



2014

*International Conference of Lithuanian Chemical Society*

**CONFERENCE PROCEEDINGS**



**KAUNAS, LITHUANIA**

**4/25/2014**

# NUCLEOPHILIC RING OPENING OF *N*-PROTECTED LEAKADINE IN LIQUID SULFUR DIOXIDE

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Aziridines represent an interesting class of compounds that are immensely valuable in organic and medicinal chemistry.<sup>1</sup> Because of the ring strain, the most common transformations of aziridine cycle are the ring opening reactions that can be realized under electrophilic or nucleophilic conditions.<sup>2,3</sup>

Here we present a new synthetic process of Leakadine **1** opening with metal halides and other nucleophiles in liquid sulfur dioxide as a solvent. The efficiency of each aziridine ring-opening reaction was monitored in several solvents in parallel experiments in three different temperature modes. As a contrast solvents classical media such as DMSO, MeCN and TFE were used. I and II group metal halides were used as nucleophiles (Fig.1.).

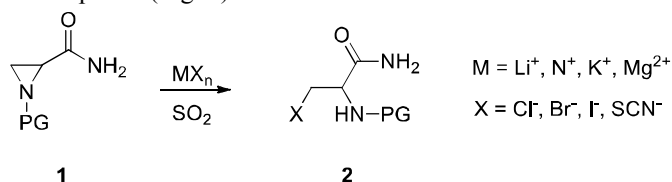


Fig. 1. Ring-opening of Leakadine **1** with metal halides

The obtained results showed that aziridine ring opening in liquid sulfur dioxide occurs incomparably faster and cleaner than in other solvents. Investigations towards this process with various other aziridine substrates are underway in our laboratory.

## References

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