

# Scientometric Analysis of Annals of Library and Information Studies (ALIS): 2009-2013

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## ABSTRACT

*Analyses 177 research papers in five volumes 56 to 60, (2009 - 2013) in Annals of library and Information studies. The study gives status of Library and information science research & importance of library science in India. Also gives account of Annals of library and Information studies, objectives & methodology in this study. Analyses papers into year wise distribution, length of articles, use of tables, graphs diagrams. Finds authorship pattern and calculates collaboration coefficients. Also finds out profile contributors, location of papers, subject wise distribution & State wise distribution.*

**Keywords:** Scientometric studies, Bibliometric study, Journal of library and Information science, Library science .

## 1. INTRODUCTION

Bibliometric study as a sub discipline in information science is first known to have been applied by F.J. Cole & N. B. Eales in 1917. Subsequently Hulme conducted study in 1923. Both studies designated it as Statistical Bibliography. Alan Pritchard in 1969, coined the terms Bibliometrics. The term Librametry was coined by S.R. Ranganathan in 1948 during ASLIB conference. Other terms used for it are Sceintometircs, Informatics, etc. The word Bibliometrics is derived from two Latin and Greek words 'Biblio & Metrics' mean application of mathematics to the study of bibliography<sup>(1)</sup>. According to British Standard Institute it is the study of the use of documents & pattern of publications in which mathematical and statistical methods are applied.<sup>(2)</sup> The authors of this paper have also used term productrometric study in their papers.<sup>(3)</sup> It is basically a technique of citation analysis which involves the process of collection, counting, analysis & interpretation of citations given in various types of literature and thereby helping in identification of significant sources of information. It is an emerging thrust unit of research in the field of library and information science. I.N. Sengupta has defined the word as organisations, classification & quantitative evaluation of publication pattern as macro & micro Communication along with their authorship by mathematical & statistical calculations<sup>(4)</sup>.

Such studies help in selection of documents saving lakhs of rupees of the organizations. It helps in planning & organization of resource sharing, networking and consortium. Thus institutions may eliminate titles rarely cited from their subscription list and also weed out unused material.

**2. Annals of Library and information studies:** Annals of library and information studies is a leading quarterly journal in Library and Information Studies publishing original papers, survey reports, reviews, short communications, and letters pertaining to library science, information science and computer applications in these fields. In the year 1954, INSDOC launched Annals of Library Science as its first publication and Dr. S R Ranganathan was its first Editor. The journal's title was expanded to Annals of Library Science and Documentation in 1964 and again renamed in 2001 as Annals of Library and Information Studies. Into its 59th volume in 2012, Annals of Library and Information Studies is the oldest LIS Indian journal.

The first volume of ALIS was started in 1954 by INSDOC New Delhi and it is quarterly journal and regularly published till date. Now ALIS is available free online. Its archives where from Vol.1, (1954) was launched on the occasion of the Seminar on "Indian LIS Journals: Problems and Prospects" held at CSIR-NISCAIR, New Delhi on 23 April 2014 (ISSN online – 0975-2404, ISSN print – 0972-5423). Present editor of the journal is Dr. G. Mahesh.

**4. Objectives:**

Five volumes of ALIS (2009-2013) comprising 20 issues have been studied to find out.

1. Year wise distribution of contributions in the journal;
2. Length of papers ;
3. Number of tables, photographs, and diagrams used in the articles;
4. Authorship pattern of articles and collaboration coefficient ;
5. Major contributors of papers;
6. Subject wise distribution of papers;
7. Location of papers ;

**5. Methodology:**

The earlier study on ALIS was conducted by Neerja Verma', Rajnish Tamrakar"and Priyanka Sharm<sup>(6)</sup> . They have studied Vol 48 to 52 (1999 - 2005). The present study is an effort to make it update by studying Vo. 56 to 60 (2009-2013).

The papers and references given in these 5 issues of ALIS Vol. 56 - 60 (2009 - 2013) have been studied in this paper. The analysis includes 177 research articles. A database sheets was created on different aspects for main articles.

**6. Analysis of the Data-****6.1. Analysis of papers in ALIS:**

In this section we will study about the No. of distribution of papers year wise. Table No. 1 shows that total 177 paper has been published during 2009-2013. In which Maximum No. of paper published in 2010 i.e. 43 ( 23.8%). And minimum 27 paper were published in 2012 i.e. 27 (15.8).

Table 1 NO. OF ARTICLE: YEAR WISE DISTRIBUTION

S.NO	YEAR	VOL.	NO.OF PAPER	% ( n=177)
1	2009	56	34	19.3
2	2010	57	43	23.8
3	2011	58	36	20.4
4	2012	59	27	15.3
5	2013	60	37	21.0
			<b>177</b>	

**6.2 Length of Papers:**

Maximum papers of ALIS during 2009 to 2013 are 7-9 pages (46.9%) in length followed by 4-6 pages (21.4%). More than 15 pages account for 5 papers (2.9%) only. And Minimum No. of paper length found 1-3 pages (1.7%) only. See table no. 2.

**Table 2 : Length of articles**

S.NO	YEAR /VOL.	1-3	4-6	7-9	10-12	13-15	15&ABOV	TOTAL	%
1	2009/V56		12	15	5	1	1	34	19.3
2	2010/V57	1	11	15	9	4	3	43	23.8
3	2011/V58		2	20	10	4		36	20.4
4	2012/V59	1	5	14	4	2	1	27	15.3
5	2013/V60	1	8	19	8	1		37	21.0
	<b>Total</b>	<b>3(1.7%)</b>	<b>38(21.4%)</b>	<b>83(46.9%)</b>	<b>36(20.3%)</b>	<b>12(6.8%)</b>	<b>5(2.9%)</b>	<b>177</b>	<b>100</b>

**6.3: Use of Tables, Grafts etc.:**

The table3 shows use of tables, photographs, diagrams, and graphs in Article. Table are the most prominent from of presentation in articles, 898 tables have been used in the articles during the period. Graphs follow 210 in number during the period. Very few diagrams & photographs have been used in ALIS during this period. i.e.67 only . In average 5 tales has been use in per article and average 1.2 graph has been use per article , and 0.38 diagram has been use per article in ALIS during this period. (Table3)

**Table 3 : NUMBER OF TABLES, PHOTOGRAPS, DIAGRAM AND GRAPHS IN ARTICLE**

SNO.	YEAR/VOL.	TABLE	Photograph/DIAGRAM	GRAPHS	TOTAL	%
1	2009/56	196	20	33	249	21.19
2	2010/57	199	12	57	268	22.8
3	2011/58	208	4	44	256	21.7
4	2012/59	113	19	38	170	14.4
5	2013/60	182	12	38	232	19.7
		<b>898</b>	<b>67</b>	<b>210</b>	<b>1175</b>	<b>100</b>

**6.4 Authorship Pattern :**

The study has revealed that researchers are sharing their experiences producing more in Joint authorship i.e. two author are maximum i.e. 84 (47.5%) in joint authorship. Followed by 58 articles are there of single authorship. And minimum five and more authors have Wright only 2 articles.

**Table 4 : Authorship Pattern & Colloboration Coefficient**

SNO.	VOLUME	ONE AUTHOR	TWO AUTHOR	THREE AUTHOR	FOUR AUTHOR	FIVE and above	TOTAL	%
1	2009/56	6	21	7			34	19.3
2	2010/57	16	18	6	2	1	43	23.8
3	2011/58	14	14	8			36	20.4

4	2012/59	11	11	5			27	15.3
5	2013/60	11	20	4	1	1	37	21.0
		<b>58</b> (32.8%)	<b>84</b> (47.5%)	<b>30</b> (16.9%)	<b>3</b> (1.7%)	<b>2</b> (1.1%)	<b>177</b>	<b>100</b>

### 6.5 Prolific Contributors: -

In this study I found Total 261 authors contributed in last Five year and frequency of the authors are 337. There are 42 authors producing 2 or more articles B.K.Sen top in the list with 11 articles. Followed by B. M. Gupta with 8 Articles. Then Mr. K.G.Garg is on third No. by writing 7 Articles. In total 5 authors have contributed 4 papers each, 4 authors have contributed 3 papers each. 2 papers have been contributed by 30 authors. In total there are 42 names in the list (Table 5) contributing 2 or more papers in ALIS. The names of other individual contributors are not listed. There are 261 authors who have contributed in ALIS during this period of which 219 authors have contributed only one article in ALIS during this period. (Table 5).

**Table 5: Prolific Contributors**

Sr. No.	Author	Frequency	% ( N=337)
1.	B.K.Sen	11	3.26
2.	B M Gupta	8	2.37
3.	K.C.Garg	7	2.07
4.	Adihya kumari H	4	1.18
5.	Bhaskar Mukherjee	4	1.18
6.	Bidyarthi dutta	4	1.18
7.	Partha Pratim Ray	4	1.18
8.	Shri Ram	4	1.18
9.	Bharvi Dutt	3	0.90
10.	Gangan Prathap	3	0.90
11.	Iqbalahmad U.Rajoli	3	0.90
12.	S Kumar	3	0.90
13.	A L Moorthy	2	0.60
14.	A.K.Sahu	2	0.60
15.	Ankur Pant	2	0.60
16.	Avinash Kshitj	2	0.60
17.	B.K.Choudhary	2	0.60
18.	B.Ramesh Babu	2	0.60
19.	Dinesh k.gupta	2	0.60
20.	Har Kaur	2	0.60
21.	Jiban k.Pal	2	0.60
22.	Juran Krishna Sarkhel	2	0.60

23.	K G Pillai Sudhier	2	0.60
24.	K.C.Ramkrishnegowda	2	0.60
25.	Khaiser Nikam	2	0.60
26.	Kirti Joshi	2	0.60
27.	Krishnapada Majumder	2	0.60
28.	Mohamed Haneefak	2	0.60
29.	N.G.Goswami	2	0.60
30.	Narendr Kumar	2	0.60
31.	NazirAhmad Bhat	2	0.60
32.	Parthasathi Mukhopadhyay	2	0.60
33.	Prashant Kumar	2	0.60
34.	Purushothama Gowdam	2	0.60
35.	R.H.walmiki	2	0.60
36.	R.Jeyshankar	2	0.60
37.	Rabishankar Giri	2	0.60
38.	Raj Kumar Bhardwaj	2	0.60
39.	Ronald Rousseau	2	0.60
40.	S.M.Zabed Ahmed	2	0.60
41.	Suresh kumar	2	0.60
42.	T.Y.Mallaiah	2	0.60

### 6.6 Subject Distribution of Papers: -

The article is ALIS have been analysis on the basis of their coverage into various subjects. Article which is related to survey is on the top i.e.42. Although we have give another sujet table which is related to subject of survey type of research table No. 6.1 shows that INFORMATION TECHNOLOGY related survey is on top with 11 frequencies. Followed by in Main Subject Information technology is on the top after survey type of research with 27 Frequency. And table 6 shows that subject Library Marketing is on the list no. with frequency is only 1.

**Table 6 : Subject Distribution of Papers:** -

Sr. No.	Major Subjects	2009	2010	2011	2012	2013	Total
1	Bibliometric law	1	1		1		3
2	Bibliometric study	4	2	4		1	11
3	Case study	5	1				6
4	Citation Analysis	1	4	4		2	11
5	Comparative Study		1	1	1		3
6	Impact factor		4		1		5

7	Information need and seeking behaviour	1		1	2	1	5
8	Information technology	1	7	4	12	3	27
9	Library Administration	1	2	4	1	1	9
10	Library Management		1			1	2
11	Library Marketing	1					1
12	Library sc. Education	2	1	1		1	5
13	Others	4	3	2	3	6	18
14	Reference service		1	1		3	5
15	Scientometric study	3	4	2	2	4	15
16	Survey	8	11	7	4	12	42
17	Universe of Subject	1		1		2	4
18	Webometric study	1		4			5
	<b>Total</b>	<b>34</b>	<b>43</b>	<b>36</b>	<b>27</b>	<b>37</b>	<b>177</b>

**Table 6.1: Subject of Survey type Research papers**

Sr. No.	Survey Subject	2009	2010	2011	2012	2013	Total
1	Use of information Sources	4			1		5
2	Use of Reference Sources	1					1
3	Use of E- Resources	1	2		1	1	5
4	College Library	1					1
5	LIS Professionals	1		1			2
6	UGC Infonet		1			2	3
7	research trend LIS		1	1		1	3
8	Information Technology		6	1	1	3	11
9	Information Retrieval		1				1
10	Internet Access			3			3
11	Information Need			1			1
12	S & T Journals				1	1	2
13	Information Service					2	2
14	user service					2	2
	<b>Total</b>	<b>8</b>	<b>11</b>	<b>7</b>	<b>4</b>	<b>12</b>	<b>42</b>

**6.7. Location of papers :-**

In this study I found Total 125 Institutions contributed in last Five year and frequency of these institutions are 274. There are 58 institution giving 2 or more articles. National Institute of Science, Technology And Development Studies (NISTADS), New Delhi is on the top with 11 paper. Followed by Kuvempu University Shankaraghatta. kuvempu Karnataka is with 10 frequency. There are 125 institutions who have contributed in ALIS during this period of which 66 institutions have contributed only one article in ALIS during this period.(Table 7).

Table 7: **Location of papers**

<b>Sr. No.</b>	<b>Affiliated /Universities, College, ResearchInstitute.</b>	<b>Total</b>
1.	National Institue of Sciece,Technology And Development Studies(NISTADS),New Delhi	11
2.	Kuvempu University Shankaraghtta.kuvempu Karnataka	10
3.	CSIR National Institute of Science Technology and Development Studies (NISTADA),New Delhi	9
4.	University of Mysore,Mysore,Karnataka	9
5.	Federal University of Agriculture,Abeokuta,Nigeria	8
6.	University of Dhaka,Bangladesh	8
7.	Banaras Hindu University,Varanasi,Uttar Pradesh	6
8.	Mangalore University ,Mangalore Karnataka	6
9.	University of Agricultural Science And Technology Of Kashmir Srinagar	6
10.	University of Burdwa,Wes Bengal	6
11.	St.Stephen's College,New Delhi	5
12.	Indian Institute of Technology Science,Bangalore	4
13.	Institute of Science Communication and Information Resources,New Delhi	4
14.	Jaypee University of Information Technology,Himachal Pradesh	4
15.	University of Ibadan,Nigeria	4
16.	University of Kerala Palayam Trivandrum	4
17.	Annamalai University ,Tamil Nadu	3
18.	Defence Scientific Information and Documentation Centre(DESIDOC), New Delhi	3
19.	Indraprasth University,New Delhi	3
20.	Government Medical College And Hospital,Chandigarh,	3
21.	Gulbarga University Gulbarga,Karnatnaka	3
22.	Indian Institute of Management Indore	3
23.	Indian Statistical Institute, Kolkata	3
24.	Indira Gandhi Institute for Develoment Reseach,Mumbai	3
25.	INFLIBNET Centre Ahmedabad	3
26.	Jadavpur University ,Kolkata	3
27.	Jawaharlal Nehru Technological University,Anantapur (JNTUA),Andhra Pradesh	3
28.	Lagos State University,Nigeria	3

29.	Manipur University, Imphal	3
30.	National Institute of Science Communication and Information Resources (CSIR-NISCAIR), New Delhi	3
31.	Structural Engineering Research Centre, Chennai	3
32.	University of Antwerp IBW, Antwerp, Belgium	3
33.	University of Colombo, Sri Lanka,	3
34.	University of Kalyan, West Bengal,	3
35.	University of Kashmir Jammu & Kashmir	3
36.	University of Malaya, Malaysia	3
37.	Advanced Center for Treatment, Research & Education in Cancer (ACTREC), Mumbai	2
38.	Ahmadu Bello University Zaria, Nigeria	2
39.	Alagappa University, Tamil Nadu, & Karaikud	2
40.	Dr. M. G. R. Medical University, Chennai	2
41.	Indian Agricultural Statistics Research Institute New Delhi	2
42.	Kalasalingam University, Krishnankoil	2
43.	Makerere University College of Health Sciences, Uganda	2
44.	Northern University Bangladesh (NUB), Banani, Dhaka	2
45.	Pondicherry University, Pondicherry	2
46.	Research Institute for the Semi-Arid Tropics, Patancheru	2
47.	Sambalpur University, Orissa	2
48.	South Eastern University of Sri Lanka	2
49.	St. Xavier's College, 30, Park Street, Kolkata	2
50.	Tai Solarin University of Education, Nigeria	2
51.	Tata Institute of Fundamental Research, Mumbai	2
52.	Tezpur University, Napaam Tezpur Assam	2
53.	Tumkur University, Karnataka	2
54.	University of Botswana, Gaborone	2
55.	University of Calcutta, Kolkata, Kerala	2
56.	University of Maiduguri, Nigeria	2
57.	V M Open University, Kota	2
58.	Visva Bharati, West Bengal	2



## **Conclusion**

From the above study it is clear that this is an era of collaborative research and trends are increasing year by year. Journals are still the most favorable term of documents in research. There are few titles of journals which are cited by most researchers & libraries must recognize them to save money. Actual use of documents is better basis of selection than occasional use by some scientists. Often it is seen that scientists wish subscription of a title for very small purposes, which is very costly now a days. It has been observed during the practice that recommending officials recommend titles of their area of research without much use and often referring one or few articles only from many volumes of the journals so purchased. Thus huge amount of money is wasted at the cost of others research requirements. This bibliometric studies provide a data based analysis to peruse such matters. Occasional needs can be catered by indexing, also abstracting & reprography services. The use of e-journals & CDs may be the trends of next decade in library science research in India.

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