

Bibliometric Investigation of Exploration Production of Branch of Science, Dr. Babasaheb Ambedkar Marathwada College, Aurangabad.

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Abstract— The paper draws out the consequence of a bibliometric investigation of research productions of division of science, Dr. Babasaheb Ambedkar Marathwada College, Aurangabad, for the period 1975-2012. It examined all the 774 research productions from the 144 diaries. it inspects year-wise dispersion of papers, creation design, diary in which creator distribute, efficiency of workforce and order shrewd dissemination and so on discoveries, proposals and references are appeared with applicable information investigation.

Keywords— Bibliometrics, compound science, explore patterns, look into productions.

1. Introduction

Bibliometrics Comprises one of the significant pushes of research in the field of library and data science. It uses quantitative examination and insights to depict examples of distributions inside a given field or collection of writing. The expression "measurable list of sources" was first utilized by E.W. Hulme in 1923, to allude to the use of quantitative strategies to libraries. The word bibliometrics showed up in print in Alan pitchards article measurable book reference or bibliometrics in the December issue of the diary of documentation. It thrived in mid twentieth century with crafted by lotka³, bradford⁴, and zipf⁵ who watched circulation design in word recurrence, creator and diary profitability. Bibliometric strategies have been utilized in Eastern Europe nations to screen science and researchers. The field of bibliometrics has created significant data researchers, for example, B.C. brookers and h. egghe. The present investigation is a bibliometric examination of research productions of division of science, Dr. Babasaheb Ambedkar Marathwada College Aurangabad, from 1975-2012. Science office appeared in 1958. It finished 54 years of its working in the year 2012. Since its origin it has been attempting steady endeavors to give quality instruction in the zone of the science. It isn't just the most esteemed branch of the college however has likewise obtained prime essentialness at the national level. The effect of the commitments of this division in the advancement of order is very noticeable in all circles. The division had been received by the UGC under its extraordinary help developer (SAP), (DST) AND (CSIR) under its modified for development of science and innovation (Clench hand). Number of cutting edge instruments accessible for research and instructing incorporate (i) NMR: atomic attractive reverberation (ii) X – beam diffract meter, (iii) gas chromatography-mass spectrometer ,(iv) UV-vis spectrophotometer,(v) fluorescence spectrophotometer, (vi) nuclear retention spectrometer,(vii) superior fluid chromatography, (viii) separate filtering calorimeter, (ix) Mossbauer spectrometer and so on.

2. Objectives of the study

The present study is undertaken to have an in-depth study of the publication of department of chemistry during the period 1975-2012 for analyzing.

- 1) Year-wise distribution of papers.
- 2) Domain-wise growth in the publication
- 3) Authorship pattern of the papers.

- 4) Productivity of the faculty
- 5) Journals where the authors publish.

3. Source of Information

The Data About the Division Is Taken from Yearly Reports. The Exploration Distributions Have Been gathered from staff by and by. The Branches of Science Is Perhaps the most established office In the College. Its Employees Have Been 4 As Individual Of Indian National Concoction Research center Pune (One), Individual Of DST, New Delhi (One), Fellow Of The Illustrious Society Of Science UK, Maharastra Foundation Of Science Pune And National Natural Science Institute Delhi And Indian Substance Lab (One). Its Employees Have Been 3 Granted Perfect Instructor From Rotoract Club Of Aurangabad (One) And Legislature Of India (Two).

4. Methodology

The exploration productions from the branch of science were taken for study. These were gathered from workforce by and by and were broke down considering year-wise appropriation, origin example and efficiency of staff.

5. Results and Discussion

5.1 Year-Wise Distribution of Publications

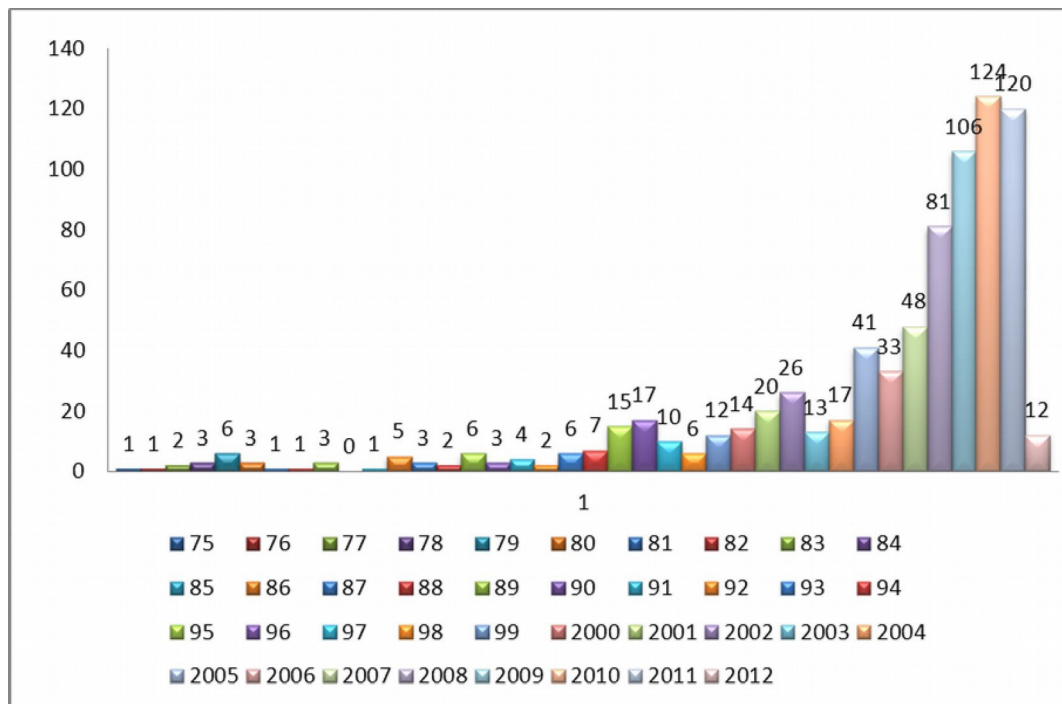
The workforce of division of science normally distributes in universal diaries of notoriety. The personnel distributed 774 research papers during the time of study for example from 1975-2012. The personnel on a normal has distributed in excess of 50 research papers following multi year. These exploration papers have been distributed in excess of 150 diaries coming about on a normal three productions for each diary. The quantity of research production of division of science for the period 1975-2012 has been given year-wise in table 1. Figure 1 demonstrates the customary increment in number of productions from 1975 to 2012. The division distributed just one papers in diary of the Indian compound society in the year 1975-which rose to 53 papers in the year 2011.as an outcome, where as in the year 1975, office distributed just 0.13%of absolute productions, in year the 2012 the commitment expanded to 15.50%.

Table 1: - Year-Wise Number of Publication for the Period 1975-2012 Distribution

Year	No. Of. Publications	% Age
1975	1	0.13%
1976	1	0.13%
1977	2	0.26%
1978	3	0.39%
1979	6	0.78%
1980	3	0.39%
1981	1	0.13%
1982		
1983	3	0.13%
1984		
1985	1	0.13%
1986	5	0.65%
1987	3	0.39%
1988	2	0.26%
1989	6	0.78%
1990	3	0.39%

1991	4	0.52%
1992	2	0.26%
1993	6	0.78%
1994	7	0.91%
1995	15	1.94%
1996	17	2.19%
1997	10	1.29%
1998	6	0.78%
1999	12	1.56%
2000	14	1.80%
2001	20	2.58%
2002	26	3.35%
2003	13	1.67%
2004	17	2.19%
2005	41	5.29%
2006	33	4.26%
2007	48	6.20%
2008	81	10.46%
2009	106	13.69%
2010	124	16.02%
2011	120	15.50%
2012	12	1.56%
	Total - 774	100

Figure No. 1: - year-wise growth of publications: period 1975-2012



5.2 Journals where the scientists publish

The distributions have been characterized into three distinct classes as per their number in every diary. The "class An" includes the diaries where 21-67 research paper have been distributed, "classification B" contains the diaries where individually 12-17 papers have been distributed and "class C" includes the diaries where 1-9. The rundown of diaries of classifications A, B, and C and their effect variables are arranged in table 2 and, for example, figure no. 2 given the roar.

Table 2: - list of journals of categories A-B and C

Sr. no.	Name of the journals	Publication of the department	%age	category
1	Journal of heterocyclic chemistry	67	8.65%	A
2	Indian journal of chemistry	58	7.49%	A
3	Journal of the Indian chemical society	53	6.84%	A
4	Journal of the Korean chemical society	45	5.81%	A
5	Bulletin Korean chemical society	42	5.42%	A
6	Chinese chemical letters	35	4.00%	A
7	Bulletin if the catalysis society of India	28	3.6%	A
8	Tetrahedron letters	24	3.10%	A
9	Green chemistry letters & review	21	2.71%	A
10	Organic chemistry: an Indian journal	17	2.19%	B
11	International journal of chemical science	15	1.93%	B
12	Acta ciencia indica	12	1.55%	B
13	Arabian journal of chemistry in press	11	1.42%	B
14	Phosphors, sulfur, silicon and the related elements	10	1.29%	B
15	Journal chemical Engineering data	12	1.55%	B
16	Journal mol. liquids	9	1.16%	C
17	Chemistry an India journal	9	1.16	C
18	Journal of co-ordination chemistry	8	1.03%	C
19	Inorganic chemistry an Indian journal	8	1.03%	C
20	Indian journal of heterocyclic chemistry	8	1.03%	C
21	Materials science, an Indian journal	7	0.91%	C
22	European journal of medicinal chemistry	7	0.91%	C
23	South African journal chemistry	7	0.91%	C
24	Materials chemistry and physics	6	0.18%	C
25	Russian journal of inorganic chemistry	5	0.65%	C
26	Journal of science	5	0.65%	C
27	Ultrasonic's sonochemistry	5	0.65%	C
28	Bioorganic & medicinal chemistry letters	5	0.65%	C
29	Oriental journal of chemistry	5	0.65%	C
30	Transition metal chemistry	5	0.65%	C
31	Chinese journal chemistry	5	0.65%	C
32	Letters inorganic chemistry	5	0.65%	C
33	Central euro. Journal of chemistry	5	0.65%	C
34	Journal solution chemistry	5	0.65%	C
35	Indian journal pharm. science	5	0.65%	C
36	chromatographic	5	0.65%	C
37	others	195	25.20%	C

5.3 Discipline-Wise Distribution of Publications

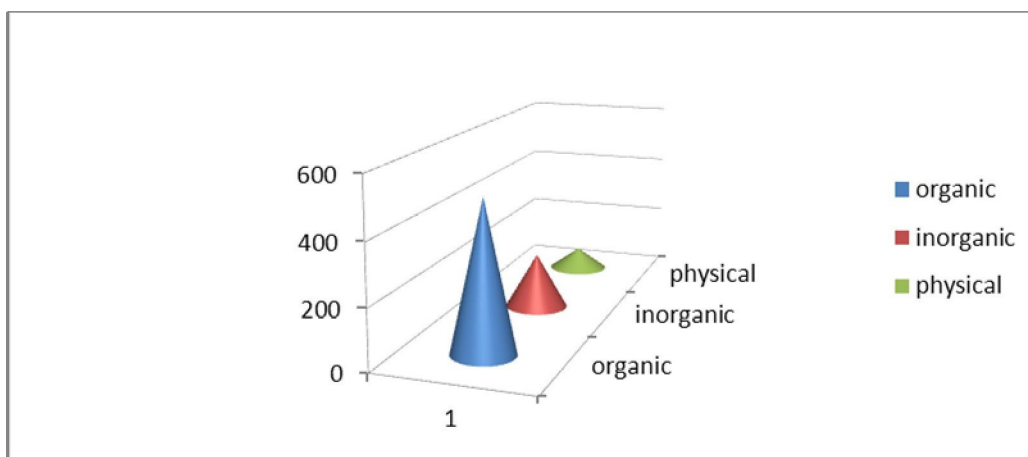
The exploration distributions in science can be characterized into three fundamental orders for example (I) natural science (ii) inorganic science (iii) physical science (table 4) however huge numbers of these productions have research work over these boundaries, the arrangement has been finished by thinking about the topic of the work.

Table 3 uncovers that the division distributed 66.40% papers in natural science, 23.91% in inorganic science and 9.69% in physical science and demonstrating the figure no. 2 in following sorts.

Table 3: - Discipline-wise distribution of publication

Sr. No.	Discipline-wise distribution	No. of. publications	% age
1	organic	514	66.40%
2	inorganic	185	23.91%
3	physical	75	9.69%
		Total-774	100

Figure no. 2: - Discipline- wise distribution



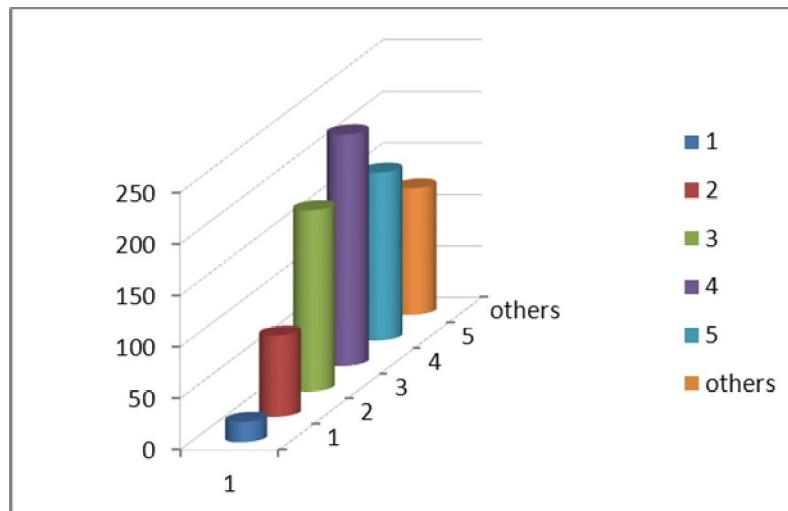
5.4 Authorship Pattern of Papers

Cooperative research is regular element which is found in science field particularly during the 21st century. It is a characteristic impression of intricacy, scale and expenses of present-day examinations in science. Multi origin gives various proportions of joint effort in the subject. Table 4 demonstrates that all the production in science are multi composed. This demonstrates the community-oriented research is increasingly valuable in this field.

Table 4: - Authorship Pattern of the Papers

No. Authors	Of.	Name Of Publications	% Age
1	8		1.04%
2	79		10.20%
3	176		22.73%
4	225		29.07%
5	163		21.06%
others	123		15.89%
total	774		100

Figure 3 Authorship pattern of the papers



5.5 productivity of faculty

To assess the efficiency of staff in science division It was seen that Dr. M. S. Shingare has distributed 259 papers during (1975-2012).

Table: -5 productivity of faculty

Sr. No	Authors Name	No. Of Publications	% Age
1	Dr. M.S.Shingare	259	33.47 %
2	Dr.Arbad Balasaheb Ramrao	120	15.51 %
3	Dr.Gill.C.H.	103	13.31 %
4	Dr.Bapurao B. shingate	80	10.33 %
5	Dr.R.A.Mane	70	9.04 %
6	Dr.Machindra karbhari Lande	57	7.36 %
7	Dr.Trimbak Kamaji Chondhekar	33	4.27 %
8	Dr.Sunil Govind Shankarwar	31	4.01 %
9	Dr.S.T.Gaikwad	7	0.91 %
10	Dr.Anjali S. Rajbhoj	6	0.75 %
11	Dr.Bahaskar R.Sathe	5	0.65 %
12	Mrs.Chavan Anusaya Shriram	2	0.26 %
13	Mr.S.R. Sonone	1	0.13 %

6. Findings

The accompanying discoveries are drawn from the investigation.

- 1) The number of productions has expanded reliably from the year 1975 to the year 2012. 25% of the all-out productions have been made in 2009, 2010, and 2011.
- 2) The lion's share of the distributions is made with 4 creators
- 3) The profitability of personnel in huge number of the 259-paper distributed.
- 4) The majority of the research paper distributed in diary of heterocyclic chemistry.
- 5) The efficiency of the year in huge number of 124 papers distributed.

7. Suggestions

The accompanying suggestions are put forth to further enhance the quality of research work in chemistry.

- 1) The researchers should create top notch research papers and distribute these in the diaries having high effect factor.
- 2) As the exploration has turned out to be interdisciplinary, increasingly more accentuation should be on collaborative research.
- 3) More and more research paper ought to be written in a joint effort with different divisions of the college and furthermore with remote organizations to give research work world acknowledgment.

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