Mpemba Effect on Nonaqueous liquid: A Study of Non-equilibrium Facilitated Freezing Rate Enhancement

Hot water freezes faster than cold water. This phenomenon is known as Mpemba effect. It has been noted by Aristotle, later Francis Bacon and Descartes. In recent years there has been a vigor in the research community studying the science behind it. However, the real reason and mechanism is still unclear. In this poster we will present the results of a study conducted on a nonaqueous solvent. The results will include, whether Mpemba effect exists for nonaqueous system. If so, what is the temperature range where such effect is observable for these systems. The results of this study will help clarify the underlying reason for Mpemba effect.