A CONTROL OF GEOMETRY OF ADSORBED MOLECULES IN COATINGS STUDIED BY SURFACE ENHANCED RAMAN SCATTERING

Q. XUE, Department of Polymer Science and Engineering, College of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210093, China.

An experimental investigation of control of optimal geometrical arrangements for adsorbed thin film by entropic depletion interactions between adsorbent and metal wall was performed. The adsorbed ultra thin layers on metal were investigated by surface enhanced Raman scattering spectroscopy^a. Bipyridine, and two engineering polymers were found to form ordered structures which covered metal surfaces, respectively, by adding low molecular weight poly(ethylene glycol) into their solutions in ethanol.



^aD. S. Zhou, J. F. Zhang, L. Li, G. Xue, J. Am. Chem. Soc. <u>125</u>, 11774 (2003)