

**ELECTROLUMINESCENCE OF PHENYLENE–VINYLENE RANDOM
COPOLYMERS WITH DIFFERENT CONJUGATION LENGTHS**

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Abstract

PPV random derivatives were synthesized and characterized. Polymer light emitting diodes (PLEDs) were assembled using the random copolymers as emissive layer and showed EL in the blue-green region in function of the method of preparation. The increase in the average conjugation degree in the polymer chain led to the reduction of the turn-on voltage of the device. The addition of Alq3 as ETL increased tenfold the luminescence efficiency.