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M. Emin Cinar, Sule Taskiran Cankaya, Asli Capan, Mehmet S. Eroglu, Turan Ozturk

PII: S0014-3057(18)30472-5

DOI: <https://doi.org/10.1016/j.eurpolymj.2018.05.001>

Reference: EPJ 8399

To appear in: *European Polymer Journal*

Received Date: 9 March 2018

Revised Date: 24 April 2018

Accepted Date: 3 May 2018



Please cite this article as: Emin Cinar, M., Taskiran Cankaya, S., Capan, A., Eroglu, M.S., Ozturk, T., Thieno[2,3-*b*]thiophene Based Polymers: Synthesis and Optoelectronic Properties, *European Polymer Journal* (2018), doi: <https://doi.org/10.1016/j.eurpolymj.2018.05.001>

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# Thieno[2,3-*b*]thiophene Based Polymers: Synthesis and Optoelectronic Properties

M. Emin Cinar,<sup>\*a,b</sup> Sule Taskiran Cankaya,<sup>a</sup> Asli Capan,<sup>a</sup> Mehmet S. Eroglu,<sup>c,d</sup>  
and Turan Ozturk<sup>\*a,d</sup>

<sup>a</sup>Department of Chemistry, Istanbul Technical University, Maslak, Istanbul 34469, Turkey

<sup>b</sup>Department Chemie-Biologie, Universität Siegen, 57068 Siegen, Germany

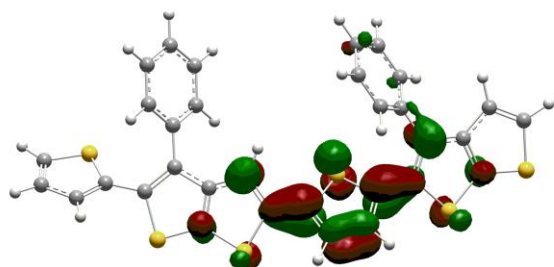
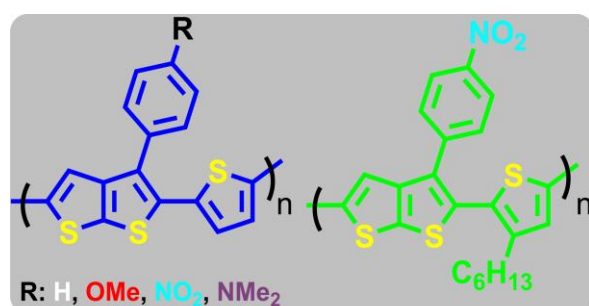
<sup>c</sup>Department of Chemical Engineering, Marmara University, 34722, Kadikoy, Istanbul, Turkey

<sup>d</sup>TUBITAK-UME, Chemistry Group Laboratories, PO Box 54, 41471, Gebze, Kocaeli, Turkey

\*Corresponding Author. Tel 90 212 285 6994, Fax 90 212 285 6386,

E-mail: emin.cinar@uni-siegen.de; ozturktur@itu.edu.tr

## Graphical abstract



## Highlights

- In spite of the cross-conjugated TTs, polymers obtained via Suzuki cross coupling with thiophene demonstrated bathochromic shifts with respect to their monomers in UV-Vis investigations up to 203 nm.
- While the polymer with H unit had the smallest band gap of 2.18 eV, the highest one was observed to be 2.65 eV for NMe<sub>2</sub> containing polymer. Electrochemical studies revealed relatively low oxidation potentials recorded between 1.10 and 1.31 V.
- The experimental results were supported by DFT and TD-DFT computational studies.

## Abstract

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