

Publication productivity analysis of University of Mysore: a study

Shree Rekha N.¹; Husna Jabeen²

Library Project Assistant, Mysore University Main Library, University of Mysore, Mysore¹;
Library Project Assistant, College of Fine Arts, University of Mysore, Mysore²

Shrirekha24@gmail.com¹; husnajabeen89@gmail.com²

ABSTRACT

The study is attempted to analyze the research outputs of University of Mysore covered by Scopus during 2011 to 2015. Researchers have mainly focused on citation pattern, various forms of documents, subject wise output of publications and top journals. The study also identified the extent of authorship and top most productive authors. Major findings of the study are 22.11% of total publications were made in the year 2013. Highest citations amounts to 33.81 % was received in the year 2011 and most preferred form of publication by faculty of UOM which amounts to 83.43% of document of total publications is journals article. Acta Crystallographica Section E Structure Reports Online found to be the most preferred journal for publishing papers. 21.36% three authored papers found to be the most collaborative papers in total number of publications.

Keywords: Bibliometric analysis, University Of Mysore, UOM, Scopus database, Publication analysis, Research output, Faculties publications.

1. INTRODUCTION

The study has been conducted focusing on citation analysis of research outputs and publications, i.e. how many times research outputs / publications were cited. This sort of evolution may help to measure and assess research impact of individuals, group scholars and institutions. Scopus is a bibliographic database containing abstracts and citations for academic journal articles. It covers nearly 22,000 titles from over 5,000 publishers, of which 20, 000 are peer-reviewed journals in the scientific, technical, medical, and social sciences.

2. OBJECTIVES

1. To know the year wise publications covered in Scopus.
3. To find out the types of document covered in Scopus.
4. To know the authorship pattern
5. To identify authors with highest publication.
6. To study the subject wise distribution of publications.

3. METHODOLOGY

For this study, a total number of 2415 publications made during 2011-15 were collected from Scopus and downloaded in the month of October 2016. Data was exported into MS Excel worksheet for the analysis and tabulation.

4. SCOPE AND LIMITATION

The scope of the present study covers the research productivity of University of Mysore faculties which has been indexed in Scopus during the period of 2011 to 2015 only.

5. RELATED LITERATURE

Arshiya Kousar (2016) states publication analysis helps to monitor the pattern of research. Cheluvaih, Bangara et. al. (2016) opined that the bibliometric analysis reflects the key activities of research being carried out through the globe. Bibliometric is an emerging thrust area of research and has now become a well established part of information research and a quantitative approach to the description of documents. Kodandarama and Swamy, D. (2016) citation indices are helpful in illustrating the publication statistics of any individual, group or institution. Somaira Nabi (2016) the study deals with research output in the field of Science & technology from University of Kashmir for the period 2009-2013. Satpathy, Sunil Kumar and Sa, Manoj Kumar (2015) analyzed different aspects of bibliometric study of research productivity of Odisha's state government universities. Yining Chen et. al. (2010) in their study surveyed 367 accounting faculty members from AACSB accredited Colleges of Business to examine their research productivity. The intrinsic and extrinsic motivators to conduct research. Wide differences in research productivity were observed in the faculty associated with doctoral vs. non-doctoral granting programs.

6. DATA ANALYSIS AND INTERPRETATION

Table 1: Year wise distribution of publication

Year	Publications (N=2415)	Percentage (%)	Growth Rate	Growth (%)
2011	525	21.73	0	0.00
2012	459	19.04	66	12.57
2013	534	22.11	-75	-16.33
2014	487	20.16	47	9.65
2015	409	16.85	78	19.07
Total	2415	100.00	116	24.96

Table 1 depicts the number of research publications of University of Mysore covered in Scopus for the period of 2011 to 2015. It is observed that, majority of 534 publications were made in the year 2013. Minority of 409 publications were made in the year 2015. Therefore up and down trend in growth of publication may be witnessed in the above table.

Table 2: Year wise distribution of citations

Year	Publications (N=2415)	Number of Citations	Percentage (%)	h- index
2011	525	2121	33.81	20
2012	459	1215	19.37	15
2013	534	1493	23.80	15
2014	487	1037	16.53	13
2015	409	406	6.47	07
Total	2415	6272	100.00	70

Table 2 indicates the year wise distributions of citations. As regards to entire publications covered in Scopus database for the period of 2011 -2015. The total number of citations received for entire publications is 6272. The highest 2121 citations were received in the year 2011 followed by 1493 citations in 2013 and 1215 citations in 2012.

Table 3: Document wise distribution of publication

Document type	2011	2012	2013	2014	2015	Total	Percentage (%)
Article	423	387	448	416	341	2015	83.43
Conference paper	75	48	53	34	25	235	9.73
Review	5	8	15	11	17	56	2.31
Articles in press	7	3	5	13	12	40	1.65
Book chapter	9	3	6	6	6	30	1.24
Note	-	5	2	3	4	14	0.57
Editorial	1	3	1	1	2	8	0.33
Letter	2	1	2	2	1	8	0.33
Erratum	1	-	1	1	1	4	0.16
Book	1	1	1	-	-	3	0.12
Short survey	1	1	-	-	-	2	0.08
Total	525	460	534	487	409	2415	100

The above table shows year wise different types of documents such as article, articles in press, book, book chapter, conference paper, editorial, erratum, letter, review, short survey and note. Majority of 2015 publications which amounts to 83.43% were made in the form of article, followed by 235 (9.73%) conference paper, 56 (2.31%) review, 40 (1.65%) articles in press, 30 (1.24%) book chapter, 14 (0.57%) note, 8 (0.33%), editorial and letter, 4 (0.16%) erratum, 3 (0.12%) book and the least one is Short Survey, 2 (0.08%).

Table 4: Subject wise publications defined by Scopus

Sl. No	Subjects	Number of Publications (N=2145)	Percentage (%)
1	Chemistry	841	34.82
2	Physics and Astronomy	640	26.50
3	Materials Science	565	23.39
4	Pharmacology, Toxicology and Pharmaceutics	415	17.18
5	Biochemistry, Genetics and Molecular Biology	394	16.31
6	Medicine	368	15.23
7	Agricultural and Biological Sciences	285	11.80
8	Computer Science	175	7.24
9	Engineering	137	5.67
10	Chemical Engineering	133	5.50

Table 4 indicates the different category of subjects defined by Scopus with no. of publications. The majority of 841 publications are from chemistry subjects followed by 640 physics and astronomy, 565 materials science, 394 biochemistry, genetics and molecular biology, 368 medicines, 285 agricultural and biological sciences.

Table 5: Ranking of the most productive journals

Ranks	Journals Names	Publications
1	Acta Crystallographica Section E Structure Reports Online	341
2	International Journal Of Pharmacy And Pharmaceutical Sciences	49
3	AIP Conference Proceedings	46
4	Molecular Crystals And Liquid Crystals	38
5	Spectrochimica Acta Part A Molecular And Biomolecular Spectroscopy	38
6	Archives of Phytopathology And Plant Protection	27
7	Advanced Studies In Contemporary Mathematics Kyungshang	24
8	International Journal of Chemtech Research	24
9	Nature Environment And Pollution Technology	24
10	Plos One	23

Table 5 signifies the ranking of the most productive journals carrying publications of University of Mysore. Acta Crystallographica section E Structure Reports Online Journal tops the first in terms of publishing 341 articles followed by International Journal Of Pharmacy And Pharmaceutical Sciences 49 publications, AIP Conference Proceedings 46 articles, Molecular Crystals & Liquid Crystals and Spectrochimica Acta Part A Molecular and Biomolecular Spectroscopy produced 38 research papers respectively.

Table 6: Ranking of the 10 more productive authors

Authors	No of Publications (N = 2415)	Percentage (%)
Yathirajan, H.S.	246	10.18
Jasinski, J.P.	145	6.00
Narayana, B.	115	4.76
Rangappa, K.S.	93	3.85
Lokanath, N.K.	91	3.76
Basavaiah, K.	83	3.43
Kaur, M.	72	2.98
Chandraju, S.	56	2.31
Devarajegowda, H.C.	51	2.11
Kemparaju, K.	51	2.11

Table 6 reveals the top ten researchers by publication count. Majority of 246 publications were authored by Yathirajan H. S. followed by Jasinski, J. P. with 145 publications. Narayana, B. has published 115 publications. Prof. Rangappa, K. S. holds 93 publications. Whereas Lokanath, N. K. and Basavaiah, K. holds 91 and 83 respectively.

Table 7: Authorship pattern

Authors	Number of publication	Percentage (%)
One	61	2.52%
Two	472	19.54%
Three	516	21.36%
Four	388	16.06%
Five	487	20.16%
Six	249	10.31%
Seven	119	4.92%
Eight	57	2.36%
Nine	20	0.82%
Ten	13	0.53%
Eleven	9	0.37%
Twelve	7	0.28%
Thirteen	3	0.12%
Fourteen	7	0.28%

Fifteen	2	0.08%
Sixteen	1	0.04%
Seventeen	2	0.08%
Twenty two	1	0.04%
Ninety three	1	0.04%
Total	2415	100%

Table furnishes the extent of collaborations, it is observed in the table that majority of 516 articles (21.36%) were found to be three authored papers, followed by five authored (487; 20.16%), two authored (472; 19.54%), four authored (388; 16.06%), six authored (249; 10.31%), and seven authored (119; 4.92%) However, contributions of other collaborated papers were found quite negligible.

7. RESULT AND FINDINGS

The major result and findings of the study are as follows

1. Majority of 534 publications were in the year 2014.
2. 34.82 % of total publications have been published by chemistry discipline.
3. Highest citations were received in the year 2013 representing 33.8% of total citations.
4. Acta Crystallographica Section E Structure Reports Online appeared to be the most preferred journal by publishing 341 publications.
5. Prof. Yathirajan, H. S. appeared to be more productive author by publishing majority of 246 publications.
6. 516 three authored papers found to be the most collaborative papers.

8. RECOMMENDATIONS

1. Publications from other than science faculty found negligible in the study. Hence, scientist from other faculty like commerce and arts & humanities may focus on to publish more articles in the Scopus covered journals.
2. Majority of the publications are from retired scholars of UOM. Therefore present working faculty may actively involve in producing more publications.

REFERENCES

- [1]. Amador Durán Sánchez, María de la Cruz Del Río Ramab, José Álvarez García (2016) Bibliometric analysis of publications on wine tourism in the databases Scopus and WoS. [European Research on Management and Business Economics](http://www.sciencedirect.com/science/article/pii/S2444883416300080) <http://www.sciencedirect.com/science/article/pii/S2444883416300080> (accessed on 15 October 2016)
- [2]. Satpathy, Sunil Kumar and Sa, Manoj Kumar (2015) Research outputs of state government universities of odisha: a bibliometric study <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3506&context=libphilprac> (accessed on 15 October 2016)
- [3]. Kodandarama, Swamy D. (2016) International Journal of Research in Library Science Volume 2, Issue 2 (July-December) 2016, 91-97 Coverage analysis of publications of University of Mysore in Scopus http://ijrls.in/journal_category/issue-no-2-july-december-2016/page/2/ (accessed on 15 October 2016)
- [4]. Hammouti, B. (2010) Comparative bibliometric study of the scientific production in Maghreb countries (Algeria, Morocco and Tunisia) in 1996-2009 using Scopus J. Mater. Environ. Sci. 1 (2) (2010) 70-77 <http://www.jmaterenvironsci.com/Document/vol1/9-JMES-16-2010.pdf> (accessed on 15 October 2016)
- [5]. <https://en.wikipedia.org/wiki/Scopus> (accessed on 15 October 2016)
- [6]. Bangara Chaluvaiiah, Dr. D Giddaiah and B M Jagadeesha (2016) e-Library Science Research Journal Archived Articles for Volume : IV Issue : X, August – 2016 <http://lsrj.in/ArticleDetails.aspx?id=691> (accessed on 19 November 2016)

- [7]. Kousar, Arshiya (2016) International Journal of Research & Development Organisation ISSN : 2456-2947 volume 1 Issue 5, August 2016 Retrieved 19.11.2016 from <http://www.ijrdo.org/Journal%20Of%20Educational%20Research-8-2016.php> (accessed on 19 November 2016)
- [8]. Yining Chen, Mary R. Nixon, Ashok Gupta, Leon Hoshower (2010) American Journal of Business Education –Volume 3, Number 2 101 Research Productivity Of Accounting Faculty: An Exploratory Study <http://files.eric.ed.gov/fulltext/EJ1060314.pdf> (accessed on 19 November 2016)
- [9]. Nabi, Somaira (2016) International Journal of Research & Development Organisation ISSN : 2456-2947 volume 4 Issue 9, July 2016 Retrieved 19.11.2016 from <http://lsrj.in/ArticleDetails.aspx?id=680> (accessed on 19 November 2016)