Productivity Analysis of Current Science Journal 2011-2020: A Bibliometric Study

Ramavath Manju
Research Scholar
Dept. of Library and Information Science, Osmania University,
Hyderabad- 500 007, Telangana, India. email: bujjidhana4@gmail.com

S. Yadagiri
Assistant Professor
University Library, Osmania University,
Hyderabad- 500 007, Telangana,
India, email: sygiri1@yahoo.co.in

Abstract

A bibliometric analysis of 8046 research publications published in the source journal "Current Science"during the period 2011-2020. The data for the study is extracted from Web of Science database and adopting the various bibliometric parameters with the help of suitable statistical tools and techniques to find out the results. The study highlighted on various measures such as year wise distribution of literature, and growth of publications, Annual growth rate, authorship pattern, collaborative measures like collaborative index, degree of collaboration, collaborative coefficient, modified collaborative coefficient, international collaboration, bibliographic coupling of author key words and year wise distribution of citation analysis of the journal during the above period. These findings will help the readers to get a quick and intuitive overview of Current Science.
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Keywords
Bibliometrics; Current Science; Annual growth rate (AGR); Authorship Pattern; Collaboration Coefficient; Citation Analysis.

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1. INTRODUCTION

The majority of the innovation is primarily published as a journal article and it acts as a prime channel of information to disseminate knowledge for the development of research in any field of knowledge. Numerous studies have been conducted with bibliometric analysis on individual journals in different subject fields and it is a comparatively new and important area of research. Therefore, we have preferred one of the leading Indian journal "Current Science" which act as a medium for communication and discussion of important issues that concern science and scientific activities.

2. SOURCE JOURNAL

The Journal "Current Science"(ISSN: Print &Online 0011-3891)was started in 1932 by the then stalwarts of Indian science such as C.V. Raman, BirbalSahni, MeghnadSaha, Martin Forster and S.S. Bhatnagar.Current Science is an open access and fortnight publishing leading interdisciplinary science journal from India, published by the Current Science Association in collaboration with the Indian Academy of Sciences, Bangalore, India. The main aim of the journal is to encourage the basic science and discussion of important issues that concern science and scientific activities and publishes special sections on diverse and topical themes of interest and this has served as a platform for the scientific fraternity to get their work acknowledged and highlighted. The journal publishes two volumes per year which has recently completed 119 volumes in the year 2020.

It is being a member of the Committee on Publication Ethics (COPE) that set standards and provides guidelines for the best practices as well as its application of double-blind peer-reviewed process to select the manuscripts would be made the journal indexed by Web of Science, Current Contents, Geobase, Chemical Abstracts, IndMed, Scopus and Indian Citation Index.The Impact Factor of the Journal is 1.102 (According to Journal Citation Report (JCR) - 2020, released by Clarivate Analytics, WoS).

3. REVIEW OF LITERATURE

The specific study of journals by application of bibliometric methodologies is recently gaining attention among the research community. Several studies related to the bibliometric analysis of the

specific journals have been published in recent times. Some of the useful studies related to the present study as follows.

Dongare, S. N., &Khaparde, V. S. (2016) have done a bibliometric study on current science journal during the study period 2000-2010, the study found a total of 7460 documents from various type of publications and total numbers of citations were 136482.It was found that the journals are the major form of media used with citation count, of 89985 (65.93%) of total literature used. The degree of collaboration found as 0.59%, which means authors, researchers collaborate together in current science research and publish more and more joint authored papers during the study period. The study further analysed the authorship patterns of citations along with calculation of collaboration coefficient. A similar study by Wang, P., et al., (2017) on bibliometric profile of Current Science between 1961 and 2015, the study consists of 31,403 publications, the analysis revealed an unstable trend; the highest citations per publication appeared during 2003-2005. The impact factor of Current Science had an overall increasing trend and placed the journal in the quartile Q2 within 'Multidisciplinary sciences' category. The h-index of Current Science was 82 and 24 authors had more than one H-Classic articles. The most productive country was India and Current Science was dominated by contributions from Indian institutions. Analysis of author keywords showed 11 main research themes for the journal. These findings will help the readers to get a quick and intuitiveoverview of Current Science.

A similar study by Sridhar, A., &Yadagiri, S. (2020) examines the bibliometric analysis of 1843 research publications published in the journal "Journal of the Geological Society of India" (JGSI) during the period 2009-2018. The data was obtained from Web of Science database and the data analysis with using the descriptive statistics and different collaborative measure of formulas was adopted to extract the results. The study highlighted on various measures of bibliometric methods such as year wise growth of publications, year wise distribution of publication, Annual growth rate, authorship pattern, collaborative measures like collaborative index, degree of collaboration, collaborative coefficient, modified collaborative coefficient, identifying most profile authors, most productive intuitions and year wise distribution of citation analysis on the publications of the journal during the above period. Another study conducted by Jeyshankar and Babu (2013) analysed the various bibliometric patterns such as authorship pattern, various forms of publications, collaboration of publications and most preferred output journal etc. the study found that a total 2120 publications in which 1524 publications were journal articles. The highest publications were made from multiple authors 79.67%. The collaboration of teamwork 0.96 % was recorded in the years 1987-1991. The maximum 47.78 % of research output was contributed by R&D institutions. 'Journal of the National Cancer Institute' is the most highly productive journal published a total of 237 papers.

The study further concentrated on the research collaboration and authorship patterns of the Journal of Knowledge and Communication Management (Naheem and Shibu, 2015) and another study observes the authorship patterns of the five information systems journals. Exclusively, this study aimed to analyses the allocation of the number of authors per paper and the collaborative relationships among the institutions across different geographic regions (Cunningham and Stuart, 1997).Thus, many authors have published papers on bibliometric analyses of specific journals to present a comprehensive overview of their research trends.

4. OBJECTIVESOF THE STUDY

The present study intended with the following objectives:

1. To find out content category wise distribution of article.
2. To examine the year-wise distribution of publications and growth of publications
3. To study the authorship pattern of the contributors.
4. To measure the degree of collaboration among authors.
5. To find out the International Collaboration of source journal.
6. To identify the year-wise distribution of citation analysis.

5. SCOPE OF THE STUDY

- The present scope of the study is limited to "Current Science" journal publications impact through bibliometric analysis by using the Web of Science database.
- The time period of the study considered from the year 2011-2020. (Ten years of the study period).

6. METHODOLOGY AND DATA COLLECTION

The present study efforts to explore the publications assessment of Current Science Journal between the years of 2001-2020. The study adopted the **"Quantitative Research methods"** to specifying the method of both data collection and data analysis of the study.

The data used in this study were mainly obtained from Web of Science database. The following search string is used for collecting the data (Basic Search as **"CURRENT SCIENCE"**and the search field as **PUBLICATION TITLES)** Selected **Timespan** to custom year rangeand Limited to Publication Yearfrom 01-01-2011 to 31-12-2020. A total of 8046publications were published which includes Research articles, Review articles, News Items, Letters, Editorial materials, Research communications, Editorial materials, Bibliographic items, book reviews etc. The total of 8046 records were downloaded in RIS and CSV file formats and exported into Bibexcel, Microsoft-Excel and VOS Graphical viewer for analysis of the data.

Thestudy is based on two bibliometric parameters that include a performance analysis and a scientific mapping analysis. In performance analysis deals with journal productivity and citations. Thescience mapping analysis, highlight the structural and dynamic patterns of scientific research such as bibliographic coupling, co-citation analysis, co-authorship and co-occurrence of keywords. It will give a comprehensive overview of the journal's main research trends.

7. DATA ANALYSIS AND INTERPRETATIONS

7.1 Distribution of Literature

The Content categories are indexed in different volumes and issues of the journal Current Science during the study period of 2011-2020 was presented in Table 7.1. A total of 8046 various articles are identified in overall 8 types of document forms are published in the journal during the time period. The majority of the researchers were preferred document type of the publication as 'Articles' with 4067 documents having the average of 50.55% of the total publications and followed by 'News items' (1232, 15.31 %), 'Letters' (1100, 13.67%), 'Editorial Material' (1049, 13.04%) etc.

Table-7.1: Distribution of Literature forms

Sl. No	DOCUMENT TYPES	No. of Articles	Average No. of Article per issue
1	Articles	4067	50.55
2	News item	1232	15.31
3	Letter	1100	13.67
4	Editorial material	1049	13.04
5	Biographical-item	251	3.12
6	Review	250	3.11
7	Book review	57	0.71
8	Correction	40	0.50
	Total	**8046**	100.00

7.2 Year-wise distribution of Publications during 2011-2020.

The journal 'Current Science' data obtained for the study period 2011-2020 (total 10 years). A total of 8046 records were downloaded from the Web of Science database for analysing the research productivity. There are varieties in the number of publications productivity in the selected years of study.

Table-7.2: Year-wise distribution of Publications during 2011-2020**.**

Year	Articles	% of articles	Growth rate	AGR
2011	706	8.77	0	0.00
2012	646	8.03	-60	-8.50
2013	702	8.72	56	8.67
2014	671	8.34	-31	-4.42
2015	804	9.99	133	19.82
2016	874	10.86	70	8.71
2017	1001	12.44	127	14.53
2018	948	11.78	-53	-5.29
2019	859	10.68	-89	-9.39
2020	835	10.38	-24	-2.79
Total	**8046**		**129**	**21.34**
		Average	**12.9**	**2.13**

From the Table 7.2 shows the year-wise distribution of publications of current science journal during the study period 2011-2020. The highest number of publications recorded in the year 2017 having 1001 documents (12.44%), the lowest publications are recorded in 2012 with 646 publications (8.03%). It is observed that an average publication per annum of current science journal is 804.

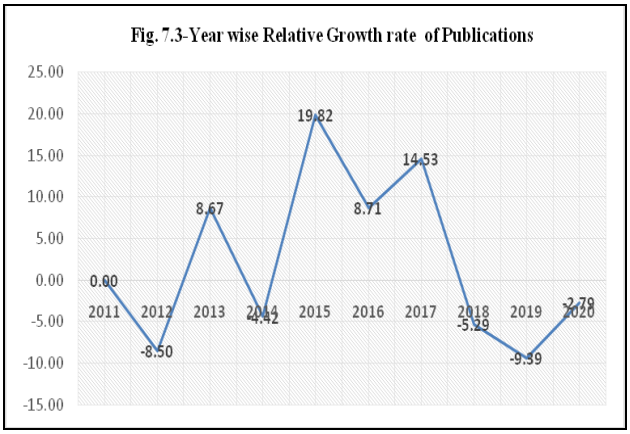
7.3 Annual Growth Rate of Publications

The ten years of research output of the journal Current Science from 2011 to 2020 is distributed in year-wise. The study exposes the growth of publication of the journal having thefluctuations during the study period. It is observed that highest growth rate and annual growth rate recorded in the year 2015 (133 &19.82%). The average growth rate for the study period specified with 12.9% ((total growth rate (129)/number of years (10)) and the Average Annual Growth Rate(AGR) in percentage 2.13%.The overall year-wise distribution of publication data shown in Table 7.2 and Fig. 7.3.The year-wise publications annual growth rate is calculated based on the formula given by Kumar and KaliyaPerumal (2015) and mentioned as follows:

$$\mathbf{R = \frac{P1 - P0}{P0} \times 100}$$

"Where, R = Publications annual growth rate in percentage
P0 = number of publications in the base/ previous year.
P1 = number of publications in the present year".
Example: Growth rate(R) calculation for the year 2013 (P1=702, P0=646).

R = (702-646)/646x100 => (0.087) x100=>**8.67**



7.4Authorship Pattern

Table 7.4 shows the year-wise split-up of authorship pattern of publications published in the source journal Current Science from 2011 to 2020. The study consists of 12430 unique authors and the sum of total 25860of single and multi-authors were appeared during the study period for 8046 documents. Some of the highlights of author pattern ship during the study period as follows:

The study identified the authorship pattern from single author to eighty-seven authored (1-87 contributors) documents were found during the study period.

The highest papers published by single authored documents found as 2816 (35%) of the total publications. The highest single authored papers published in the source journal for the year 2017 (372 publications).

Two authored papers publications found as 1577 (20%) with total of 3154 authors contributions followed by three author papers total of 1187 (15%) with highest of 3651 contributors.

The study also found that in the year 2014 there are 84,85, 86 and 87 authored papers (total of 13 papers are traced) during the study period.

The study clearly understands that majority of the source published by multi-authored publications, it indicates that the majority of the publications in this particular journal are in collaborative works, it determines the teamwork and sharing of information among the researchers have been increased progressively during the study period.

Table7.4: Distribution of Year-wise Authorship pattern

Year → Author ship↓	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	TPU	TAU
1	284	254	261	248	252	272	372	296	288	289	**2816**	**2816**
2	150	138	166	138	178	195	180	157	130	145	**1577**	**3154**
3	94	111	87	95	132	129	156	140	125	118	**1187**	**3561**
4	74	59	80	81	79	123	81	117	80	76	**850**	**3400**
5	50	32	30	39	55	69	58	70	61	62	**526**	**2630**

6	24	23	22	30	42	36	26	44	26	44	**317**	**1902**
7	9	11	23	11	30	13	29	38	32	32	**228**	**1596**
8	8	6	13	9	14	13	11	13	15	15	**117**	**936**
9	6	6	3	3	8	10	32	26	47	6	**147**	**1323**
10	1	5	6	2	2	8	6	17	34	17	**98**	**980**
11	1		2	1	1	3	10	18	8	14	**58**	**638**
12	1		1		3	1	16	3	2	4	**31**	**372**
13	1						14	1	2	1	**19**	**247**
14					2	1	2	2	1	1	**9**	**126**
15			1		1		2	1	2		**7**	**105**
16						1	1	2	1	2	**7**	**112**
17			1	1				1	3		**6**	**102**
18	1		2							3	**6**	**108**
19	1		1		1		1	1		1	**6**	**114**
20			1							4	**5**	**100**
21							1				**1**	**21**
22		1	1		1				1	1	**5**	**110**
23					1						**1**	**23**
24							1				**1**	**24**
25											**0**	**0**
26											**0**	**0**
27							1		1		**2**	**54**
28					1						**1**	**28**
29			1								**1**	**29**
30											**0**	**0**
31	1				1						**2**	**62**
39							1				**1**	**39**
48								1			**1**	**48**
84				8							**8**	**672**
85				3							**3**	**255**
86				1							**1**	**86**
87				1							**1**	**87**
Grand Tot	706	646	702	671	804	874	1001	948	859	835	**8046**	**25860**

TPU-Total Publications, TAU-Total Authors

7.5 The Measure of Collaborations:

The study of collaboration is an important aspect and it plays a vital role in the bibliometric data analysis. The magnitude and precise nature of collaboration between authors cannot be easily determined by standard methods of survey, questionnaire, observations or interviews.

To evaluate the extent of collaboration in two or more researchers in a discipline we have used the four most prominent bibliometric indices methods like Collaborative Index (CI), Degree of Collaboration (DC), Collaborative Coefficient (CC) and Modified Collaborative Coefficient (MCC).The values are calculated and displayed in Table 7.5and the basic data values of single and multiple authorships along with the publications pattern are taken from table 7.4. The formulas adopted by using the below Equations (7.5 A), (7.5 B),(7.5 C) and (7.5 D).

(7.5 A). Collaboration Index (CI)

The formula of collaboration index is given by Lawani (1980) as follows.

$$CI=\frac{Total\ Authors}{Total\ Joint\ papers}$$

This index gives mean number of authors per paper. It has no upper limit and cannot express as a percentage. The Collaboration Index (CI) is the simplest index presently used to explore the literature, which is to be interpreted the mean number of authors per paper and the formula.

(7.5 B). Degree of Collaboration (DC) derived by Subramanyam (1983).
DC lies between zero and one, gives zero weight to single-authored papers, and always ranks higher a discipline (or period) with a higher percentage of multiple-authored papers. However, DC does not differentiate among levels of multiple authorships.

DC= $\frac{Nm}{Nm+Ns}$

Whereas
Nm = number of multi authored papers
Ns = number of single authored papers
Thus the percentage of collaboration can be arrived at by applying the
Formula C= Nm/ (Nm + Ns) x 100.

(7.5 C). Collaboration Coefficient (CC)

The methodology of Collaboration Coefficient (CC) has suggested byAjiferuke et al. (1988).
The descriptive statistics and mean was used for statistical calculations. The following formula was used to calculate collaborative coefficients of authors.

$$CC = 1- \left[\sum_{j=1}^{k} (1/\ j)Fj\ /\ N \right]$$

In this formula: CC = Coefficient of teamwork (Collaborative Coefficient)
F_j = Number of research articles have been published in the specified period of time with j author
j = Written articles (first author, second author, third author, and ...)
N = Number of research articles that have been published at the same specified period of time.
K = Maximum number of authors for each author.
Collaborative coefficient is a number between 0 and 1, whatever the number is closer to 1 indicates more collaboration between authors.

(7.5 D). Modified Collaborative Coefficient (MCC)

The methodology (MCC) was derived by Sarvanur and Srikanth (2010).

$$K = \frac{A}{A-1}\{1- \frac{\sum_{j=1}^{A}\left(\frac{1}{j}\right)Fj}{N}\}$$

Table 7.5 Measures of Collaboration

Year	CI	DC	CC	MCC
2011	2.622	0.598	0.396	0.397
2012	2.551	0.607	0.399	0.399
2013	2.849	0.628	0.417	0.418
2014	3.252	0.630	0.426	0.426
2015	3.077	0.687	0.464	0.465
2016	2.908	0.689	0.463	0.464
2017	3.287	0.628	0.437	0.437
2018	3.457	0.688	0.488	0.488
2019	3.619	0.665	0.479	0.479
2020	3.371	0.654	0.460	0.461
Avg.	**3.099**	**0.647**	**0.443**	**0.443**

From the above table 7.5 reflects the collaboration measures of the source journal for ten years from 2011 to 2020. It shows that the CI value varies between 2.622 to and 3.619. The highest CI value has got in the year 2019 and the average CI recorded as 3.099, which means the source journal having an average of 3 authors per paper. The DC values shows between 0598 to 0.689.

(if DC value is equal to 1.00 it indicates that the number of single-author papers is zero). The results indicate that decrease in the single authored papers and increase in the multi authored papers. This indicates that the authors prefer the collaboration works in their research publications. The average Degree of collaboration value is 0.647, i.e. 65 percent of research output in the source journal contributed by collaborative authors and the reaming of 35 percent of articles were produced by single authors during the period of 2011-20. It is an indication that the majority of the researchers of the source journal 'current science' are intended to contribute as the collaborative contribution in research and problem solving activities through therepublications.

The values of CC and MCC almost same, the only reason CC and MCC are differentiated between the levels of authorships. The average CC and MCC are recorded as 0.443 during the study. CC and MCC lies between the values 0 and 1, and is 0 for a collection of purely single authored and less than 1(<1) is for finitely many authors. The results of CC andMCC values reflecting that the research output of Current Science journal extended as maximum of collaborative publications on the overall study period of 2011-20.

7.6 Citations Analysis:

The reference given by the researchers in their publications reflects on as the source of citation analysis. Citation analysis includes counting of the number of citations to a particular publication for a period after its publication. Table 4.6& Table 4.7 shows, there are total of 25287 citations received during the ten years' study period (2011-20) with the total contribution of 8046 publications. The highest number of citations received in the year 2011 (Avg. Citations per Paper is 16.80%), followed by 3667 in 2013 (ACPP 14.50%). The citable of articles of thetime will be decrease by year by year during the study period, hence the citable articles for year 2020 will be recorded as low.

Table 7.6: Year-wise distribution of Citations

Year	Articles	citations	ACPP
2011	706	4247	16.80
2012	646	3522	13.93
2013	702	3667	14.50
2014	671	3351	13.25
2015	804	3246	12.84
2016	874	2183	8.63
2017	1001	2054	8.12
2018	948	1600	6.33
2019	859	1022	4.04
2020	835	395	1.56
	8046	**25287**	**100.00**
	Avg.	**3.14**	

Table 7.7 shows the highlights of the source Current Science Citations report during the period of 201-2020. A sum of 25287 citations are recorded for 8046 publications during the study period. The average citations per article are 3.14 and the h-index of the source journal is 42.

Table 7.7: Citation Report for the period 2011-2020.

Sl. No.	Citations details	Total
1	Total Publications during 2011-20 (Articles, Proc. Papers, meeting abstracts, reviews etc.)	8046
2	Sum of Total Cited	25287
3	the sum of without self-citations	23364
4	Citing articles	21583
5	Citing articles without self-citations	20177
6	Average Citations per item	3.14
7	h-index	*42*

Citation Source: WoS Database

7.8 International Collaboration of Publications

Table 7.8shows that foreign collaboration of articles in the source journal during the study period. Out of 88 Countries top 10 countries are listed in the below table and the maximum articles are published by India by 5993 (74.48 %) during the period of 2011-2020. The USA is the second country by publishing 287 papers (3.56%) in Current Science journal. The People R China is third country it published 224 papers (2.78 %) in the source journal Current Science.

Table 7.8: International Collaboration of publications

Sl. No	Country	No. of Publications	% of publications
1	INDIA	5993	74.48
2	USA	287	3.57
3	PEOPLE R CHINA	224	2.78
4	ENGLAND	82	1.02
5	AUSTRALIA	75	0.93
6	MALAYSIA	58	0.72
7	JAPAN	51	0.63
8	GERMANY	47	0.58
9	SAUDI ARABIA	34	0.42
10	PAKISTAN	31	0.39

7.9 VOS viewer analysis of Source Journal Current Science.

The previous section provides a brief statistical analysis of the various influential variables in the source journal. In this section, it shows deep visualization of the bibliographic connections between the leading source journals. For this the work we used the VOS viewer software for collecting the bibliographic data and generating graphical maps by using bibliographic coupling of co- occurrence of author keywords.

Fig. 7.9 shows the most frequently used key- words and their relations over the study period respectively,

and also present the related top-30 keyword list. Note that the co-occurrence number indicates the number of times the keyword appeared together with other leading keywords with at least thirty occurrences. From the analysis the most frequent word 'climate change' is occurred 114 times followed by 'remote sensing' 59 times respectively by the authors.

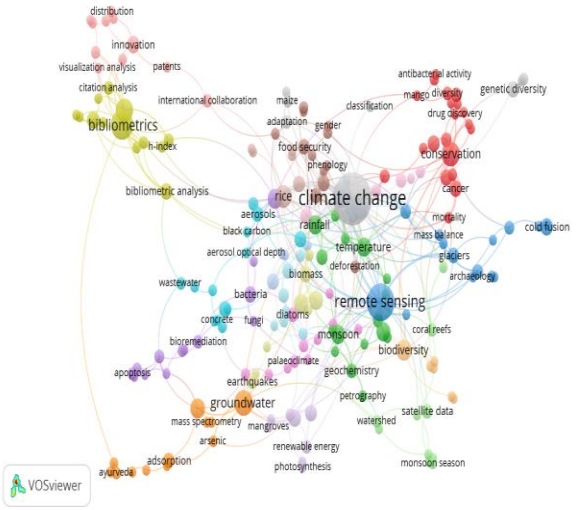


Figure 7.9Bibliographic coupling of co- occurrence of author keywords.

8 DISCUSSIONS AND CONCLUSION

The Study Observes and applied with qualitative and quantitative of bibliometric tools on the source journal Current Science during the study period of 2011-2020. The data generated from Web of Science, and some journal articles (Non-SCI Journals) which are not indexed in this database does not come under the preview of the study. The study reflects that Current Science an international peer-reviewed multidisciplinary scientific journal with an Impact Factor (IF) 1.102 according to the 2020 release of Journal Citation Reports (JCR). The study found some of the significant insights.

Sum of 8046 various type of documents are identified for the study and 'Journal articles' are the majority type of publication in the source journal (50.55 %) and the growth of publications and annual growth rate is observed as up and downs during the study period. The study consists of 12430 unique authors with a sum of 25860 single and multi-authors were contributed during the study. It is observed that 2816 (35%) of publications are contributed by single author and the remaining 65 % are contributed multi authored. The study further analysed the Collaboration between the authors and found that the collaboration index as 3.099, which shows the source journal having an average of 3 authors per paper. The average Degree of collaboration value recorded is 0.647, i.e. 65 percent of research output in the source journal contributed by collaborative authors, which clearly indicates that scientific community sharing their research work and views among their group of community and generating the research output by group of author publications. The study also explores the Citation analysis of the source journal during the study period and founds that a sum of 25287 citations are received and the average citations per article is 3.14 and the h-index of the source journal is 42.

REFERENCES

1. Ajiferuke, I., Burell, Q., & Tague, J. (1988). Collaborative coefficient: A single measure of the degree of collaboration in research. *Scientometrics*, *14*(5-6), 421-433.
2. Cunningham, S. J., & Dillon, S. M. (1997). Authorship patterns in information systems. *Scientometrics*, 39(1), 19-27.
3. Current Science Retrieved November 12, 2021 from https://www.currentscience.ac.in/about.php
4. Dongare, S. N., & Khaparde, V. S. (2016). A Bibliometric Analysis of Current Science Journal 2000-2010. *Knowledge Librarian: International Peer-Reviewed Bilingual E-Journal of Library Science*, *3*(5), 36-55.
5. Jeyshankar, R., &Babu, B. R. (2013). Scientometric analysis of Leukemia research output (1960-2011): An Indian perspective. Asia Pa--ence, 3(2).
6. Journals Citations Report (2020) Retrieved November 12, 2021 from https://clarivate.com/webofsciencegroup/solutions/journal-citation-reports/
7. Kaliyaperumal, K. (2015). A scientometric analysis of mobile technology publications. Scientometrics, 105(2), 921-939.
8. Lawani, S. M. (1980). *Quality, collaboration and citations in cancer research: A bibliometric study* (Doctoral dissertation, The Florida State University).
9. Naheem, K. T., & Shibu, K. M. (2015). Authorship Patterns and Collaborative Research in the '*Journal of Knowledge and Communication Management'*, 2011–2014.
10. Savanur, K., & Srikanth, R. (2010). Modified collaborative coefficient: A new measure for

quantifying the degree of research collaboration. *Scientometrics*, *84*(2), 365-371.
11. Sridhar, A., & Yadagiri, S. Authorship Patterns and Collaborative Measures in the Journal of the Geological Society of India (2009-2018): A Bibliometric Analysis.
12. Subramanyam, K. (1983). Bibliometric studies of research collaboration: A review. *Journal of information Science*, *6*(1), 33-38.
13. Wang, P., Zhu, F., Song, H., & Hou, J. (2017). A bibliometric profile of Current Science between 1961 and 2015. *Current Science*, 386-392.
14. Web of Science. Retrieved November 12, 2021 from https://apps.webofknowledge.com/