



UMD Department of Chemistry & Biochemistry
Spring 2022 Seminar Series
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Chem 200 ~ 3:00 PM

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A Novel Synthesis of Benzoxazolone and Derivatives via a Ring Expansion/Reduction Approach

Benzoxazolone is a heterocyclic aromatic molecule whose structure can be found in a wide range of biologically active molecules including but not limited to antibacterial, anticancer, analgesic, and anti-HIV, in addition to having some applications in material science. A well-established approach for synthesizing this class of compounds is by cyclization of aminophenol derivatives. We present an alternative route of synthesis of this class of compounds from readily available isatin derivatives through an oxidative ring expansion and ring reduction approach. Various optimization studies and a range of derivatives synthesized will be presented.

