

# **Guiding Scholars and Advisees to Publish Their Research Work**

by

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# Importance of Publishing Research Work

- Contributes to the wealth of new knowledge
- Contributes to the visible advancement of science and engineering
- Validates your research work
- Stimulates further research
- Opens up opportunities for international collaboration
- Contributes to country's economy

# R&D Spending, Publications & Economy

- Country's GDP ~ R&D spending
- Functional Relationship:

$$G=kF(IgP)N$$

where:

G = GDP per capita

K= constant (0.4 to 1.2 for most countries)

F = gross expenditure on R&D as % of GDP

IgP= patent applications

N = Internet users per 10,000 inhabitants

Source: Ye, F.Y. (2007)

Scientometrics journal of Springer

# R&D Spending, Publications & Economy

- Spending on R&D spending in Asian countries is positively correlated with number of published documents, citations per document and H-index in various subjects

Source: Meo et al. (2013)

# Ranking of All Countries Based on Engineering Publications (1996-2016)

Rank	Country	Documents	Citable Documents	Citations	Self-citations	Citations per document	H index
1	China	1,694,209	1,685,951	7,397,071	4,758,894	4.37	386
2	United States	1,641,808	1,606,416	19,305,814	7,249,777	11.76	798
3	Japan	556,567	550,167	3,876,598	1,257,463	6.97	356
4	Germany	404,973	398,392	3,708,075	935,644	9.16	402
5	United Kingdom	369,811	360,742	4,176,344	908,650	11.29	423
6	France	284,016	280,311	2,814,403	719,359	9.91	337
7	South Korea	268,044	264,939	2,253,370	504,815	8.41	291
8	India	255,600	252,506	1,629,410	541,478	6.37	242
9	Canada	230,012	225,848	2,527,877	475,342	10.99	345
10	Italy	225,976	221,940	2,314,095	633,401	10.24	303
<b>78</b>	<b>Philippines</b>	<b>2,209</b>	<b>2,183</b>	<b>10,227</b>	<b>1,465</b>	<b>4.63</b>	<b>46</b>

Source: Scimago Journal and Country Rank (2018)

# Ranking of Asian Countries Based on Engineering Publications (1996-2016)

Rank	Country	Documents	Citable Documents	Citations	Self-citations	Citations per document	H index
1	China	1,694,209	1,685,951	7,397,071	4,758,894	4.37	386
2	Japan	556,567	550,167	3,876,598	1,257,463	6.97	356
3	South Korea	268,044	264,939	2,253,370	504,815	8.41	291
4	India	255,600	252,506	1,629,410	541,478	6.37	242
5	Taiwan	188,350	186,324	1,575,391	380,599	8.36	237
6	Singapore	77,254	76,145	1,052,576	141,679	13.62	263
7	Hong Kong	66,738	65,630	938,098	121,831	14.06	244
8	Malaysia	65,316	64,792	282,977	87,145	4.33	122
9	Thailand	27,137	26,896	159,422	27,019	5.87	110
10	Pakistan	15,261	15,036	82,342	23,583	5.4	82
<b>15</b>	<b>Philippines</b>	<b>2,209</b>	<b>2,183</b>	<b>10,227</b>	<b>1,465</b>	<b>4.63</b>	<b>46</b>

Source: Scimago Journal and Country Rank (2018)

# Ranking of Southeast Asian Countries Based on Engineering Publications (1996-2016)

Rank	Country	Documents	Citable Documents	Citations	Self-citations	Citations per document	H index
1	Singapore	77,254	76,145	1,052,576	141,679	13.62	263
2	Malaysia	65,316	64,792	282,977	87,145	4.33	122
3	Thailand	27,137	26,896	159,422	27,019	5.87	110
4	Indonesia	12,886	12,716	33,400	6,747	2.59	58
5	Vietnam	7,175	7,066	37,091	7,272	5.17	67
<b>6</b>	<b>Philippines</b>	<b>2,209</b>	<b>2,183</b>	<b>10,227</b>	<b>1,465</b>	<b>4.63</b>	<b>46</b>
7	Brunei Darussalam	482	468	1,903	251	3.95	21
8	Myanmar	254	253	570	37	2.24	12
9	Laos	80	79	204	9	2.55	8
10	Cambodia	72	69	315	13	4.38	9
11	Timor-Leste	3	3	1	-	0.33	1

Source: Scimago Journal and Country Rank (2018)

# Status of ERDT Publications

- No data ???
- Number of ERDT graduates

Year	Number of MS Graduates	Number of PhD Graduates	Combined Total
2007	38	11	49
2008	81	10	91
2009	127	19	146
2010	116	13	129
2011	108	10	118
2012	116	12	128
2013	127	7	134
2014	98	7	105
2015	56	1	57
2016	4	0	4
2017			
<b>Total</b>	<b>871</b>	<b>90</b>	<b>961</b>

Potential publications

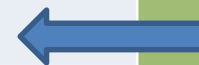
Source: ERDT (2018)



# Status of ERDT Publications

- Number of oral paper presentations by ERDT faculty members

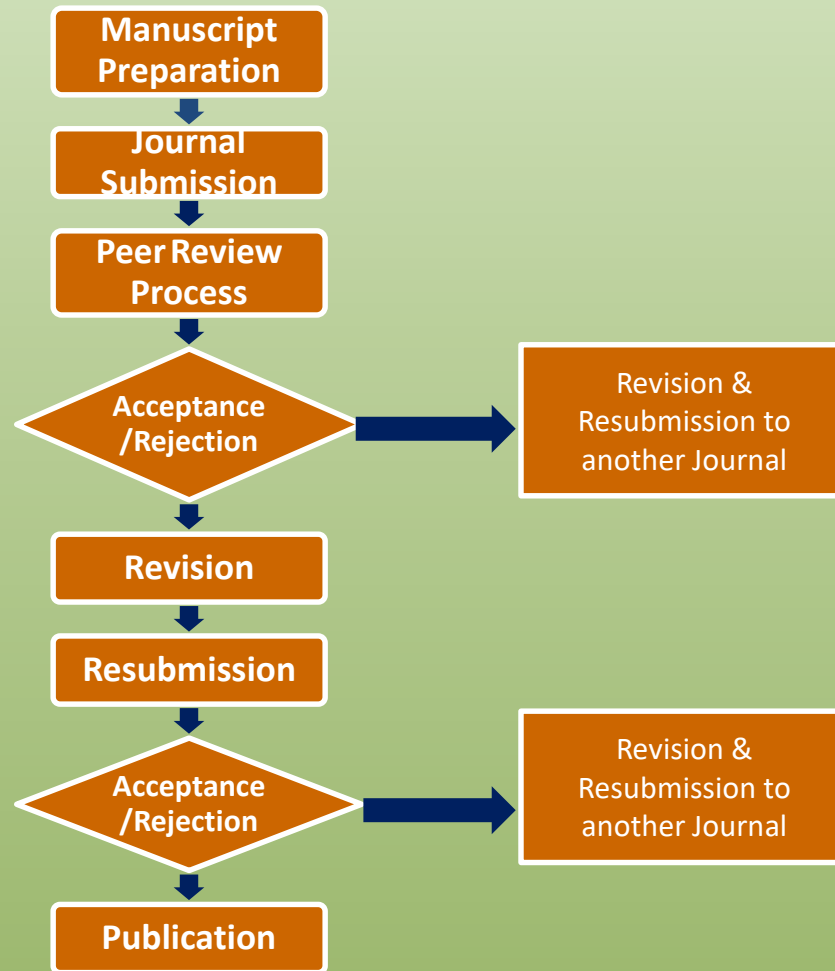
Year	Number of Recipients
2008	1
2009	17
2010	51
2011	25
2012	32
2013	43
2014	72
2015	62
2016	60
2017	58
<b>Total</b>	<b>421</b>



Potential publications

Source: ERDT (2018)

# The Basic Scientific Journal Publication Process



# Qualities of a Good Publishable Manuscript

- Offers original and new knowledge
- With scientifically valid findings
- Well written and organized
- With appropriate title that is reflective of content
- Presents well defined objectives
- Contains up-to-date review of literature
- With appropriate, sound and scientifically acceptable methodologies and research design
- With rigorous data analysis

# Qualities of a Good Publishable Manuscript

- Presents adequate and substantive results that meet the specified objectives
- Contains well prepared tables and figures
- Presents proper interpretation and adequate discussion of results
- Provides conclusions that are supported by data and analysis
- Stimulates further research work
- With acceptable length
- Complete and contains the basic components of a scientific publication

# Basic Structure of a Publishable Manuscript

- Title
- Authors
- Abstract
- Keywords
- Introduction
- Materials and Methods
- Results and Discussion
- Summary and Conclusion
- Acknowledgement
- References

# Selecting Journals

- Choose peer-reviewed engineering journals, as much as possible
- Choose the journal that best fits the topic
- Aim for publication in ISI-indexed or at least Scopus-indexed international journals

# Selecting Journals

Check out:

<http://mjl.clarivate.com/> for ISI-indexed journals

The screenshot shows the Clarivate Analytics Master Journal List website. At the top left is the Clarivate Analytics logo. The page title is "Master Journal List". On the right, there is a search bar with the text "Search" and a magnifying glass icon. Below the header, the page content is divided into several sections. On the left, there is a search area with the text "Search our Master Journal List" and a search input field. Below the input field is a purple "Search" button. To the right of the search area is a "Search Type" dropdown menu with the following options: "Title Word" (selected), "Title Word", "Full Journal Title", and "ISSN". To the right of the search area is a purple "Submit a journal" button. Below the search area, there are three tabs: "Journal Lists", "Journal Evaluation", and "Scope Notes". The "Journal Lists" tab is active. Below the tabs, there is a section titled "Journal Lists for Searchable Databases" with a list of databases: "Web of Science Core Collection", "Arts & Humanities Citation Index", "Science Citation Index Expanded", and "Social Sciences Citation Index". On the right side of the page, there is a promotional banner with the text "Look up to your brightest stars. Find out who shines in the Highly Cited Researchers list 2017." and a green "See the list" button. The banner also features the Clarivate Analytics logo and a satellite dish image.

# Selecting Journals

- Check the track record of the journal (publication frequency, promptness of review, acceptance/rejection rate, impact factor, publication costs, etc.)
- Avoid predatory journals and publishers  
**Predatory journal/publishers-** those that exploit the gold open-access model to profit from scholarly publishing in a dishonest way (Beall, 2016)



# Selecting Journals

Checkout

<https://beallslist.weebly.com/> for a listing of predatory journals

## BEALL'S LIST OF PREDATORY JOURNALS AND PUBLISHERS

PUBLISHERS

STANDALONE JOURNALS

CONTACT

OTHER

THINK CHECK SUBMIT

### Potential predatory scholarly open-access publishers

**Instructions:** first, find the journal's publisher - it is usually written at the bottom of journal's webpage or in the "About" section. Then simply enter the publisher's name or its URL in the search box above. If the journal does not have a publisher use the [Standalone Journals](#) list.

### Original list

This is an archived version of the Beall's list - a list of potential predatory publishers created by a librarian [Jeffrey Beall](#). We will only update links and add notes to this list. A list of new predatory publishers is available below the original one.

- [1088 Email Press](#)
- [2425 Publishers](#)

### Other important lists

[List of journals falsely claiming to be indexed by DOAJ](#)

[DOAJ: Journals added and removed](#)

[JCR Master Journal List](#)

[Questionable conferences](#)

[How to avoid predatory conferences](#)

**Beware and avoid these journals!**

# Manuscript Revision (After the Peer-Review Process)

- Address both technical and editorial comments and suggestions
- Prepare a rejoinder of how you addressed each comment and suggestion by the reviewers
- Redo and improve some analysis if needed or strongly justify your findings and conclusions
- Have your co-authors take on some of the comments and suggestions
- Be patient!
- Submit the revised version on time

# Ethical Considerations

- Proper authorship
- Complete and proper citation of literature
- Avoid multiple submissions
- Never fabricate data
- Provide proper acknowledgement (people, secondary data sources, funding agencies, etc.)
- Never, never plagiarize!

**Use online plagiarism checkers**  
e.g. Turnitin

# Concluding Remarks

- Importance of publishing research work can never be overemphasized
- The Philippines still lags behind in engineering publications
- ERDT scholars have a moral obligation to publish their research work
- ERDT faculty advisers play a key role in publishing their advisees' research work
- Preparation of high quality manuscript, proper selection of journals and adequate revision after peer review are all critical in scientific publishing
- Always observe ethics in publishing
- Make time to publish, work on it and be patient

# *Thank you!*

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