

DESIGN, SYNTHESIS AND INVESTIGATION OF COUMARINE-BASED DERIVATIVES

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Compounds with electroactive moieties are widely studied due to their good processability and applications in various optoelectronic devices including organic light emitting diodes [1] [2]. Their thin films on the different substrates can be fabricated by using simple techniques, i.e. casting or spin-coating from solutions. Such advantages are important in the fabrication of low cost, large area devices.

In this work, four new coumarine-based compounds were synthesized and their photophysical, electrochemical and thermal properties as well as device characterization studied.

Acknowledgement. This research was funded by a grant (No. S-LZ-19-2) from the Research Council of Lithuania.

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[2] Y. Shirota, H. Kageyama, Charge carrier transporting molecular materials and their applications in devices, Chem. Rev. **107**, 953-1010 (2007).