

# Synthesis of Dendronised and Dialkyl Fluorene Based Hybrid Polymer under Microwave Irradiation

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**Abstract:** *We report a rapid synthetic strategy to afford of new dendronised and dialkyl fluorene based hybrid polymer by employing Microwave radiations. This polymer was synthesized by the reaction of 2,7-dibromo-9,9-di(4-(2,3,4,5-tetraphenylphenyl)benzyl) fluorene with 2,7-dibromo-9,9-dipentyl fluorene under microwave irradiation using nickel catalyst. The synthesized dendronised and dialkyl fluorene based hybrid polymer was fully characterized by spectroscopic techniques. We believe that, this dendronised and dialkyl fluorene based hybrid polymer can be emerge as a promising material for blue-light-emitting diodes.*

**Keywords:** Fluorene; Polyphenylene; Dendrimers; Microwave; Polymerization

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