We investigated interactions between fullerene molecule and amine group from 3-aminopropyl-trimethoxysilane (3AT). Theoretical calculations show that the material obtained as a result of interactions between 3AT and C\textsubscript{60} fullerene may have extremely low dielectric constant around 1.6, so it could be considered as a candidate for ultra low-k (ULK) material applications. We prepared films composed of 3AT and fullerene by using two preparation techniques: spin-coating and evaporation. Interactions between these two components were investigated by using X-ray photoelectron spectroscopy (XPS) and Near Edge X-ray Absorption Fine Structure Spectroscopy (NEXAFS). We found that there are strong chemical reactions between the nucleophilic nitrogen atom from 3AT and electrophilic fullerene molecule. Results of NEXAFS measurements suggest that due to direct interactions between 3AT and C\textsubscript{60} the shape of fullerene molecule is changed.

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