

# SYNTHESIS AND CHARACTERIZATION OF FULLY CONJUGATED ISOXAZOLE DENDRIMERS

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## ABSTRACT

Conjugated isoxazole dendrimers are intriguing molecules with many potential applications as conducting materials, in medicine and in polymer science. We are interested in preparing phenyl isoxazole dendrimers (fig. 1) and analyzing their photophysical properties. This dendrimer system is fully conjugated and is expected to be rigid due to steric constraints<sup>1</sup>. It is anticipated that there will be a geometric potential in these molecules because of the “tree-like” structure<sup>2</sup> and the dendrimers should have potential applications as light harvesting materials.

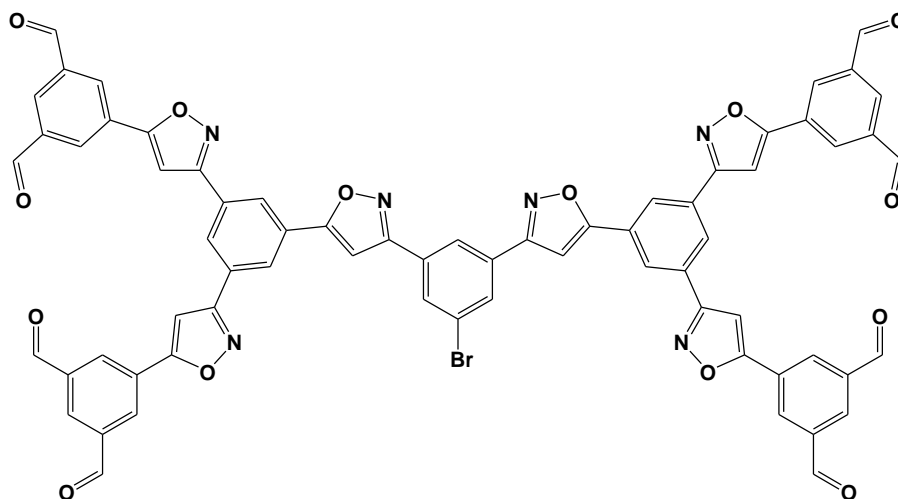


Figure 1. Second generation (G-2) phenyl-isoxazole dendrimer.

## References:

1. Higuchi, M.; Shiki, S.; Yamamoto, K. *Org. Lett.* **2000**, 2, (20), 3079-3082
2. Albrecht, K.; Yamamoto, K., *J. Am. Chem. Soc.* **2009**, 131, (6), 2244-2251.