

**Characterization and Evaluation of the Acrylonitrile Grafted Biodegradable Film**

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**Abstract** - Acrylonitrile has been graft co polymerized onto a starch-based biodegradable film. The characterization of the acrylonitrile grafted biodegradable film has been done by IR spectroscopy, XRD, SEM and thermal analysis. The evaluation of the film was made in terms of its thickness, density, water absorption, water vapor transmission, mechanical properties and biodegradability. Since grafting onto a polymer is mainly confined to the surface, the modification of polymer by grafting is more pronounced in the film form than any other form of the bulk polymer.

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