SDI Review Form 1.6

Journal Name:	**International Research Journal of Pure and Applied Chemistry**
Manuscript Number:	**2014_IRJPAC_12459**
Title of the Manuscript:	**LIQUID LAUNDRY DETERGENTS BASED ON NOVEL POLYMERIC SURFACTANTS**
Type of the 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:

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PART 1: Review Comments

	Reviewer's comment	**Author's comment** *(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)*
Compulsory REVISION comments	**Experimental section is insufficient. Synthesis of the polymer should be described more precisely.** Line 47. What does mean a "stoichiometric quantity" here? Table -1 shows only weight % composition. Line 49-50. "desired viscosity, and molecular weight" are not clear. Please indicated the specific value of the desired viscosity and molecular weight in the Results and discussion section. Line 51. "by adding additional water after 0.5h". The reviewer thinks that by the addition of water at this point, reverse reaction, hydrolysis of ester bond, may occur. Line 54. Why oxirane bond is produced by this reaction? Line 61 and Line 73. Are VI and Vi identical? Line 65. Please specify 1% HCl. Does 1% HCl mean the concentrated hydrochloric acid or 1wt% hydrogen chloride? Line 74. Does acid value of the polymer mean the combined value of HCl derived acid value and citric acid derived acid value? Line 75. Please provide the reasons why pH of Vi is higher than those of A and B because acid value of Vi was higher than those of samples A and B. Line 77. Please provide the method to determine the % solid value. Line 82. There may be no hydrophobic moiety in the polymer. Please give the calculation method to determine the HLB value.	

	Line 85. What concentration of polymer you use to measure the surface tension? Line 89. What concentration of polymer you use to measure the foam volume? Line 94. Table-3. Table 3 is complicated and some confused. Please clarify the table. Line 104. What is 03? Line 108. What is the chemical structure of S.L.E.S.=sodium lauryl ether sulphate? This may be ill named. Line 120. Please specify the "commercial" substance. **Results and discussions section is insufficient. First, experimental results should be adequately described. Then, discussions based on the experimental results should be described.** Line 140. Assignment of NMR peaks should be given in order to demonstrate the chemical structure of the polymer. Line 146. Table 1 shows that only 5% PEG was used for sample VI. Is this ok? Line 153. How oxirane is formed? Please describe the reasons in the discussion section. Line 188. Toiltries may be Toiletries. Line 191. Toiltries may be Toiletries. Line 207. Year 1945 may be 1995. Please check. Line 213. Forth edition may be fourth edition.	

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Minor REVISION comments	Line 14. Keywords. HLB ratio should be HLB. **Introduction section should be minor revised as follows.** Line 16-17. The sentence "surfactants are based on various crude petroleum products" is curious. Please reconsider this. Line 20. What is "acid slurry"? Please define acid slurry chemically. Line 26. What is indicated "400" of polyethylene glycol (400)? Molecular weight or polymerization degree? Line 30. There is no oxirane oxygen in PEG. What does this mean? Line 41. Why esterification and etherification are expected to give good surfactant properties? Please describe more explanations. **There are many miss-typing in the text.**	
Optional/General comments	**Generally, this manuscript seems to be premature.** **The authors should reconsider the story of this manuscript scientifically.**	

Reviewer Details:

Name:	Anonymous
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