



**SDI Review Form 1.6**

Journal Name:	<a href="#">Asian Journal of Chemical Sciences</a>
Manuscript Number:	Ms_AJOCS_35504
Title of the Manuscript:	New synthetic pathways for Thiocarbohydrazide and Salicylaldehyde azine compounds
Type of the Article	Original Research Article

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



**SDI Review Form 1.6**

**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<p>1. General Comments.</p> <p>The authors have presented work that claims to be a "new" process whereby a higher yield for a known reaction is achieved. I view this merely as a yield optimization experiment and while interesting, constitutes a very minimal contribution to thiocarbazon chemistry. Modification which would make the paper much stronger include:</p> <p>a. Employing this method to investigate a short series of derivatives which would demonstrate the scope and efficacy of this reaction.</p> <p><u>And/or</u></p> <p>b. Prepare a series of electron-withdrawing and electron-donating substituted derivatives of this hydrazine product and examine the kinetics of the overall process, which can help elucidate the proposed mechanism.</p> <p>Notwithstanding these shortcomings, the following comments are offered to address existing issues with the presented manuscript:</p> <p>c. Content Comments.</p> <p>Page 8, Lines 166-169. The mechanism presented is incomplete- a number of electron-pushing arrows have not been presented to depict molecular changes. Issues I see are:</p> <p>(1) The pyridine promoted decomposition of the thiocarbazon is not presented in this depiction.</p> <p>(2) None of the proton transfers which are required are shown.</p> <p>(3) Additionally, the rearrangement whereby the two hydrazine structure lose an equivalent of hydrazine is not clearly shown in a step-wise fashion.</p> <p>(4) How is the CS<sub>2</sub> regenerated as depicted in Figure 6?</p> <p>(5) Finally, why is an "intermediate" depicted? The intermediate is the final product. Unless there is proof of such a non-H bonded entity prior to isolation of the final product, it should not be included.</p>	<p>Thank you so much for these valuable comments. The advice of advancing/testing this new mechanism to a series of electron-withdrawing and electron-donating substituted derivatives has been taken seriously and the experiments will be executed soon.</p> <p>All other comments and corrections have been addressed in the manuscript.</p>
<b>Minor</b> REVISION comments	<p>Editorial comments.</p> <p>a. Page 1, Line 12. Change "And by..." to "By..."</p> <p>b. Page 1, Lines 19-20. Change the word "used" to "use" in all instances.</p> <p>c. A thorough editing should be performed prior to any resubmission to ensure proper English language usage.</p>	



SDI Review Form 1.6

	<p>Content comments.</p> <p>a. Page 2, Lines 52, 62, 69. For known compounds, literature melting points should be reported along with the citation for the readers to verify compound identity.</p> <p>b. Page 3, Line 83. The melting point for salicylaldehyde azine must be reported.</p> <p>c. Page 3, Line 91. The operating frequency for <sup>13</sup>C NMR should be reported (~100 MHz).</p> <p>d. Page 8, Lines 161-164. Figures 3 and 4 are not of sufficient resolution and need to be presented at a higher resolution to be readable.</p>	
<b>Optional/General</b> comments		