

SAFEGUARD ON THE RISE OF AI-GENERATED MANUSCRIPTS IN ACADEMIC COMMUNICATION

MOHD TAJUDDIN ABDULLAH¹ AND MUHAMAD SAFIHH LOLA^{2*}

¹Academy of Sciences Malaysia, Level 20, West Wing, MATRADE Tower, Jalan Sultan Haji Ahmad Shah, Off Jalan Tuanku Abdul Halim, 50480 Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur, Malaysia. ²Faculty of Computer Science and Mathematics, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia.

*Corresponding author: safihmd@umt.edu.my

<http://doi.org/10.46754/jssm.2025.08.001>

Submitted: 26 August 2024

Revised: -

Accepted: 4 January 2025

Published: 15 August 2025

Abstract: This article examines the growing trend of Artificial Intelligence (AI)-generated manuscripts in academic publishing, specifically within the Journal of Sustainability Science and Management (JSSM). Drawing on decades of experience as seasoned reviewers, a concerning increase was observed in submissions that lack depth, critical thinking, and adherence to JSSM's standards. Thus, this article advocates for a more rigorous preliminary evaluation by subject matter associate editors to ensure that manuscripts meet the required standards before proceeding to the peer-review stage. In particular, it highlights the significance of preserving the integrity and credibility of JSSM by rejecting AI-dependent manuscripts that fail to demonstrate genuine creativity and the higher-order thinking that reflects authors' scholarly contributions.

Keywords: Artificial intelligence, scientific manuscript, creativity, higher order thinking, Journal of Sustainability Science and Management, UMT.

We are writing to draw your attention to a concerning trend in submissions to the Journal of Sustainability Science and Management (JSSM), published by Universiti Malaysia Terengganu (UMT), which warrants urgent consideration.

From 1979 to 2024, we have had the privilege of reviewing thousands of manuscripts for Scopus and Web of Science (WoS)-indexed journals as well as local journals (MyCite-indexed). It spans various disciplines and sub-disciplines within the biological sciences, including cultural heritage, tourism, medical research, and environmental modelling. Between September 2020 and August 2024, we reviewed approximately 190 manuscripts submitted by Associate Editors (AEs) of the JSSM, UMT. However, we have recently observed a significant increase in manuscripts that rely heavily on Artificial Intelligence (AI) for content generation (Rinko, 2024). Alarming, many of these AI-generated manuscripts are being forwarded by AEs for peer review without undergoing thorough internal evaluation.

These AI-dependent submissions are characterised by the lack of specific details (Google AI, 2023), scientific accuracy, and coherent analysis. It can be harmful to informed decision-making (Else, 2023). They frequently display inconsistencies across sections and disregard the formatting and guidelines set by the JSSM editorial team. More concerning is the absence of depth and critical thinking, qualities that define the scholarly work of scientists. In addition, the writing is superficial, with little evidence of higher-order thinking or the formulation of innovative ideas. This starkly contrasts with the human creativity and intellectual rigour essential in academic communication.

The implications of this trend are severe. The presence of AI-generated content threatens to erode the trust that our scientific readers, authors, and the broader academic community place in JSSM. If left unchecked, it risks undermining the journal's integrity and credibility, diminishing its reputation as a trustworthy outlet for high-quality sustainability and environmental

management research. On the other hand, Dwivedi *et al.* (2023) highlighted the limitations of ChatGPT, including the disruptions it may cause to existing practices, threats to privacy and security, and the potential consequences of biases, misuse, and misinformation. Notably, the potential damage to the university's reputation and the perceived value of its research output cannot be underestimated.

To address these issues, we propose the establishment of a more active and refined role for subject matter AEs within the JSSM editorial process. As such, AEs should conduct a thorough preliminary evaluation of each manuscript, ensuring it meets the journal's rigorous standards before it is advanced to the external peer-review stage. Specifically, this evaluation should include a careful review to identify any reliance on AI-generated content, as well as an assessment of the manuscript's adherence to the JSSM's format and guidelines.

Suppose a manuscript is reported to be predominantly AI-generated or fails to comply with the required standards. In that case, AEs should have the authority to desk reject the submission without proceeding further. This additional layer of scrutiny is essential to preserving the academic integrity of JSSM and ensuring that only manuscripts reflecting genuine scholarly work are published.

In retrospect, during the early 1970s, we transitioned from relying on brainpower and slide rules (hand-operated mechanical calculators) to electronic calculators in the late 1970s (Bruderer, 2022). This was followed by the adoption of statistical software on mainframe computers in the 1980s such as the Statistical Package for the Social Sciences (SPSS) and Statistical Analysis Software (SAS) (Balakrishnan *et al.*, 2014; Schissler *et al.*, 2024). Nevertheless, we have never lost sight of the fundamental skills in data analysis or the critical understanding of when and how to apply statistical tests such as the t-test or Wilcoxon test. Similarly, while AI can serve as a valuable tool, it should never replace the human intellect and creativity essential for generating new knowledge and contributing

meaningfully to academic discourse (Else, 2023; Paperpal, 2024).

We appeal to our fellow research students and academics: Let us use AI as an assistant for proofreading and reference searches instead of the principal author of our manuscripts (Abdelhafiz *et al.*, 2024; Paperpal, 2024). Let us remain committed to the intellectual rigour and creativity that define our field. This ensures that the future of academic publishing stays in the hands of those dedicated to pushing the boundaries of knowledge grounded in evidence-based facts and figures.

Acknowledgements

We thank UMT for funding this project under the Department of Wildlife and National Parks (DWNP) (UMT/The Giant Panda Protection and Research Programme/2015/53161). We also acknowledge the valuable feedback provided by the reviewers and the Chief Editor, which significantly improved the earlier draft of this manuscript.

Conflict of Interest Statement

The authors declare that they have no conflict of interest.

References

- Abdelhafiz, A. S., Ali, A., Maaly, A. M., Ziady, H. H., Sultan, E. A., Ahmed, E., & Khairy, W. A. (2024). Knowledge, perceptions and attitude of researchers towards using ChatGPT in research. *Journal of Medical Systems*, 48(1), 26. <https://doi.org/10.1007/s10916-024-02044-4>
- Balakrishnan, N., Colton, T., Everitt, B., Piegorsch, W., Ruggeri, F., & Teugels, J. (2014). *Wiley StatsRef: Statistics reference online*. John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118445112>
- Bruderer, H. (2022). Spectacular finds of historical calculating machine. *Technical Report*, 1-13. Retrieved from <https://www.>

- researchgate.net/publication/359052060_Spectacular_finds_of_historical_calculating_machines
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., Carter, L., Chowdhury, S., Crick, T., Cunningham, S. W., Davies, G. H., Davison, R. M., Dé, R., Dennehy, D., Duan, Y., Dubey, R., Dwivedi, R., Edwards, J. S., Flavián, C., Gauld, R., Grover, V., Hu, M.-C., Janssen, M., Jones, P., Junglas, I., Khorana, S., Kraus, S., Larsen, K. R., Latreille, P., Laumer, S., Malik, F. T., Mardani, A., Mariani, M., Mithas, S., Mogaji, E., Nord, J. H., O'Connor, S., Okumus, F., Pagani, M., Pandey, N., Papagiannidis, S., Pappas, I. O., Pathak, N., Pries-Heje, J., Raman, R., Rana, N. P., Rehm, S.-V., Ribeiro-Navarrete, S., Richter, A., Rowe, F., Sarker, S., Stahl, B. C., Tiwari, M. K., van der Aalst, W., Venkatesh, V., Viglia, G., Wade, M., Walton, P., Wirtz, J., & Wright, R. (2023). Opinion paper: "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Else, H. (2023). Abstracts written by ChatGPT fool scientists. *Nature*, 613(7944), 423. <https://doi.org/10.1038/d41586-023-00056-7>
- Google AI. (2023). *Gemini 1.5 Flash*. Retrieved from <https://ai.google.com/>
- Paperpal. (2024, April 8). AI and human expertise: A paradigm shift in safeguarding research integrity. *Paperpal Blog*. <https://paperpal.com/blog/news-updates/industry-insights/ai-and-human-expertise-a-paradigm-shift-in-safeguarding-research-integrity#:~:text=AI%20can%20swiftly%20scan%20vast,fingerprints%20of%20AI%2Dgenerated%20text>
- Rinko, S. (2024, January 8). 10 best AI writing tools (2024): Enhance your writing with AI magic. *eWEEK*. <https://www.eweek.com/artificial-intelligence/ai-writing-tools/>
- Schissler AG, Nguyen H, Nguyen T, Peterit J, Gardeux V, (2019). *Statistical Software*. Wiley. Available from: doi.org/10.1002/9781118445112.stat00527.pub2