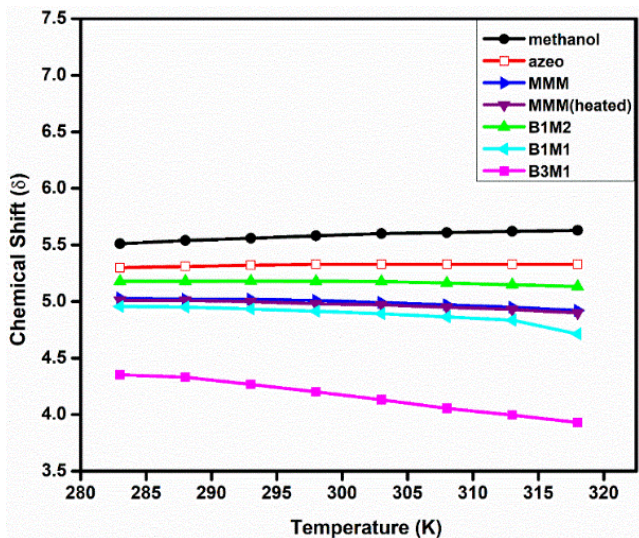


P5041: Structural Fluctuations in an Azeotrope: Understanding the Benzene-Methanol Azeotrope

Sneha Banerjee, Dr. Sohini Sarkar, Dr. Pankaj Mandal. Indian Institute of Science Education and Research (IISER), Pune.



❑ Formation of an azeotrope is a temperature driven process.

❑ We provide experimental proof that the intermolecular dynamics is starkly different for the azeotrope when compared to the MMM and all the other mixtures.

❑ The amplitude and the shape of the spectral density (SD) is different for the azeotrope.

❑ Our results imply that the benzene-methanol binary system segregates and forms benzene-benzene and methanol-methanol clusters.

❑ Heating the binary system, provides the energy to break these clusters and to form the azeotrope.

