Dear Editor,

We are glad to submit our manuscript ‘SIGNIFICANCE OF ARTIFICIAL NEURAL NETWORK ANALYTICAL MODELS IN MATERIALS PERFORMANCE PREDICTION’ to the ‘International Journal of Industrial Engineering: Theory, Applications and Practice’.

Since material service safety is important to be maintained, many researchers devote their time to experimental testing and data analyzing to discover the different factors influencing on materials performance. To overcome the weakness of traditional mathematical analysis models used in materials science, artificial neural network (ANN) is evolved as a strong bridge between materials science and computer science. The manuscript reviews multiple ANN predictive applications for materials related problems, ranging from simple ANN models alone to more complicated ANN models along with other computing methods, and highlights the significance and advantages of ANN applications that arouse the researchers to use ANN for future as well as their shortcomings and its future trend in researches.

The main contribution of this paper is that it can give a hand to materials and computer science researchers as a comprehensive review of ANN by introducing the basic background of ANN and discussing multiple ANN applications in separate sections, arranged by level of simplicity, ranging from simple ANN models alone to more complicated ANN models along with hybrid use of other computing and input ranking methods.

In this manuscript, we have cited one of recent published works in IJIETAP that was a kind of great help to write this review. Here is its cited information:

Weckman, G. R., W. Young, S. Hernández, M. Rangwala and V. Ghai (2010). "EXTRACTING KNOWLEDGE FROM CARBON DIOXIDE CORROSION INHIBITION WITH ARTIFICIAL NEURAL NETWORKS." International Journal of Industrial Engineering: Theory, Applications and Practice; Vol 17, No 1 (2010).

I would like to recommend two reviewers who have the different nationalities to assist the peer-reviewing process. Here is their information:

Dr. Aaron Zimba,

azimba@mu.ac.zm,

Department of Computer Science,

Mulungushi University,

Zambia.

Expertise/Short biography: Dr Aaron is a well-seasoned expert in the field of computer science and information technology.

Name: Dr Michelle Mukeshimana

E-mail: michele.mukeshimana@ub.edu.bi

Address: University of Burundi, Bujumbura, Burundi

Expertise/Short biography: Dr Michelle is a well-seasoned expert in the field of computer science and information technology.