**COVER LETTER**

Retno Ariadi Lusiana February 18, 2021

Chemistry Deparement, Diponegoro University

Jl. Prof. Soedharto, SH, Tembalang, Semarang, Central Java, Indonesia

Dear Editor of Indonesian Journal of Chemistry,

We wish to submit an original research article entitled “**The Effect of Temperature, Sulfonation, and PEG Addition on Physicochemical Characteristics of PVDF Membranes and Its Application on Hemodialysis Membrane**” for consideration by 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 paper, we write an article that focuses on modifying the PVDf membane through sulfonation proccess and additive adition. Tha additive used in this study is PEG. Furthermore, this paper also study about the effect of temperature variation during casting process toward the properties of PVDf membrane and its derivative. Furthermore, permeation study using creatinine and urea are also employed to evaluate the membrane as a hemodyalisis membrane. Overall, the data shows that the addition of additive, modification using sulfonation process, and the inceasing of temperature can enhance the psicochemical properties of the membane and its permeability. This study, leads to the suggestion of developing dialysis membranes from the modification of synthetic polymers and its derivatives in the future.

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 [retno.lusiana@live.undip.ac.id](mailto:retno.lusiana@live.undip.ac.id)

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

Sincerely,

Dr. Retno Ariadi Lusiana

**List of Potential Reviewers**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | **Name** | **:** | D. Mohan |
|  | Affiliation | : | Membrane Laboratory, Department of Chemical Engineering, Anna University, |
|  | Address | : | Chennai, India |
|  | E-mail | : | mohantarun@gmail.com |
|  | Reviewing Interest / Expertise | : | Membrane Technology |

|  |  |  |  |
| --- | --- | --- | --- |
| 2. | **Name** | **:** | Santanu Dhara |
|  | Affiliation | : | School of Medical Technology , Indian Institute of Technology Khargpur, Kharagpur-721302, |
|  | Address | : | india |
|  | E-mail | : | sdhara@smst.iitkgp.ernet.in |
|  | Reviewing Interest / Expertise | : | Membrane Technology |

|  |  |  |  |
| --- | --- | --- | --- |
| 3. | **Name** | **:** | Xuefen Wang, |
|  | Affiliation | : | Donghua University State Key Lab for Modification od Chemical Fibers and Polymer materials, |
|  | Address | : | Shanghai 201620, PR China |
|  | E-mail | : | wangxf@dhu.edu.en |
|  | Reviewing Interest / Expertise | : | Membrane Technology |

|  |  |  |  |
| --- | --- | --- | --- |
| 4. | **Name** | **:** | Magdalena Gierszewska |
|  | Affiliation | : | Faculty of Chemistry, Nicolous Copernicus University in Torun |
|  | Address | : | gagarina St. 7.87-100, Torun, Poland |
|  | E-mail | : | mgd@chem.uni.torun.pl |
|  | Reviewing Interest / Expertise | : | gagarina St. 7.87-100, Torun, Poland |