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Sustainable synthesis of a high performance inter-polymer anion exchange membrane employing concentrated solar radiation in a crucial functionalization step

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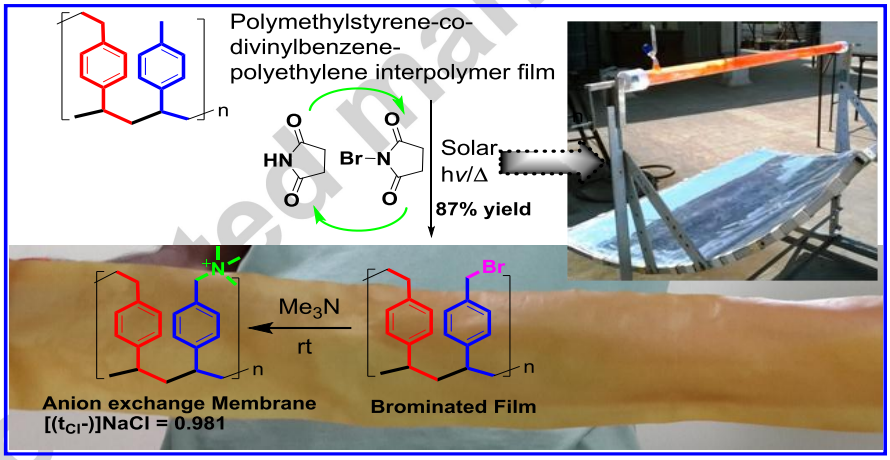
GRAPHICAL ABSTRACT



ABSTRACT

Preparation of an anion exchange membrane (AEM) from polymethylstyrene-co-divinylbenzene/polyethylene (P*p*-MSt-co-DVB/PE) inter-polymer film (IPF) was reported recently. Functionalization of the above IPF was achieved through photo-thermochemical benzylic bromination with N-bromosuccinimide. The end result was the same as that achieved through chloromethylation of conventional styrene-DVB IPF, while avoiding use