

The study of chlorophyll / polyaniline core-shell structure

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Synthesis of polyaniline and chlorophyll via sol-gel reaction has been studied. With the addition of APS increases, the feature spectral signal of the core-shell nano-particles in FTIR has decreased. When the molar addition of APS is increased to 1.75-fold with respect to that of aniline, the characteristic absorption peaks of chlorophyll are decreased as observed from UV-vis and FT-IR spectra. It may be due to polyaniline become highly oxidized leaving the chlorophyll oxidation state disappeared which in turn, proved that the formation of a core-shell structure. FESEM surface morphology showed that the polyaniline / chlorophyll core-shell structure is an elongated strip rod shape.

Biography

S-F Su completed his PhD at the University of Southern Mississippi, USA in 2004. He is the Head of the Polymeric Materials Procession Lab at the STUST. His major areas of expertise include various aspects of synthesis of polymeric membranes and its application, in particular in the field of fuel cell. Other of his research areas includes the application of bio-optical materials.

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