



SDI Review Form 1.6

PART 1:

Journal Name:	<u>American Chemical Science Journal</u>
Manuscript Number:	2013_ACSj_4957
Title of the Manuscript:	Fe_{0.2}Al_{1.8}Zn₁₀O₄ Composite: An Efficient Catalyst for the Synthesis of 1, 4-Dihydropyridine Derivatives
Type of the Article	Research paper

General guideline for Peer Review process is available in this link:

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

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



SDI Review Form 1.6

PART 2: Review Comments

	Reviewer's comment	Author's comment <i>(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)</i>
<u>Compulsory</u> REVISION comments	1. Describe the catalyst synthesis in the experimental section or reference should be cited. 2. The authors were mentioned about the catalyst recyclability. However the data for recycling studies is missing. It would be good to include the data 3. The Authors mentioned no leaching of catalysts observed. However no explanation on what happened to the catalyst after third cycle. 4. How the authors confirmed that there is no leaching of catalysts? need a proper explanation in the results and discussion 5. In order to show the efficiency the catalytic activity must be compared with the simple Lewis catalyst. 6. What is purpose of adding 2 drops of HCl in the reaction mixture as indicated in the Table 1? 7. Since the number of catalysts and methods developed for the DHP synthesis authors should clearly elaborate the novelty of this catalyst. 8. The results and discussion part is too short and discussing only the common features of the DHP synthesis 9. The authors have published a research paper in using the same catalyst for the synthesis of DHP derivatives using MW. However the above paper not cited in the present manuscript. 10. The substituent R is attached to the phenyl ring and it is misleading in the Table 1. For example, entry 1 the substituent R is phenyl ring but if we compare to scheme 1 the substituent is biphenyl. It would be correct to remove the phenyl ring from the Scheme 1 and attach the R to the DHP moiety directly. 11. the manuscript contains grammatical errors and this should	



SDI Review Form 1.6

	be avoided while making the manuscript. some examples are as follows: - line 43 : homogeneous.... corrected as homogeneous - scheme 1 remove phenyl ring and attach R directly to DHP moiety - DHP derivative 7 correct the susbtituent n-C₉H₉ - line 68 : spectrophotometer..... corrected as spectrometer - line 72 : Section1.1 should be corrected as 2.1 - line 99: dimethyl.....corrected as diethyl - line 72: 1,4-dihydropyridines derivatives should be corrected as 1,4-dihydropyridine derivatives. - line 84: is... should be corrected as ...are... since the beginning is plural	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		

Reviewer Details:

Name:	Vajiravelu Sivamurugan
Department, University & Country	Research and Development, DyStar Singapore Pte Ltd, Singapore