Workshop on
High Impact Journal Writing and Publication

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Organized by AMTech & AMSERU, KOE, IIUM

Presented by,

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H-index: 35; Citation index:5,000+

The workshop will cover the following topics:

1. Introduction to WnP
2. **Journal Writing (Part 1)**
   - Before, during and after writing
   - Manuscript writing steps
   - Assessment question
3. **Journal Publication (Part 2)**
   - Selection of right journal
   - **Criteria to** publish in high impact journal
   - Submission for publication (with a case example)
   - Assessment question
4. Key Takeaway

What is High Impact Journal?

- A 'high impact' journal is one where its articles are regularly cited across the academic spectrum - and especially if they are cited in other high impact journals. Therefore, it is *known as 'citation index'* used to measure 'impact factor' of journals.
- Impact factor is calculated based on the number of times selected articles are cited within the last few years.
- High impact means high citation

Journal writing and publication (WnP) are for whom?

Introduction to WnP

- A human (professional!) life would be happy one if (s)he had only to observe, work but never *write or publish*
- In science and engineering, no matter how spectacular the results are, the work is not completed until the results are published!
- *Writing* is mainly for *publication*. Writing and Publication (WnP) represents the writing of research work, review process for publication and publish rapidly in indexed journals.
- Knowing the steps on how to *write a high impact journal and publish it rapidly* are essential.

Cont..

- Research is worthless unless it is being published
- The publication is mainly referred to the knowledge sharing and a research achievement
- Nowadays it's obligatory for students to '*publish*' in high impact journal to graduate Masters or PhD degree and for academic staffs to fulfil KPI and get promotion or else '*perish*'.

Why WnP?

- To build reputation via research contributions.
- To protect IP of scientific contributions.
- To share research knowledge with others.
- To increase the visibility within the research discipline
- To create a sense of competition among the researchers.
- To encourage other researchers to continue publish research work.

Assessment

Why does it matter for researcher (you and me!) to share our research?

Journey to WnP

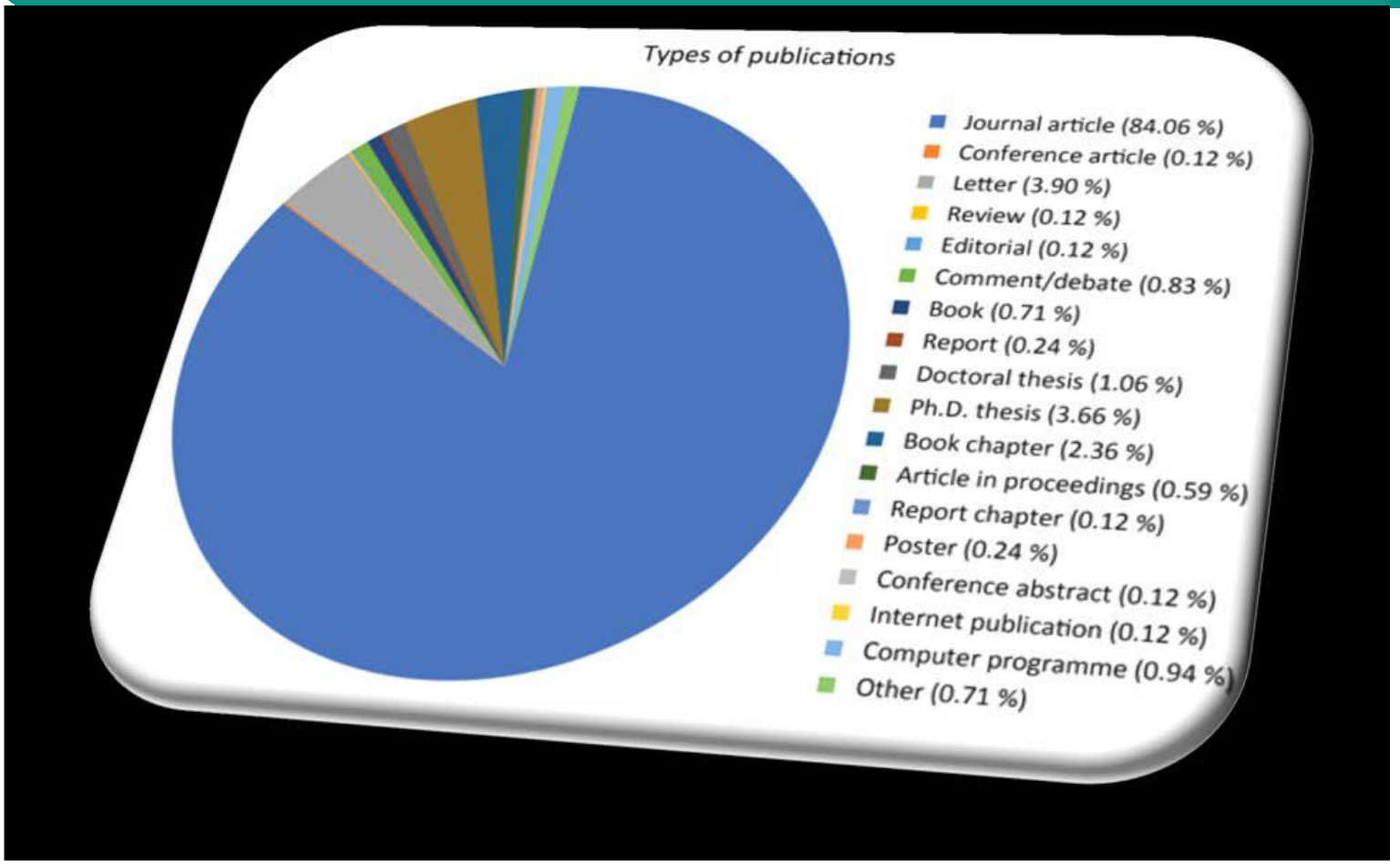
From an idea

by way of rules
(scientific writing)

to the published paper

- Select types of scientific publication (journal....)
- Scientific writing
- Writing in 'IMRaD' format
- Writing them properly
- Organization of writing
- Submission for publication
- Review & editing process
- Proof-reading
- Published

Types of Publications



https://apps.library.vcu.edu/dblist/category/1

Journal Writing

Overview

Focus on the followings:

Subject matter

- be aware of subject areas or scopes, as these are very important to general readers
- align with global perspective

Purpose

- exchange the scientific knowledge
- ask and answer specific research questions

[Research questions are important; it should be new and relevant]

Audience

- scientists and those interested in the subject
- a publisher or an editor

Criteria for Good Journal Writing

- Concise but informative/technical information
- To the point
- Free from grammatical and technical errors
- Novel idea
- Quality and original research work (in an established lab)
- Attractive presentation
- **Following** Author's Guidelines
- Plagiarism

Moreover, consider the following points:

- Formatting (word count, no of figures, no of tables, images, referencing)
- Language
- Structure
- Coherence and completeness
- Significance
- **Use proper editing tool** (viz. MS word), drawing tool (Pixel-based graphs, such as JPG and PNG) and reference management tool (Mendeley, Zotero, Qiqqa and Bibtex).

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Before Writing

- Collect and analysis the data including interpretation (experimental, or numerical or simulation); highlight the well-known lab name.
- Present data in tabular, figure, graphical or chart forms;
- Analyze data using some tools or techniques, develop mathematical models, show simulation results, present statistical analysis, optimization of parameters etc
- Show consistent results (Preferably show average results from several experiments).
- Write ideas whenever they come in mind

During Writing

- Think about the four A's: *aims, audience, awareness, and articulation.* ...
- Get to know the **journal** you want to submit to, such as scopes (subject matters, publishing full length original research articles, short communications, reviews.….)
- Create a logical framework in the writing
- Clear and accurate presentation
- Avoid dual publication
- Don’t use the work of others without appropriate attribution or reference. Make references current and relevant.

After Writing

- Checking plagiarism: To avoid plagiarism, produce the similarity report (use Turnitin or iThenticate).
- Checking availability of impact factor journal on WoS & Scopus sites
- Submission for publication
- Review & editing process
- Proof-reading
- Published

Journal Manuscript Writing Steps

- Write a rough outline first (prepare a skeleton of the draft), fill it in
- Get a rough draft ready
- Select the journal and read Instructions to Authors (manuscript requirements: style in headings, the system for citations, figures and tables, etc.)
- Write the final manuscript
- Write or refine abstract
- Choose *keywords carefully* (get them from e-databases and search engines)

Writing Steps – Structure of manuscript

- Title: Describe concisely the core contents of the paper along with authors' affiliation (Name, Affiliations including name of the lab, Corresponding author)
- Abstract: Summarize the major elements of the paper Keywords: (3 – 5 words)

"IMRaD" format

- Introduction
- Methods
- Results and
- Discussion

- What problem was studied? What others and you did? Your study area.
- How do you did it?
- What did you find out?
- What do your findings mean? [Combine with conclusion /summary and future implecations/plans]

Writing Steps – cont..

Introduction:

- Provide context and rationale for the study by answering the following:

  why your subject is important to your readers?

  why did you do it ?

Methods/methodology:

- Describe the experimental procedures by answering the following:

  what and how did you do it to achieve your objectives?

Cont..

Results:

Summarize the findings without interpretation; what did you find?

Discussion:

Analyse and Interpret the findings of the study; What does it all mean?

Conclusions:

Summarize the major findings; what the results mean for the readers?

Acknowledgement: Give credit to those who helped and provided financial support for the work.

References: *List all scientific papers, books, proceedings and websites that are cited with the correct format*

Revisit Literature Review

- Review (don't just list!) relevant literature
  - Derive meaningful and appropriate research questions and/or problems
  - Find the research gaps
  - Check the existence of any duplication to your work
- Conduct a specific search
  - manually in the library
  - on-line searching
  - Reading research articles
- Keep up-to-date with the specific subject

The Final Draft

- **Front Matter**
  - Title (fewest possible words that describe the contents)
  - Author's (co-authors) name and address; highlight the well-known lab name
  - Abstract (miniversion of the paper, no citations)
  - Keywords
- **Article Body (IMRaD)**
  - Introduction
  - Methods
  - Results
  - Discussion/Conclusion
- **End Matter**
  - Acknowledgment (technical help and financial assistance)
  - References (as per author's guideline)

How to Write All Matters in Final Draft?

The Title

- A good title is defined as the fewest possible words (10- 15) that adequately describe the entire contents of the paper.
- The title is extremely important and must be chosen with great care as it will be read by thousands, whereas few will read the entire paper
- Indexing and abstracting of the paper depends on the accuracy of the title.
- Construction of an article title has a significant impact on citation frequency

The Abstract

- Should be informative, indicative and reflects the main content of the article.
- Should be concise and accurate.
- Gives the quick idea of the contents on what and how was the work done
- Provide a brief conclusions
- The content consists of :brief background/problem statement, aim/purpose, methods, findings/results and conclusions with implication
- In generally, abstract should be written at the end.

The Introduction

- The introduction section is VERY important; the Editor and/or the Reviewers will read it in the first place for REJECTION of the paper
- Highlight background information of the current study
- Provide rationale for current study
- Go with integrated review (Summarize, synthesize, compare and critique) of relevant works
- Provide updated literature citation
- Identify research gaps in the literature and research to be filled
- State aim of study

The Methods/Methodology

- If the method is new, provide details
- If the method has been previously published in a scientific journal, give some outlines with reference
- Mention the type of equipment (manufacturer, model, etc.),
- Include measurement conditions (if standard, give reference, and if new or modified, provide details)
- Highlight number of samples tested with reproducibility,
- How data was generated and collected?
- Any exploitation of the data?
- Statistical and analytical techniques for analysis

The Results

- Summarize and illustrate the findings in an orderly and logical sequence, without interpretation
- Presentation of the data: answer all points raised in Methods; present results without comment; include Figures (graphs and schemes), tables, model equations, etc. in the text with proper numbering
- Figures should be introduced as close as possible to the place where they are mentioned in the text.
- No mismatch in numbers between text and tables / figures
- No repetition between text and tables; tables and figures
- No description of methods

The Discussion

- Hardest section to write
- What might the results mean and why does it matter?
- Should answer the question stated in the introduction
- Concisely summarize the interpretation of the results
- Show how your results and interpretations agree or contrast with previously published work
- Discrepancies between new results and previously reported results (critical discussion)

The Conclusions

- Summary of the major findings and analysis
- Meaning of the results to the audience (readers)
- Validation of the hypothesis and answer to the problem
- Extract from results and discussion
- The limitations, future work, and implications will tell others how far you know about your work.

The References

- The references cited in the text must be listed in the reference section
- Cite current and major relevant references
- Reference citations must be accurate complete and consistent
- Use correct style for journal papers
- Not many self citations
- Add few references from the journal that you are intending to submit

Assessment

- Write last 2 or 3 sentences of your 'Introduction' section.
- Present a simple case study on the data presentation, analysis and interpretation based on your research findings.

Journal Publications

Types of Publications

- **Scientific journals**
- Books
- Book chapters
- Conferences and workshops
- Conference proceeding
- Posters
- Technical reports; Seminar presentation
- User manual; Patent description
- Science/technical magazines
- ……..

Questions Related to Publication

- What are the scopes of publication?
- Is it predatory Publisher?
- Is it pee-reviewed journal?
- What is the impact factor?
- Is it transformative journal? [Means can either follow traditional publishing route OR Open Access (paid journal).
- How much the fees related to publication (Article Processing Charge)

Selection of Right Journal

- Look at the aims and scopes
- Types of articles they publish (Current hot topics!)
- Readership of the journal
- Read & review the abstracts of recent publications
- Also go through the following: - Is the journal peer-reviewed? - Who are editorial boards? - Who is this journal's audience?
- Find the journal from *indexed journals* list
- *Look for abstracting, indexing* and impact factor

[This will help to get a pathway to select right journal]

Indexed Journal List by Category

Based on disciplinary

- Multidisciplinary journals
- Interdisciplinary journals
- Specialized journals

Based on accessibility

- Open access journals
- Subscription-based journals

Based on indexing

- Scopus journals
- ISI master journals
- ISI journals

Based on the review speed

- Rapid publication journals.
- Traditional journals

Abstracting and Indexing

- Science Citation Index
- Expanded Web of Science
- Scopus
- Emerging Sources Citation Index (ESCI)
- Directory of Open Access Journals (DOAJ)
- INSPEC
- Crossref
- Google Scholar
- MyCite or My Jurnal

Impact Factor with example

The following information was extracted from J of Magnetism and Magnetic Materials:

- Impact Factor: **2.917**
- 5-Year Impact Factor: **2.723**
- CiteScore: **5.2**
- Source Normalized Impact per Paper (SNIP): **1.532**
- SCImago Journal Rank (SJR): **1.558**

[Reference: https://www.journals.elsevier.com/journal-of-magnetism-and-magnetic-materials]

Cont..

- Impact factor of Scopus Indexed Journals are available at Scopus Database: www.scopus.com. On top of impact factor of the journal, it gives four types of quality measure for *each journal*: h-Index, CiteScore, SJR and SNIP.
- WoS/ISI Indexed Journals [refer to J*ournal Citation Reports* @ Clarivate Analytics]
- Impact factor journals are available in Journal Citation Reports (JCR) with full list and can be found at:

Clarivate Analytics: https://clarivate.com

OR Thomson Reuters Master List:

http://ipscience.thomsonreuters.com/mj

Publish in High Impact Journal

Article or Paper will be published in High Impact Journal those have the following attributes:

- Work of established scientists/labs
- Results of general interest; wider scopes of the readers
- Novelty of findings
- *Concise and well written*

Other Criteria to Accept for Publication

- Originality
- Novel or creative research methodology
- New and important research findings
- Robust experimental design and methodology
- Excellent data representation; Clarity of presentation (readability/ clarity of writing/ grammar/logical flow)
- In depth investigation (standard methodology /variables/….)
- Thorough and logical discussion of results with interpretation
- Importance in the scientific world (implication)

Submission for Publication

- Pre-editing & pre-proof reading: In-house reviews required? – go with in-house review before final submission.
- Cover letter i.e., write to the journal's editor (only to one journal); [An Example]
- File format
  - Text: Word, Word Perfect, TeX/LaTeX, etc.
  - Figures: JPG, PNG, tif, gif, postscript, etc.
- Provide List of suggested reviewers
- Write Highlights and Graphical Abstract (if required by J. editor)
- Author's biography
- Submit paper online via Online Submission System (eSystem)
- Add ORCID iD during submission

Peer-review & Editing Process

- Editorial Manager or Assistant to Editor (AE) logs a manuscript and sends an acknowledgement that the paper has been received.
- AE will go with similarity, language quality checking and preliminary screening or scrutinizing of the article (emphasis on the introduction of the work, formatting, grammer, fig/image clarity etc)
- First impressions: writing style, language/Fig/Table quality, cohhesiveness, bias-free & inclusive language

Cont..

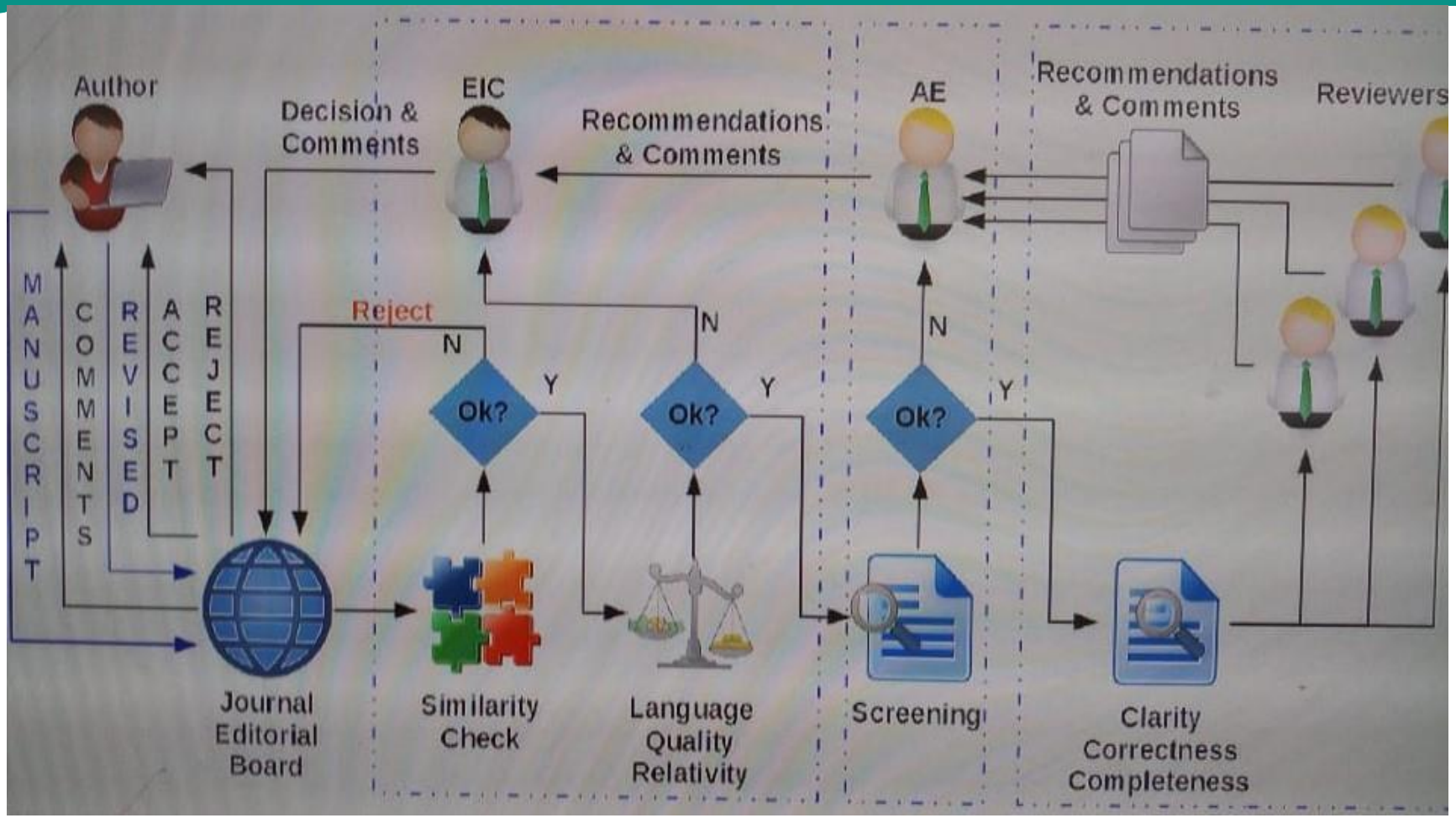
- Editor or editorial assistant sends the manuscript to reviewers for in-depth review in the areas of 3Cs (clarity, correctness and completeness)
- Reviewers send comments & recommendation
- Editor-in-chief (EIC) decision:

➢ EIC sends decision with comments

➢ On the basis of the reviews and the EIC's decision, article will be either **accepted**, **conditionally accepted** (either minor or major correction)**,** or **rejected.**

- If accepeted, revised article sends to publisher
- Finally, proof-reading checking ***A Case Example***

Total Review Cycle



EIC's two cents' comments

- "*When a manuscript is submitted to a high-impact journal, it goes through intense scrutiny —even before it's seen by the editor-in-chief and selected for peer-review process*".
- At Elsevier, between 30% to 50% of articles don't even make it to the peer-review process."
- Endnote from EIC:

"By avoiding these pitfalls, the author can save reviewers, editors and staff time and frustration, and ensure that the work is judged by it's scientific merit, not mistakes".

Published OR Perished!

If answer is published, then……..

Congratulations!

Key Takeaways

The main takeaways from this workshop are:

- High impact journal means high citation and impact factor is calculated based on the number of times selected articles are cited within the last few years.
- Research is worthless unless it is being published
- Systematic journal writing steps help to write a quality scientific article and give away much lower risk of rejection of the submitted article.
- Publication in high impact journal brings joyous moment of the writers and helps to graduate Masters/PhD degree or to fulfil KPI and get promotion.

Cont..

- To ensure that the article is not rejected, remember the followings:

- It passes the technical screening; no plagiarism issue; not republishing the findings; not submitting to more than one journals at the same time; the article is complete; English is sufficient standard for the peer-review process; the figures/images are complete or clear enough; conforms to the "Guide for Authors" of the journal and references are complete.
- It falls within the 'Aims and Scope' of the journal.
- The methodology/analysis of the data are robust.
- The conclusions are justifiable and extracted from results and discussion


Thank You

Impact Factor Calculation

The annual **impact factor** is a ratio between citations and recent citable items published. Thus, the **impact factor** of a journal is **calculated** by dividing the number of current year citations to the source items published in that journal during the previous two years.

- For example, the 2020 impact factor for a journal is calculated as follows:

A = the number of times articles published in 2018 and 2019 were cited in indexed journals during 2020 (say, 600 times cited)

B = the number of "citable items" (usually articles, reviews or proceedings; not editorials and letters-to-the-Editor) published in 2018 and 2019 (no of citable items are 100 & 80 respectively)

- So, 2020 impact factor = A/B = 600/200= 3.333