**COVER LETTER**

Name: Tran Thi Kim Ngan [Date] 07/19/2021

Affiliation: Institute of Environmental Sciences, Nguyen Tat Thanh University

Address: Ho Chi Minh City, 70000 Vietnam

Dear Editor of Indonesian Journal of Chemistry,

We wish to submit an original research article entitled “**[Synthesis Of Mn-Doped Fn-MOFs With Different Ratios And Application Photocatalytic Degradation Of Rhodamine B Dye]**” 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.

[Recent trends in environmental remediation have shifted to the use of metal-organic framework (MOF) composites due to their unique structural properties. Despite that, it is still a challenge to diversify MOFs photocatalysts to fulfill application to treat toxic organic pigments. In this study, Fe-MOF bimetallic materials were synthesized by doping Mn2+ ions at different ratios. The structural and morphological characteristics of the materials were analyzed by XRD, UV-Vis, FT-IR, SEM and UV-Vis DRS methods. Rhodamine B (RhB) dye was used to evaluate the photocatalytic degradation of Mn/Fe-MOF bimetallic materials. The research results show that, under the same experimental conditions, the RhB degradation efficiency of Mn/Fe-MOF is enhanced than that of the pristine Fe-MOF catalyst, under the influence of visible light. After 120 min, the RhB solution was decomposed to 91.78% by the mixture of 0.1Mn/Fe-MOF, H2O2 and visible light irradiation. At the same time, the presence of H2O2 in the reaction system also showed a strong impact on the efficiency of RhB degradation. The activity from the two metal centers of Mn/Fe-MOF contributes to the formation of a unique structure and composition that can be used as a photocatalyst for colored wastewater treatment as an alternative to the reduction process.]

We have no conflicts of interest to disclose.

Please address all correspondence concerning this manuscript to me at [nganttk@ntt.edu.vn].

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

Sincerely,

Tran Thi Kim Ngan

**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.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | **Name** | **:** | **Ph.D Tuan Loi Nguyen** |
|  | Affiliation | : | Department of Chemical and Biological Engineering  |
|  | Address | : | Gachon University, Republic of Korea |
|  | E-mail | : | tuanloihl06@gmail.com |
|  | Reviewing Interest / Expertise | : | Materials chemistry, Chemical Engineering and Biochemistry  |

|  |  |  |  |
| --- | --- | --- | --- |
| 2. | **Name** | **:** | **Ph. D Mai Thanh Binh** |
|  | Affiliation | : | Istituto Italiano di Tecnologia |
|  | Address | : | Italy |
|  | E-mail | : | maithanhbinh1988@gmail.com |
|  | Reviewing Interest / Expertise | : | Materials chemistry and Polymer chemistry |

|  |  |  |  |
| --- | --- | --- | --- |
| 3. | **Name** | **:** | **Ph. D Tran Anh Vy** |
|  | Affiliation | : | Department of Chemical and Biochemical Engineering |
|  | Address | : | Gachon University, Republic of Korea |
|  | E-mail | : | tranhvy@gmail.com |
|  | Reviewing Interest / Expertise | : | Nanotechnology, materials chemistry and chemical engineering |