

**ON-LINE RAMAN SPECTROSCOPY FOR MONITORING OF FREE RADICAL GRAFTING IN A MODEL
TWIN SCREW EXTRUDER**

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Abstract

A fiber optic Raman spectroscopy is developed to monitor the grafting of GMA onto LDPE in a model non-intermeshing counter rotating twin screw extruder which has a series of glass windows along the extruder. The fiber optic probe is mounted on the glass windows of the extruder. The melting behavior and GMA concentrations are followed along the extruder. The reaction takes place at the second chamber of the extruder as indicated by the reduction of monomer concentration and LDPE melting behavior.

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POLYMER ASSISTED LAMINATION OF CERAMIC GREEN TAPE