

# Publishing in High Impact Journals

## Session 1: Overview

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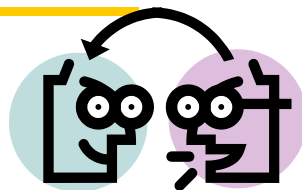
Universitas Andalass,  
Padang ,  
Indonesia.  
14 and 15 March 2017



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The greatest ideas are (literally)  
worthless if you keep them to  
yourself



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## Why do We Publish Paper?

- For career progression and personal development
  - An edge in competitive job market, scholarship, promotion
- To share knowledge
  - Sharing opinions and experiences with peers
  - Attract interest from others
  - To receive expert feedback
- To legitimize the research,
  - Independent verification of methods and results.
  - PhD candidate
  - Grant application



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## Institutional Concerns

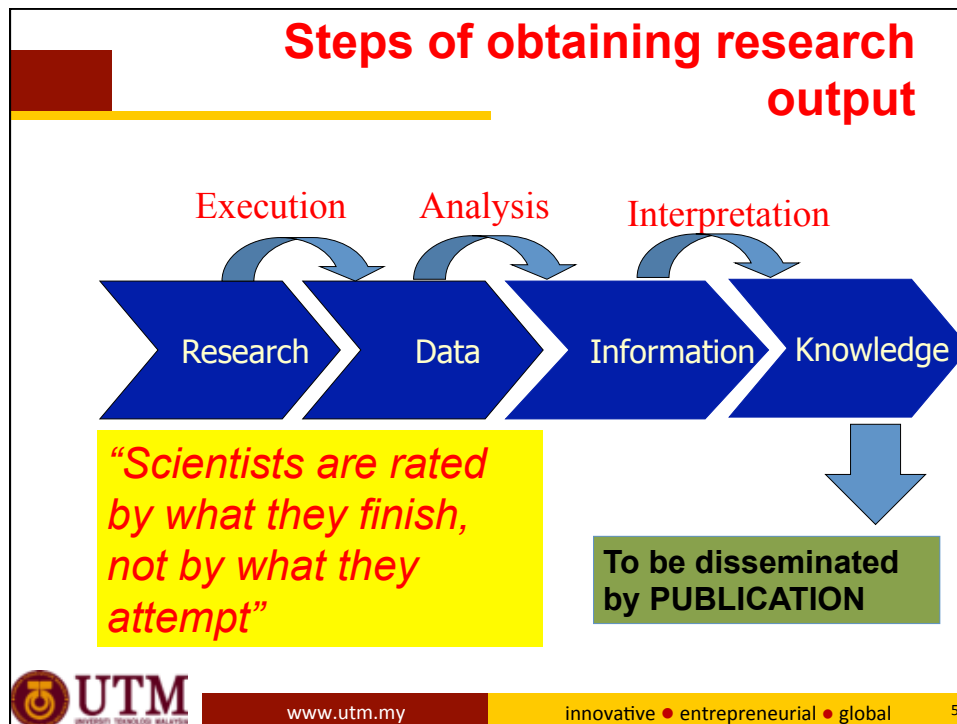
- University Rankings
  - Mostly based on citations
  - Competition for students enrolment
- Publishing in high impact journals as key performance indicator (KPI) for staff
  - Certain University requires a number of papers per year to maintain employment

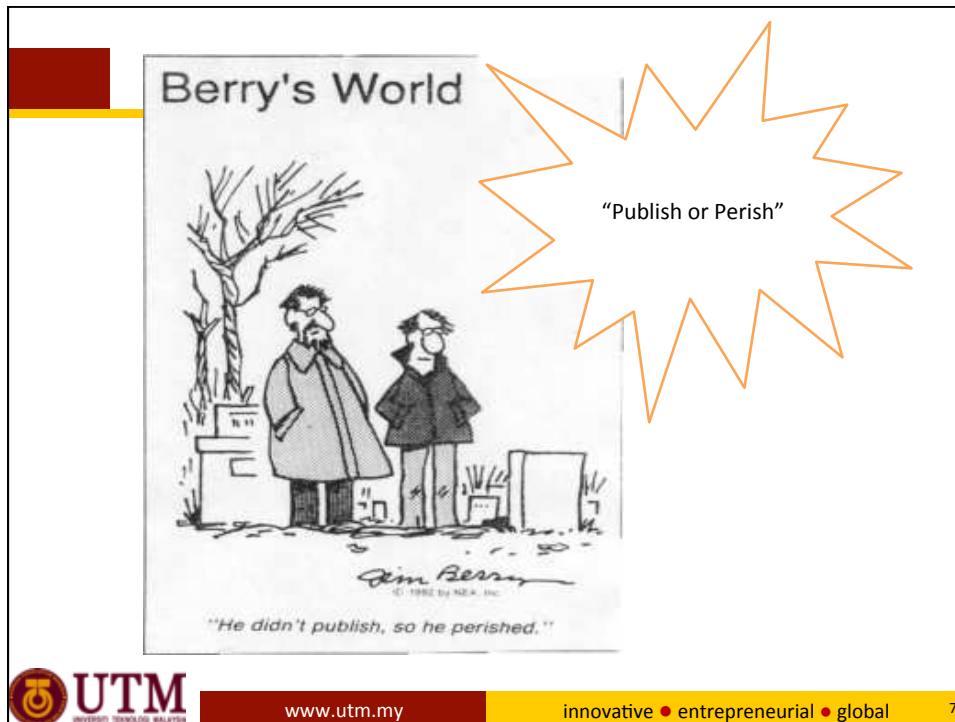


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## Peer Review vs. Popular Press

- ❖ 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

## 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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## 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: 5.261  
5-Year Impact Factor: 5.597

**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)

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## 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

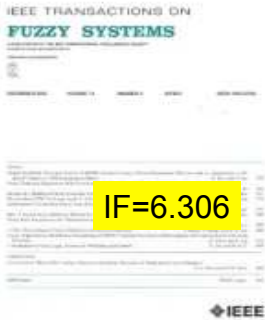


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## Examples of top 2014 Q1 journals




**IF=6.500**



**IF=6.306**



**IF=10.211**



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## 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



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## *h*-index

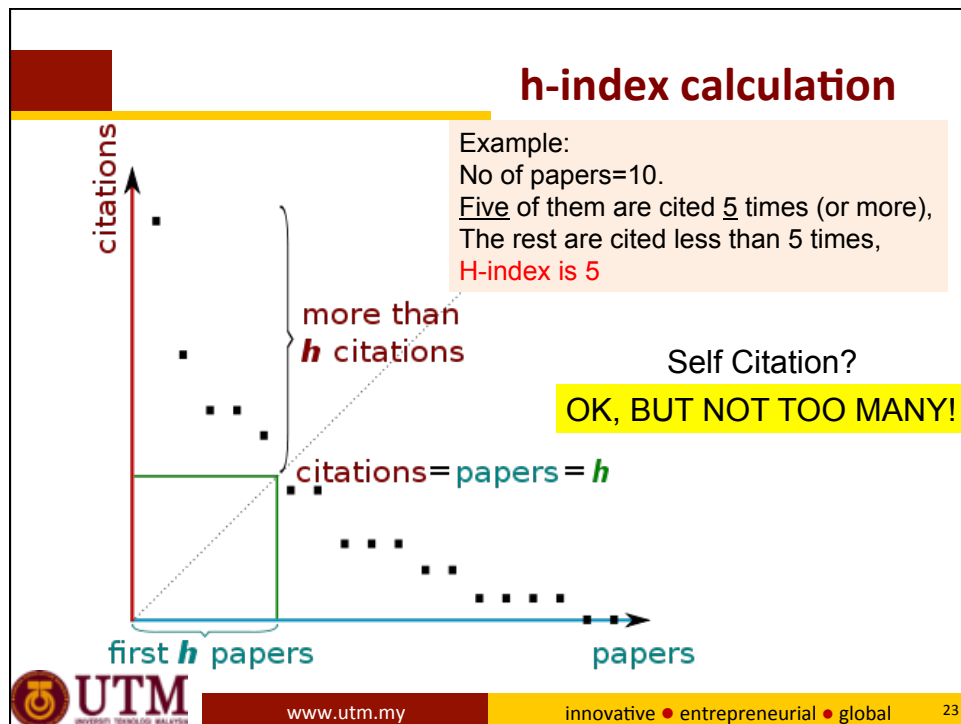
- A measure to assess the cumulative publication **productivity and impact** of a researcher
- *h*-index can also be applied to the productivity and impact of a scholarly journal, department, institution or even a country!
- There are is *h*-index for Google Scholar, Scopus and WoS



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## 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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## Final Words

The only way to learn how to write above all is **to read**, to **study good models**, and to **practice**.”

[P. B. Medawar]

*[Won the Nobel Prize in Physiology or Medicine 1960]*



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Thank you...

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