Review of: "Optimized Material Removal and Tool Wear Rates in Milling API 5ST TS-90 Alloy: AI-Driven Optimization and Modelling with ANN, ANFIS, and RSM"

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Potential competing interests: No potential competing interests to declare.

Optimized Material Removal and Tool Wear Rates in Milling API 5ST TS-90 Alloy: AI-Driven Optimization and Modelling with ANN, ANFIS, and RSM has been reviewed and the following comments will help the paper strength and quality;

(a). The introduction section requires to be updated with recent publications as listed below;

1. **Onyelowe, K.C**., Fazel Mojtahedi, F., Golaghaei Darzi, & Kontoni, D.-P.N. (**2023**). Solving large deformation problems in geotechnical and geo-environmental engineering with the smoothed particle hydrodynamics: a state-of-the-art review of constitutive solutions. Environ Earth Sci 82, 394 (2023). https://doi.org/10.1007/s12665-023-11079-8
2. Kumar, P., Ganasen, G., **Onyelowe, K.C.** & L. Krishnaraj (**2023**). Comparative Study on Net-zero Masonry Walls Made of Clay and Fly Ash Bricks and Grouts/Mortars/Stuccos with The Effect of Super Fine Fly Ash Blended Cement – Low Carbon Cement. International Journal of Low-Carbon Technologies, Volume 18, 2023, Pages 1008–1014, https://doi.org/10.1093/ijlct/ctad087
3. Ravi, M., Murugesan, B., & **Onyelowe, K.C**. (**2023**). Performance evaluation of marine and industrial wastes in cement to envelope low carbon environment in manufacturing process, International Journal of Low-Carbon Technologies, Volume 18, 2023, Pages 986–998. https://doi.org/10.1093/ijlct/ctad082
4. **Onyelowe, K.C.,** Jagan J, Kontoni, D.-P.N., Moghal, A. A. B., Onuoha, I. C., Viswanathan R., &Soni, D. K. (**2023**). Utilization of GEP and ANN for Predicting the Net-Zero Compressive Strength of Fly Ash Concrete Towards Carbon Neutrality Infrastructure Regime, International Journal of Low-Carbon Technologies, https://doi.org/10.1093/ijlct/ctad081
5. **Onyelowe, K.C.** & Ebid, A.M. (**2023**). The influence of fly ash and blast furnace slag on the compressive strength of high-performance concrete (HPC) for sustainable structures. *Asian J Civ Eng* (2023). https://doi.org/10.1007/s42107-023-00817-9
6. **Onyelowe, K.C.,** Kontoni, D.-P. N., Pilla, S.R.M. *et al.* (**2023**). Runtime-based metaheuristic prediction of the compressive strength of net-zero traditional concrete mixed with BFS, FA, SP considering multiple curing regimes. *Asian J Civ Eng* (2023). https://doi.org/10.1007/s42107-023-00839-3
7. **Onyelowe, K.C**., Ebid, A.M. & Ghadikolaee, M.R. (**2023**). GRG-optimized response surface powered prediction of

concrete mix design chart for the optimization of concrete compressive strength based on industrial waste precursor effect. *Asian J Civ Eng* (2023). https://doi.org/10.1007/s42107-023-00827-7

8. **Onyelowe, K.C.,** Ebid, A.M. &Hanandeh, S. (**2023**). The influence of nano-silica precursor on the compressive strength of mortar using Advanced Machine Learning for sustainable buildings. *Asian J Civ Eng* (2023). https://doi.org/10.1007/s42107-023-00832-w
9. **Onyelowe, K.C.,** Ebid, A.M. & Hanandeh, S. (**2023**). Advanced machine learning prediction of the unconfined compressive strength of geopolymer cement reconstituted granular sand for road and liner construction applications. *Asian J Civ Eng* (2023). https://doi.org/10.1007/s42107-023-00829-5
10. **Onyelowe, K. C.,** Ebid, A. M., Hanandeh, S., Moghal, A. A. B., Onuoha, I. C., Obianyo, I. I., &Ubachukwu, O. A. (**2023**). The influence of fines on the hydro-mechanical behavior of sand for sustainable compacted liner and sub-base construction applications. Asian Journal of Civil Engineering, https://doi.org/10.1007/s42107-023-00800-4
11. **Onyelowe, K. C.** & Kontoni, D.-P. N. (**2023**). The net-zero and sustainability potential of SCC development, production and flowability in structures design. International Journal of Low Carbon Technologies, Vol. 18, Pp. 530-541. https://doi.org/10.1093/ijlct/ctad033
12. Ebid, A. M., **Onyelowe, K. C.,** Kontoni, D.-P. N., Gallardo, A. Q., & Hanandeh, S. (**2023**). Heat and mass transfer in different concrete structures: a study of self-compacting concrete and geopolymer concrete. International Journal of Low Carbon Technologies, Vol. 18, Pp. 404-411. https://doi.org/10.1093/ijlct/ctad022.
13. **Onyelowe, K. C.**, Ebid, A. M., Sujatha, E. R., Fazel-Mojtahedi, F., Golaghaei-Darzi, A., Kontoni, D.-P. N., Nooralddin-Othman, N. (**2023**). Extensive overview of soil constitutive relations and applications for geotechnical engineering problems. Heliyon 9, Pp. 1-30. https://doi.org/10.1016/j.heliyon.2023.e14465
14. ***Onyelowe, K. C.,*** *Ebid, A. M., Mahdi, H. A., Onyelowe, F. K. C., Shafieyoon, Y., Onyia, M. E., &Onah, H. N****(2023****).* AI Mix Design of Fly Ash Admixed Concrete Based on Mechanical and Environmental Impact Considerations. Special Issue, 2023 27 “Innovative Strategies in Civil Engineering Grand Challenges" Civil Engineering Journal, Vol. 9. Pp. 27-45. https://doi.org/10.28991/CEJ-SP2023-09-03
15. ***Onyelowe, K. C.,*** *Ebid, A. M., Mahdi, H. A., & Baldovino, J. A. (****2023****).* Selecting the Safety and Cost Optimized Geo-Stabilization Technique for soft clay slopes. Civil Engineering Journal, Vol. 9(2), Pp. 453-464. https://doi.org/10.28991/CEJ-2023-09-02-015
16. **Onyelowe, K. C.**, Mojtahedi, F. F., Ebid, A. M., Rezaei, A.,Osinubi, K. J., Eberemu, A. O., Salahudeen, B., Gadzama, E. W., Rezazadeh, D., Jahangir, H.,Yohanna, P., Onyia, M. E., Jalal, F. E., Iqbal, M., Ikpa, C., Obianyo, I. I., & Rehman, Z. U. (**2022**). Selected AI optimization techniques and applications in geotechnical engineering, Cogent Engineering. 10 (1). https://doi.org/10.1080/23311916.2022.2153419
17. **Onyelowe, K.C.**, Jayabalan, J., Ebid, A.M., Samui, P., Singh, R.P., Soleymani, A., & Jahangir, H. (**2022**). Evaluation of the Compressive Strength of CFRP-Wrapped Circular Concrete Columns Using Artificial Intelligence Techniques. *Designs* 2022, *6*, 112. https://doi.org/10.3390/designs6060112
18. **K. C. Onyelowe**, J. Jayabalan, A. M. Ebid, P. Samui, A. Soleymani, H. Jahangir, R. P. Singh & H. A. Mahdi.(**2022**). Modeling the confined compressive strength of CFRP-jacketed noncircular concrete columns using artificial intelligence techniques. Cogent Engineering, 9(1). https://doi.org/10.1080/23311916.2022.2122156

19. **K. C Onyelowe**, E. R. Sujatha, F. I. Aneke & A. M. Ebid. (**2022**). Solving geophysical flow problems in Luxembourg; SPH constitutive review. Cogent Engineering, 9(1). https://doi.org/10.1080/23311916.2022.2122158
20. **Onyelowe, K.C**., Mojtahedi, F.F., Azizi, S., Mahdi, H.A., Sujatha, E.R., Ebid, A.M., Darzi, A.G., & Aneke, F.I. (**2022**). Innovative Overview of SWRC Application in Modeling Geotechnical Engineering Problems. Designs 2022, 6, 69. https://doi.org/10.3390/designs6050069

(b) The basic backgrounds of the ML techniques are needed to be included in the methodology section

(c) The statement of novelty is required to be mentioned in the abstract and background section

(d) the English language issues are needed to be checked in the entire manuscript.

(e) the research limitations are required to be added in the conclusion section as well as focus for future research.