

Important Aspects of Publishing in High Impact Journals Session 1: Overview

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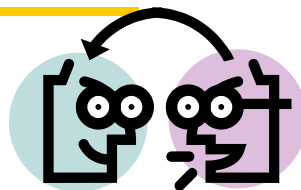
For CEES and FKE,
Post Graduates Students.
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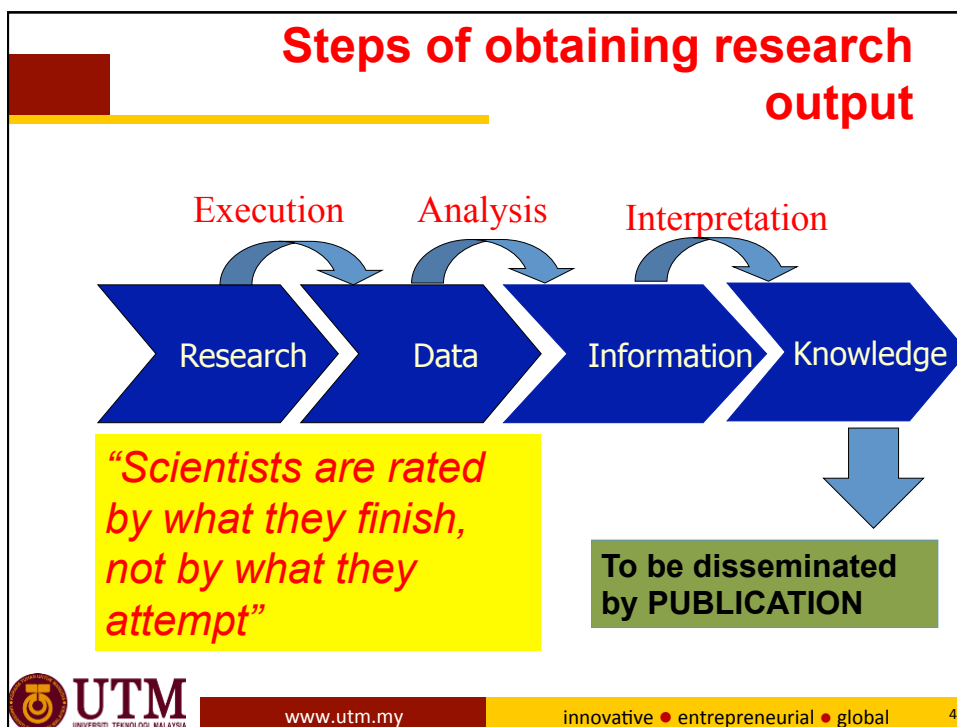
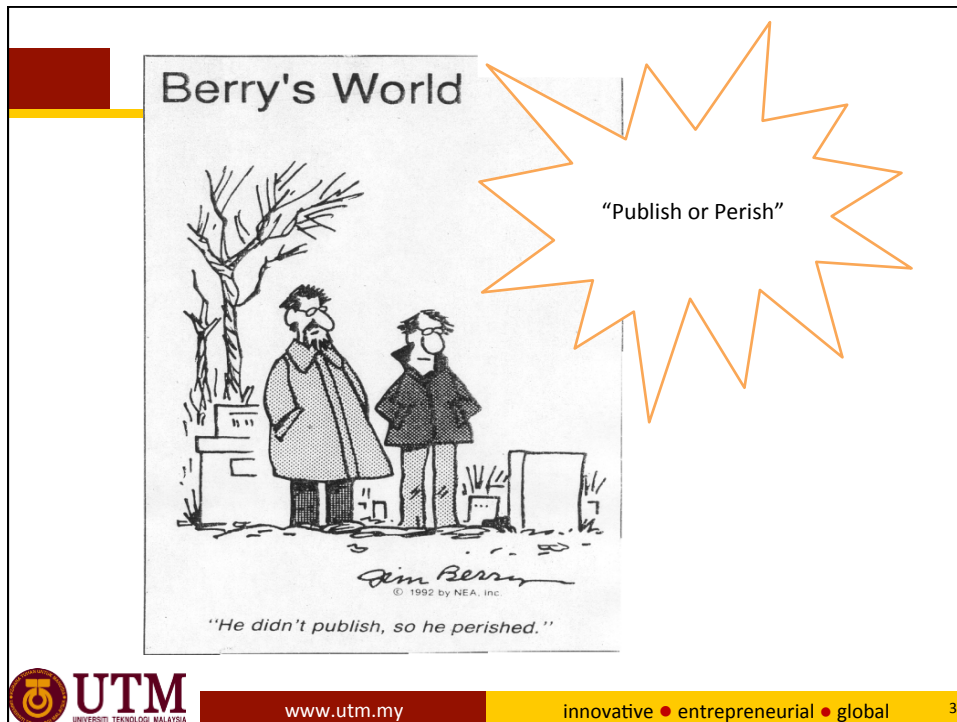
The greatest ideas are (literally)
worthless if you keep them to
yourself



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Peer Review vs. Popular Press

- ❖ Peer Review
 - ❖ Difficult to understand (technical jargon, equations etc)
 - ❖ Aimed at a specific audience
 - ❖ Primary data
 - ❖ Access via expensive databases

- ❖ Popular Press
 - ❖ More approachable (easier to understand)
 - ❖ General audience
 - ❖ Sold in stores



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What is High Impact Journal?

- ✓ Journals that are being referred frequently by means of citations
- ✓ Information in it are accurate and reliable
- ✓ Content reviewed by “expert peers”.
- ✓ Examples:
 - ✓ IEEE Transactions,
 - ✓ Titles form Elsevier, Wiley, Pergamon Press, Nature, Science.



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Types of Articles

- Original Research Article
 - Content based on primary data from author's experiments, own work
 - Very Specific
 - Audience can be limited
- Literature Review Article
 - Compilation of others work on the same topic/ area
 - Quite broad
 - Lots of reference
 - Opportunity for more citations



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Indexing Databases: Google Scholar

- Allows users to search for digital or physical copies of articles, whether online or in libraries.
- It **indexes** full-text journal articles, technical reports, preprints, thesis, books and other documents that “deemed to be scholarly”.
- Advantage: linked to Google, Free
- Concerns: Lack of screening for quality, predatory journal, vulnerability to spam



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Scopus

- ❖ Owned by Elsevier
- ❖ On-line subscription (not free)
- ❖ Covers 21,000 titles from 5,000 publishers
- ❖ Over 21,000 are peer review journals and conference proceedings
- ❖ Areas: scientific, medical, technical, arts, humanities, social science



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Web of Science (WoS)

- Previously known as *Web of Knowledge*
- Indexing maintained by *Thomson Reuters*
- Consist of seven online databases
 - Conference Proc. Citation Index (160,000 titles)
 - Science Citation Index Expanded (8,500 journal)
 - Social Science Citation Index (3,000 journal)
 - Book Citation Index (60,000 editorial)
 - And others..



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Citations

- Definition: A formal, **explicit linkage** between papers that have particular points in common.
- If your paper is **cited**, it shows the **value of your research** in the eyes of others.
- It also reflects the quality of your work
- Nowadays, an important tool for personal/institutional competitiveness



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Journal Impact Factor (IF)

- The annual IF is a ratio between citations and recent citable items published.
- A measure to indicate the **relative importance** of a journal within a specific subject category (field of research).
- Devised by the founder of *Institute of Scientific Information* (ISI)
- Calculated yearly, since 1975.
- Only for journals indexed in **Journal Citation Report (JCR)**
- **Many critics? But IF is still widely used as a "benchmark" of journal quality.**



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Impact Factor calculation

- **A**= number of articles published in 1990-91
(2 years)
- **B**= Number of cites (in 1992) to articles published in 1990-91
- **Impact Factor for 1992**= B/A
- Example:
In 1990 and 1991, Journal X published a total of 100 articles (**A**).
In 1992, these 100 articles are cited 250 times (**B**) .

$$\begin{aligned} \text{1992 impact factor of Journal X} &= B/A \\ &= 250/100 \\ &= 2.50 \end{aligned}$$



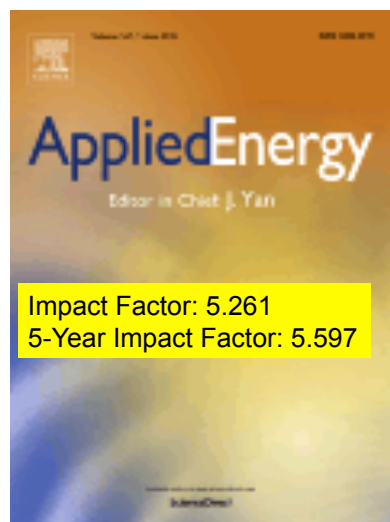
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5-year Impact Factor



Impact Factor:

The Impact Factor measures the average number of citations received in a particular year by papers published in the journal during the two preceding years.

Five-Year Impact Factor:

To calculate the five year Impact Factor: citations are counted in the previous five years and divided by the source items published in the previous five years.

Measure of journal consistency and stability



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Journal Quartile (Q)

- Within a subject category, there are 100 journals having their impact factor compute by the **Journal Citation Reports (JCR)** published by Thomson Reuters.
- The top 25 (25%) is considered as Q1, second 25 (next 25%) as Q2 and so on.
- Note: A journal can be in different Q for different subject category (because it can be classified into several categories)

Example

SIMULATION MODELLING PRACTICE AND THEORY

Impact Factor

1.05 **1.169**
 2013 5 year

JCR® Category *Rank in Category* *Quartile in Category*
 COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS
70 of 102 **Q3**

COMPUTER SCIENCE, SOFTWARE ENGINEERING
49 of 105 **Q2**

Data from the 2013 edition of [Journal Citation Reports®](#)

Publisher

ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE
 AMSTERDAM, NETHERLANDS

ISSN: 1569-190X

Research Domain

Computer Science

Examples of top 2014 Q1 journals



Why publish in Q1 or Q2?

- To get higher citation
 - The paper is very likely to be cited.
- Personal Satisfaction/esteem
 - Recognition as “expert”
 - Promotion/appraisal exercises
 - “Ticket” for mobility (especially if publish in *Nature, Science, IEEE Transactions*)
- Institutional
 - Visibility, University Ranking, RU

h-index

- A measure to assess the cumulative publication **productivity and impact** of a researcher
- *h*-index can also be applied to the productivity and impact of a scholarly journal, department, institution or even a country!
- There are is *h*-index for Google Scholar, Scopus and WoS

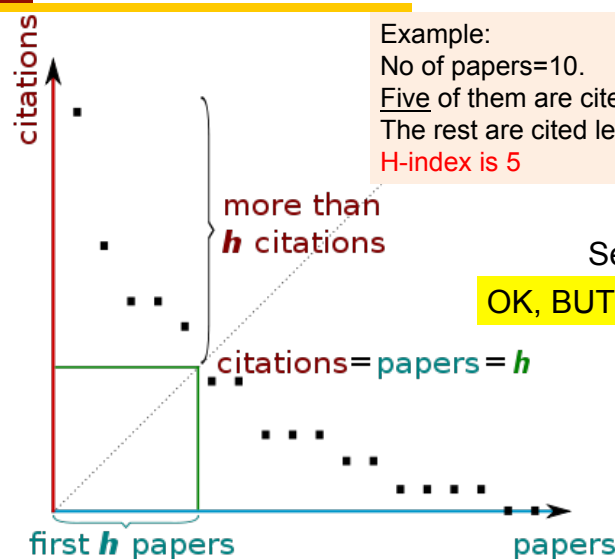


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h-index calculation



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Ways to Increase your h-index

- In principle, **no short-cut**: you need to write good articles in good journals!
- Write **review articles** (normally highly cited)
- Link with people who are top in the field
- Enroll of professional network, e.g. LinkedIn, ResearchGate
- Get more people interested in your work (promotional?)
- Volunteer to review papers of others
- **Cite your own paper**

WORK SMART!



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KEY FOR SUCCESSFUL WRITING

- Obtain high quality research results
- A lot of reading
 - Study how successful authors write their papers
 - Try to emulate some of their methods and style
- Practice
- Never give up.

For Supervisor:

A sure way of getting a rejection is to let the student writing the paper by himself (BK Bose; IEEE Fellow)



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Ask these Questions before Starting

For Original Research Article

- ❖ The problem to be addressed?
 - ❖ Is the problem important?
 - ❖ Is it still relevant?
- ❖ Your approach/idea/solution
 - ❖ Is your idea to solve the problem new?
 - ❖ Different than others?
- ❖ Your Findings
 - ❖ Are the results you obtain superior to previous work?
 - ❖ If not, are there special "dimension" can be considered significant?

For Review Article

Is there a similar review paper published in the last three years?


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