COVER LETTER

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Dear Editor of Indonesian Journal of Chemistry,

We wish to submit an original research article entitled "Thermo- and pH-responsive Behavior of Poly(N-isopropylacrylamide)-block-poly[(2-dimethylamino)ethyl methacrylate)]" for consideration by the Indonesian Journal of Chemistry.

We confirm that the written manuscript is original, and no part of it has been published before, nor is any part of it currently under consideration for publication elsewhere.

In this work, the attempt to synthesize copolymer block of PNIPAM-b-PDMAEMA via RAFT polymerization was performed. The chain length of PDMAEMA as the second block was varied and their thermo-, and pH-responsive behavior were investigated. The phase transition temperature (Tc) was observed by studying the turbidity upon heating. Interestingly, the Tc depended not only to the chain length of PDMAEMA but also to the end group from the RAFT agent. In addition, the difference of particle sizes in different temperature and pH confirmed the thermo-, and pH-responsive behavior which could be related to the self-assembly of the micelles. Notably, the finding in our manuscript supports the concept of using thermo-/pH-responsive block copolymers for future studies in the thermo-/pH-related applications of polymers, for instance in drug delivery. We believe that this manuscript is appropriate for publication by Indonesian Journal of Chemistry because it represents the design of new block copolymers which have thermo-, and pH-responsive behavior and are able to form micelles as a response of the temperature and pH of the environment.

Please find below a list of potential reviewers for this work.

We have no conflicts of interest to disclose.

Please address all correspondence concerning this manuscript to me at noverra.mardhatillah@sci.ui.ac.id.

Your consideration is very much appreciated. We are looking forward to your favorable reply.

Sincerely,

Dr. rer. nat. Noverra Mardhatillah Nizardo

List of Potential Reviewers

Note:

- 1. Reviewers should not be from the same institution as authors.
- 2. Reviewers have no research collaboration with authors in the last three years.
- 3. If possible, reviewers have a different nationality.
- 4. Final decision of the reviewers will be made by editors.

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