



SDI Review Form 1.6

Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	Ms_IRJPAC_25473
Title of the Manuscript:	Investigation of New Cooling Paints Based on Copolymers of N-Isopropylacrylamide with Butyl Acrylate and N,N-Dimethylacrylamide
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:

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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	In general, the manuscript highlights on the Cooling Paints Based on Copolymers of N Isopropylacrylamide with Butyl Acrylate and N,N Dimethylacrylamide. The manuscript could be considered to be accepted with minor correction as below: Introduction: Author should provide some literature supported with current references on the following topics: (i) Cooling based coating based on single monomer and dual monomer (ii) The cooling mechanism Results and discussion: Author should include the characterization part to confirmed the combination of Copolymers of N Isopropylacrylamide with Butyl Acrylate and N,N Dimethylacrylamide. Author should confirmed on (i) Composition of each monomers (ii) Interaction of each monomers (iii) Sequence of each monomers (iv) Distribution of each monomer (v) Interface of each monomers (vi) Homogneity of each monomers	Thank you for reviewing our manuscript. In introduction, (i) We added two sentences in the text (lines of 33-35) (ii) We added a word of "vaporized" in the text (line of 42) In Results and discussion, We added NMR spectra (Fig. 6) and sentences in lines of 161-168.. (i) Composition is similar to monomer in preparation as described in lines 161-168. (ii)(v) Illustrating interactions and interferences among monomers in the copolymer is difficult, because polymers can take many conformations (not crystal). (iii)(iv) It can be considered that some sequences e.g. -NIPAAm-DMAAm-NIPAAm-, NIPAAm-BANIPAAm-NIPAAm-BA-NIPAAm-, -NIPAAm-BA-BA-NIPAAm-, -NIPAAm-BA-DMAAm-NIPAAm-, etc. are distributed over the copolymer (line of 187-190).



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		(vi) The copolymer dissolved in <i>t</i>-BuOH was pasted on the glass bottle, therefore it can be considered that the copolymers homogeneously coat the material. (line of 196-197) It can be regarded that each monomer component in the copolymer is homogeneously distributed over the glass bottle.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		