21COE 物質階層融合科学セミナー物性コロキュウム

日時: 7月23日(月)16:30-18:00

場所: 理学部 総合研究棟 745号室(大学院講義室1)

講師: 土井 正男(東京大学 大学院工学研究科)

題目: Micro-Meso Modeling of Polymer Adhesion

要旨: Polymer adhesives are extensively used in our daily lives and modern technology. A particular class of adhesives, called the pressure sensitive adhesives (PSA) is an adhesive which sticks to solid surfaces instantaneously without any process that causes compositional change such as drying or chemical reaction. This property is called tackiness. A method of testing the tackiness is the probe-tack test, in which a flat-ended probe is indented onto the adhesives, kept contact for a given time, and pulled out at a constant speed and the stress-strain curve is measured. The stress strain curve obtained by this test is interesting. The stress grows rapidly when the probe is pulled, but then starts to drop, showing a plateau region before the adhesive is completely separated from the probe. We are studying this process by microscopic observation and modeling/simulation. In this talk I summarize our recent study.

連絡先: 川勝 年洋 (795-6438)

16:15 よりコーヒー、紅茶、お菓子を用意します。

世話人: 岩井伸一郎(795-6423)中島龍也(795-6441) 松井広志(795-6604) 内田就也(795-7756)