

General Information

All material should be written in clear, correct International English. All AJERI technical publications use the same editorial style.

Journal articles are edited and prepared for publication by IEK Editorial Board.

Please use this Guide for your publication. If you have questions about style, technical terms, or reference citations, please Email: editor@iekenya.org.

Figures

Include figures (graphs, photographs, drawings, etc.) to emphasize points made in the text. See details on preferred image types below such as JPEG, TIFF, EMF, PNG, and Excel.

Make your figures the size you prefer. Design them to make efficient use of space. For the African Journal of Engineering Research and Innovation (AJERI), figures are generally the width of a column (8.5 cm, ~3.33 in, ~20 picas), but may be as wide as a page (17.4 cm, ~6.83 in, ~41 picas).

Please observe the following points:

- Place each figure in your manuscript after the first paragraph that mentions it.
- Every figure must be explicitly mentioned in the text.
- Number figures in the order of their citation in the text and refer to them as figure 1, figure 2, etc. Abbreviate the word "figure" only in parentheses: (fig. 1).
- Include a descriptive caption with each figure. The caption may be a sentence fragment or a few sentences long. Figures should not have titles.
- A figure may contain a legend, such as to define symbols. Place the legend either directly below the figure or within it.
- Avoid using the Word drawing canvas except when absolutely necessary, for example to constrain floating elements, such as arrows, within a figure.
- To remove unwanted material, do not place a text box over it or crop it in Word since it will reappear in the HTML version online. Instead, open the graphic and delete the unwanted elements.
- It is generally not necessary to show all the data points and coordinate rulings.
- If a point represents the mean of a number of observations, indicate the magnitude of the variability by a vertical line at each point.

- Use boldface only for x-axis and y-axis labels. Use all capitals only when necessary (e.g., for acronyms).
 - Figure parts are labeled with letters like (a), (b), and (c) using eight point, bold, Times New Roman font. Labels are either outside the figure as text (preferred) or may be part of the figure.
 - Identify and describe each part in the caption.
- You may use horizontal or vertical type, but avoid other angles.
- All lines must be at least one-half point wide to reproduce in print and be distinct.
- For digital photos, use the medium or large file setting, not the small file (low quality) setting. For scans and other images, use 600 dpi for black and white line art and 300 dpi for color or grayscale (including photos). Higher resolution will not increase the quality of the published image.
- To ensure image quality, check your [Word settings](#) in File/Options/Advanced. Scroll down to "Image Size and Quality". Check the box for "Do not compress images in file".
- The image types below are preferred. After acceptance, we may ask you to provide files for images due to resolution issues. For best results, in Word go to the "Insert" menu and choose "Pictures" to [insert the image file](#). For Excel graphs, embed the object instead of linking to a file. Only use copy and paste for images, if necessary. Word may convert the image to a bitmap resulting in a lower quality image with jaggies.
 - Figures (line art) file formats: Enhanced MetaFile EMF, embedded Excel, or PNG. You may also use JPG and TIFF, if necessary. Do not use [EPS](#).
 - Photographs: JPG or TIFF
- Do not use [EPS](#) file types.

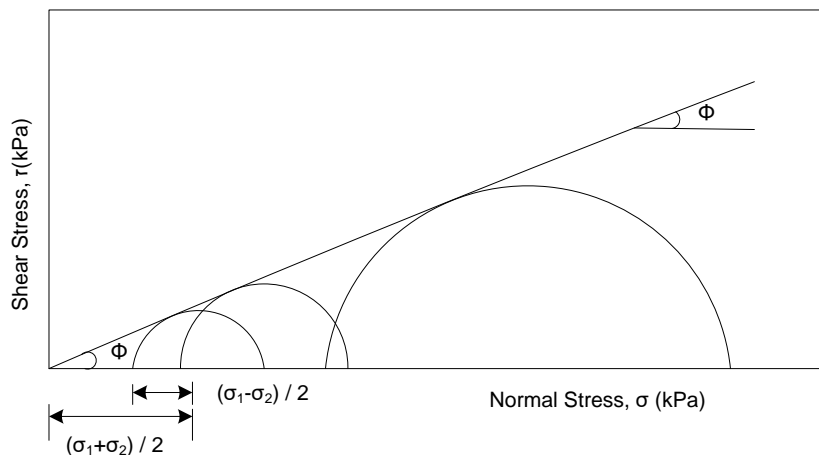


Fig 3: Ideal Mohr-Coulomb failure envelop for cohesionless granular materials (Dartevelle, 2003)

Tables

Tables are used for reporting extensive numerical data in an organized manner. The data presented in tables should neither be duplicated in figures nor reviewed extensively in the text.

Design your tables to make efficient use of space. For Journal of the AJERI, prepare each table to fit either one column (8.5 cm, ~3.33 in, ~20 picas) or the page width (17.4 cm, ~6.83, ~41 picas).

Please observe the following points:

- Number tables in the order of their citation in the text and refer to them as table 1, table 2, etc.
- Use the Table contents style, which calls for 8-point Times New Roman type inside your table.
- Include a descriptive caption with each table. The caption may be a sentence fragment or a few sentences long.
- Create your tables in Microsoft Word or Excel. Do not submit tables in a graphic format. Do not separate columns with tabs or spaces
- Do not include excessive text in the column headings. Place explanatory information in the table caption, in the manuscript text, or in a footnote at the bottom of the table.
- Do not include columns of data that can be easily calculated from other columns.
- Use horizontal lines to separate sections within a table. You may place additional lines under subheads or under heads that span two or more columns, and you may need to insert blank columns to achieve this (as shown in the sample table).
- Use bracketed superscripted letters ([a], [b], [c], etc.) for explanatory footnotes within the table. Assign footnotes to elements within a table in a left-to-right, top-to-bottom sequence.
- Use asterisks (*, **) to indicate statistical significance, and explain the significance in a footnote.
- Use lowercase letters (a, b, c, etc.) to indicate statistical relationships among elements within a table and explain the relationships in a footnote.

Table 1: Summary of Cyclic Loading and Stress Relaxation Experiments

Variety	No of Replications	Density (kg/m ³)
V1	3	730
	3	800
V2	3	730
	3	800
V3	3	730
	3	800

Equations

Do not derive or reproduce recognized equations; rather, cite a source and refer to the equation by its standard name. State only those assumptions and initial boundary conditions needed to understand the development of the equation.

For a new equation, state all assumptions and initial boundary conditions and give sufficient derivation for the reader to understand its development. Show only those mathematical steps required for comprehension. Interpret the significance of the mathematics and indicate the accuracy and range of usefulness of the equations.

For the AJERI, prepare each equation to fit within the width of a column (8.5 cm, ~3.33 in, ~20 picas). When necessary, break an equation before an operational sign or at a major bracket.

Please observe the following points:

- Insert each equation into your manuscript at the point where you would like it to appear in the published article. Small equations may be incorporated into the text. Equations that are separate from the text are introduced by the preceding text and a colon (see the sample equation). These separate equations are numbered consecutively. Refer to numbered equations as equation 1, equation 2, etc., or abbreviated in parentheses as (eq. 1)
- The type style in the equation should match the type style in the corresponding text (which is 10-point Times New Roman for most text), including italicized variables.
- Prepare simple expressions by using ordinary type (including superscripts, subscripts, and the Symbol font). For other equations, use MathType (preferred) or the built-in [Word equation editor](#). After we receive a manuscript, we convert equations to MathType with the correct font sizes and italics.

- Include the equation number in parentheses, to the right of the equation, by using a tab. Type the equation number outside of the equation editor box.
- Define variables and supply SI units. If there are more than two such elements in an equation, then list them individually after the equation (as in the sample below):
- Chemical symbols (such as P for phosphorus) should not be italicized in equations or in the text.
- Abbreviations in all caps, such as RSME, are not italicized in equations or in the text to prevent them from being misread as multiple variables (e.g., R x M x S x E).
- Greek letters should not be italicized in equations because they are distinct from other symbols and do not require further distinction using italics.

(sample equation): $f_p = (I_1^3 / I_3 - 27)(I_1 / P_a)^m = K_p = a \cdot e^{-W_p} (W_p / P_a)^{1/q}$ (1)

Numbers

In general, use words for numbers one through nine and use digits for numbers 10 and greater. For a series of numbers, any of which are greater than 10, use digits for all. Use digits for values followed by abbreviated units. For example:

There were five hens in the pen. Use 5 mL of water.

The component consisted of 231 parts.

The mixture contained 2 parts magnesium, 12 parts copper, and 8 parts lead.

When two numbers occur as adjacent adjectives, spell out the first one.

For example: There were thirty 12 mm holes in the first section.

When a number begins a sentence, spell it out or rewrite the sentence. For example: Fifty samples were prepared.

We prepared 50 samples.

Units of Measurement

Express all units of measure in SI (metric) units.

Time

Use 24-hour clock notation. The day begins at midnight (00:00 h), and the last minute of the day is at 23:59 hr. The notation “24:00 h on 14 January” is the same time as “00:00 h on 15 January.” The use of “a.m.” and “p.m.” is also acceptable, but note that these terms do not apply to noon and midnight:

4:00 a.m. = 04:00 h

12:00 noon = 12:00 h

10:43 p.m. = 22:43 h

Dates

Write all dates in day-month-year format, with no punctuation and with names, rather than numbers, for the months:

12 January 2020

4 to 16 August

In tables, the names of months may be abbreviated to save space: Jan., Feb., Mar., Apr., Aug., Sept., Oct., Nov., Dec.

Abbreviations in Text

In general, spell out abbreviations that might be unfamiliar to the AJERI audience. Such abbreviations only need to be spelled out at their first occurrence. Spell out the scientific name of an organism at its first occurrence in the text. After the first occurrence, you may use the first letter of the genus.

Form plurals for abbreviations without an apostrophe: PCs, CVs, PhDs

References

- For the bibliography, i.e., the References section, use APA 6th format.
- For citations in the text, use the name (year) system. For example:
Kariuki (2016) stated that this method was valid, while other researchers (Matu, 2012; Matu and Nzai, 2013; Jones et al., 2014) found that it applied only in special circumstances.
Make sure that all citations that appear in the text are included in the References section, and that all sources listed in the References section are cited in the text.

For all titles, capitalize only the first word, the first word after a colon or dash, and proper nouns.

- List the source documents in alphabetical order by the lead authors' last names (Word will do this with the Paragraph function).
- List all authors with their last name first, followed by their initials.
- For sources with more than seven co-authors, list the first six authors, an ellipsis (. . .), and then the last author, as in the journal article example.
- To distinguish two or more sources by the same author(s) in the same year, add letters after the year of publication, for example, 2018a and 2018b.
- Italicize only the titles of books and journals. Do not italicize other titles (book chapters, journal articles, meeting papers, etc.).
- Include a URL or DOI number, if available, as the last element in the reference. Do not use a period after a URL or DOI number.

Journal Article

Kwanza, A. B., Pili, E., Tatu, F. G., Nne, H. I., Tano, J., Sita, K.L., . . . Mwisho, Z. (2014). Title of journal article: Capitalize after colon. *Appl. Eng. Agric.*, 578(12), 5-10. <http://doi.org/10.1111/11111>

Book

Kwisha, A. B., & Ndavu Jr., C. D. (2014). Book title. Location of publisher: Publisher.

Surname, X. B., Author, C. D., & Juvua Jr., E. (2023). Book title (2nd ed., Vol. 3). St. Joseph, MI: AJERI.

Section of a Book

Kwanza, A., & Pili, B. C. (2017). Section or chapter title. In Book title (pp. 17-34). Kampala: USEPA. Retrieved from www.epa.gov

Chapter author, A. (2021). Section or chapter title. In Kitabu, K & Daftari (Eds.), Book title (2nd ed., Vol. 3, pp. 17-34). Ibadan, Nigeria.

Dissertation or Thesis

Hafala, A. (2020). Title of dissertation. PhD diss.[or MS thesis.] City, state or nation: University Name, Department of Engineering.

Miscellaneous

If no author listed, use the name or abbreviation of the organization.

ABCD. (2014). Title. Association of BioCropsDiversity. Retrieved from

<http://bcd.org/report.pdf> Author, A. B. (2014). Patent title. U.S. Patent No. 123,456.

SAS. (1990). SAS User's Guide: Statistics. Ver. 6a. Cary, NC: SAS Institute.

Unpublished Material

Do not list such material in the References section because it is not available to the reader. Instead, put useful information in the text of your manuscript, e.g., "... this was rare (Stanley Msai, IEK, personal communication, 21 July 2022).

For an unpublished manuscript:

Author Surname, Initials(s). (Year of production). Title of manuscript [Unpublished manuscript]. Department, University.

If the paper has been accepted for publication:

Author Surname, Initials(s). (in press). Title. Periodical title.

If the paper has been submitted but not yet accepted for publication:

Author Surname, Initial(s). (Year of Production). Title of manuscript [Manuscript submitted for publication]. Department, University.