

## SYNTHESIS AND CYTOTOXIC ACTIVITY OF *bis*-PYRANO-1,4-BENZOQUINONES

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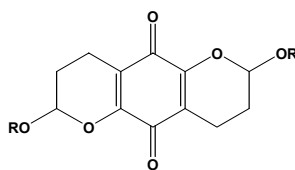
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The pyrano-1,4-benzoquinone core occurs in many natural products and pharmaceutically important compounds<sup>1</sup>. Some representative examples<sup>2</sup> are isoasterriquinone, irisquinone, geldenamicyn and dactyloquinones. These wide range of biological applications have stimulated considerable interest in evolving newer synthetic methods for the construction of benzoquinone derivatives<sup>3</sup>.

This communication describes an efficient method to synthesize *bis*-pyran-benzoquinones based on a domino three-components reaction, from easily available starting materials. The results of cytotoxic activity of the benzoquinones synthesized will be also presented.



[1] Á.G. Ravelo, A. Estévez-Braun, E. Pérez Sacau. *Studies in Natural Products Chemistry*, **2003**, 29,719.

[2] A.G. Ravelo, A. Estévez-Braun, H. Chávez-Orellana, E. Pérez Sacau, D. Mesa-Siverio. *Current Topics in Medicinal Chemistry*, **2004**, 4, 241-265.

[3] M.A. Brimble, M.R. Nairn.; H. Prabakaran, *Tetrahedron*, **2000**, 56, 1937.