

### Review Form 3

Journal Name:	<a href="#">Asian Journal of Environment &amp; Ecology</a>
Manuscript Number:	Ms_AJEE_127785
Title of the Manuscript:	Advancing Micro Plastic Analysis: A Comprehensive Review of Detection and Characterization Techniques
Type of the Article	

#### **General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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#### PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	This manuscript provides a comprehensive evaluation of the current methods for micro plastic detection and characterization, making it a valuable contribution to the scientific community. By critically examining the strengths and weaknesses of instrumental, machine learning-based, and spectroscopic techniques, the review offers a nuanced perspective on the challenges and opportunities in the field. It also emphasizes the importance of standardizing protocols and developing cost-effective, portable solutions for on-site monitoring, which is crucial for large-scale environmental assessments. The proposed advancements, such as the integration of machine learning with spectroscopy and the exploration of novel detection technologies, have the potential to significantly enhance the accuracy and efficiency of micro plastic analysis, driving forward both research and practical applications in addressing micro plastic pollution.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	Yes, title is suitable for publication.	
<b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b>	Overall, the abstract is good in terms of content, but restructuring it slightly and adding more detail to some points could make it even more effective. This would help readers quickly grasp the key focus areas and contributions of the paper.	
<b>Is the manuscript scientifically, correct? Please write here.</b>	Yes, structure of the manuscript is up to the mark.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	The references provided are sufficient and current for most aspects of micro plastic research, from detection to environmental impact. However, incorporating additional sources related to biodegradation, Nano-plastics, and policy could further strengthen your review, especially if it seeks to address micro plastics in a holistic, global context. Additionally, exploring more advanced analytical techniques would ensure your review captures the full scope of recent innovations in this field.	
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	English quality of the work is suitable for scholarly communications	
<b>Optional/General</b> comments	Future studies in micro plastic detection should focus on improving the portability, efficiency, and accuracy of existing methods, as well as exploring new technologies and interdisciplinary approaches. The integration of machine learning, next-generation spectroscopy, and automated systems offers a pathway for making micro plastic detection more accessible, scalable, and reliable, driving progress in environmental monitoring and pollution management. The study did not mention any future work.	

#### PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

#### Reviewer Details:

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