JOURNAL OF THE NIGERIAN INSTITUTION OF MECHANICAL ENGINEERS (JNIMechE) (Manuscript Template)

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ABSTRACT

This article acts as the template for preparing articles for submission to Journal of the Nigerian Institution of Mechanical Engineers. Please do not refer readers to other literature articles in the abstract. This is because abstracts are expected to be stand-alone, capable of providing fast and complete, yet short information about the article. The Abstract **should not exceed 250 words** and must have a statement of *Introduction, Problem, Objective, Methodology, Results and Conclusion*. The entire manuscript should be structured as follows: Introduction, Methodology, Results and Discussion, Conclusion and References. Relevant sub-sections can be allowed under Methodology as well as Results and Discussion.

Keywords: Mechanical; Article submission; NIMechE; Journal review; Engineering.

1.0 INTRODUCTION

The Journal of the Nigerian Institution of Mechanical Engineers (JNIMechE) is based at The Nigerian Institution of Mechanical Engineers (NIMechE), a Division of The Nigerian Society of Engineers (NSE) and has been publishing technical papers for several years. All papers submitted to the journal should be an original thought-provoking appraisal of existing knowledge, collation of relevant data of interest or investigation and exploration of new fields in applied science and technology. The paper should cover aspects of technological education, planning, analysis, design or construction of technological systems. A key phenomenon of **each paper** is that it **must advance technology** or **contribute to knowledge**.

2.0 MANUSCRIPT FORMAT

2.1 Paper Text

Original research manuscripts should not exceed 16 pages, typed on portrait A4-sized paper in Times New Roman font 12, with 1.5 line spacing and an all-round margin of 25mm - this includes references, figures and tables. However, review papers can be allowed up to 20 pages or more (excluding references), typed in Times New Roman font 12, with 1.5 line spacing and an all-round margin of 25mm.

The articles should have only one column per page. All manuscripts must have line and page numbers. The article should be logically divided into numbered sections and subsections (just like this guide). Equations should be written using an equation editor and numbered accordingly in parenthesis in the right-hand margin as indicated in Eqn. 1. All units shall be in SI.

$$y = \frac{3\pi}{z} + x^z \tag{1}$$

2.2 Figures

All ffigures and diagrams should be of **high quality and print-ready** with a reasonably small size, preferably with a width less than 8cm but not larger than 16cm and should not scatter/ungroup (retain the same format) when resized. All line diagrams and photographs should be numbered in a continuous serial manner and named/referred to as Figures. Each should have appropriate numbers and précised captions placed directly below the figure/diagram. All Figures should be appropriately discussed in the article's test for readers understanding. In situations where multiple curves exist per graph, each curve should be uniquely distinguished with markers or different line styles, or colours. Please be sure that the quality of all diagrams is high such that all labels and titles are clearly legible and in moderate proportion to the size of the figure/diagram as we cannot improve what is sent to us. All lines forming the figure/diagram must not be smudgy or blurred and labels/titles must not overlap with any part of the figure/diagram. Plots of multiple variables. Figure 1 is a sample figure/diagram which shows the thermal degradation profile of different materials with current for differing values of temperature.



Temperature (°C)

3.0 Tables

Tables should be used when data is reported and must be referred to in the text. Table Caption should be above the table and if it was borrowed from another source, its source must be stated below the table. Authors *MUST AVOID* presenting tables and graphs for the same data. The author needs to decide which is more appropriate for the dataset in question. For example, Table 1 is the results extracted from machining operation conducted on a low carbon steel.

	Input parameters			Output parameter				
Run	Speed	Feed	DOC	Surface	Cutting	MRR	Sound	Force
				finish	Temp.		level	
1	590	1.3	0.5	2.1685	32.1711	2.1692	76.1692	2.1692
2	465	2.3	1	0.2308	43.9999	2.0933	75.233	0.2242
3	456	2.1	0.25	0.1598	40.1597	0.1597	70.1597	0.1604
4	353	1.9	0.75	0.7382	43.020	3.233	82.000	0.7320

 Table 1: Extracted parameters

Source [5]

4.0 **REFERENCES**

Authors are highly encouraged to visit the journal website or the published hard copy of journal to search for articles related to theirs using their keywords and cite them in their article. In-text references should be cited in consecutive numbers enclosed in square brackets without name of author and year of publication, using the IEEE format. In the references listed below [1] is for journal articles, [2] for books, [3] for conference proceedings while [4] is for articles obtained from on-line sources. References should be listed and numbered in the order in which they appear in the text e.g. Visit <u>IEEE Citation Guidelines2.doc (ieee-dataport.org)</u> for more details.

For journal Articles

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5.0 ACKNOWLEDGEMENT

This section is optional for Authors that may wish to recognize persons or organizations that supported the study being reported.

6.0 **APPENDIX**

vital information in form of text, equations tables or figures that are too large are placed in the appendices. Appendices should also be adequately cross-referenced.