Annals of Library and Information Studies Vol. 65, June 2018, pp. 128-138

Bibliography of Indian bibliometric publications (1958 -1994)

B K Sen

Chairman, Bibliometrics Expert Committee, DST, Govt. of India Postal Address: 80 Shivalik Apartments, Alaknanda, New Delhi – 110019 Email: bksen1938@gmail.com

Received: 21 May 2018; accepted: 20 June 2018

Provides a bibliography of publications on bibliometrics and related subjects published in India as well as generated from India and published abroad during 1958 to 1994.

Keywords: Bibliography; Bibliometrics

Introduction

The term 'Indian bibliometric publications' given in the title of this article includes research papers, books, etc., in bibliometrics and related subjects produced from India and published in India and abroad; and also the foreign articles published in India.

Evidences suggest that the first bibliometric publication appeared from India in 1958¹. It appears that during 1959 to 1962, no bibliometric publication appeared in India. In 1963, the first DRTC Seminar was organized. It was devoted to bibliometrics. More than half a dozen papers were presented in the Seminar. Since then one or more papers were published every year. The papers appeared in journals, conference documents, and festschrift volumes published from India and abroad. Till 1963, less than ten authors contributed articles on bibliometrics. With the passage of time more and more bibliometricians like TS Rajagopalan, B K Sen, J S Ghosh, B Guha, A R Chakarborty, S Naranan, I K Ravichandra Rao, I N Sengupta, K Subramanyan, S Arunachalam, B M Gupta, B S Maheswarappa, Khaiser Jahan Begum and many others appeared on the scene and by 1984, they started contributing not only in Indian but also in foreign journals. The contributions of some of the above authors attracted worldwide attention and they went on to become prolific authors. It may be said that by 1984 a strong

base for conducting bibliometric studies was formed in India.

A review article on the Indian contribution of that period was published². However, in the absence of databases like *Scopus* and *Indian Citation Index* in those days, the compilation of the articles reviewed was done through manual searching. Recently, Garg and Tripathy³ compiled a fairly comprehensive bibliography covering the period 1995-2014. In this paper, a bibliography is being appended for the period 1958 to 1994. These two bibliographies combined together is expected to be a more or less complete listing of bibliometric works done in India or published in India.

Usefulness of the bibliographies

The two bibliographies can to serve as a base for numerous bibliometric studies and generation of reliable indicators. In most bibliometric articles sent for publication in journals, the literature search is generally found to be sketchy. The same is the case with the literature survey included in PhD theses. Using these bibliographies, the shortcoming can be easily overcome.

The bibliometric indicators such as the most prolific authors and journals can be determined now more or less without any flaw. Numerous single journal bibliometric studies have been conducted in India. The single journals can now be easily detected and found out how many times *Annals of Library and Information Studies* or any other journal has been studied bibliometrically. Single author bibliometric studies also abound. Who are the persons studied and by whom are now quite clear. One can easily find out the extent of studies on Bradford's law, Lotka's law, and Zipf's laws. Using these two bibliographies, the growth pattern of Indian bibliometric literature has been depicted (Table 1). The per year productivity (PYP) is continuously on the rise and in 2014 it has crossed 100.

Table 1—Year-wise distribution of bibliometric publications 1958-2014			
Year	No. of publications	Year	No. of publications
1958	1	1992	22
1963	9	1993	29
1964	2	1994	20
1965	5	1995	22
1966	2	1996	26
1967	2	1997	21
1968	1	1998	40
1969	3	1999	32
1970	6	2000	33
1971	7	2001	30
1972	6	2002	40
1973	4	2003	32
1974	5	2004	27
1975	8	2005	33
1976	4	2006	37
1977	4	2007	49
1978	10	2008	40
1979	5	2009	46
1980	10	2010	68
1981	4	2011	74
1982	7	2012	54
1983	7	2013	89
1984	6	2014	109
1985	18		Contd—

blications			
Table 1—Year-wise distribution of bibliometric publications 1958-2014			
o. of ications			

Conclusion

The two bibliographies are fairly comprehensive but not complete due to the fact that bibliometric literature is scattered in not only English journals but non-English journals like Granthagar, proceedings of national and international conferences, non-LIS journal like University News and Current Science, festschrift volumes, and so on. It is also not clear as to how many national bibliometric conferences have been organized so far. Similar is the case with festschrift volumes. In such a situation, a compilation of a complete bibliography is just about impossible. Hence, it is requested that the missing items in the bibliography may please be brought to our notice so that they can be included in the forthcoming Indian Bibliometrics Abstracts.

References

- Dutta S and Rajagopalan T S, Literature citations in scientific & technical periodicals: a survey, *Journal of scientific and Industrial Research*, 37A (July) (1958) 259-61.
- Sen B K and Kumar N, Indian contribution in bibliometrics (1958-1984): a review, Annals of Library Science and Documentation, 33(3) (1986) 85-103.
- 3. Garg K C and Tripathy H K, Bibliometrics and scientometrics studies in India during 1995-2004 Part II, *Annals of Library and Information Studies*, 65(1) (2018) 1-42.

- Afolabi M, Productivity of journals which published Nigerian library literature 1910-1985, Annals of Library Science and Documentation, 39 (4) (1992) 139-144.
- Amba K and Raghavendra P R, A technical note on Bradford's law of scatter as applied to periodical literature on leather, Annals of Library Science and Documentation, 19 (4) (1972) 222-224.
- 3. Amba S, Study on the extent of use of patent documents, *IASLIC Bulletin*, 23 (2) (1978) 45-52.
- Anand A K, An analysis of communications in *Journal of the Indian Chemical Society* in 1979, *IASLIC Bulletin*, 26 (1) (1981) 17-21.
- 5. Anand H R and Tahir A, Methodology for mapping information needs of research scientists in the field of powder metallurgy, *Annals of Library Science and Documentation*, 37 (3) (1990) 96-101.
- Anand J K, *Journal of Documentation* 1980-89: an analytical study, *Library Herald*, 30 (2-4) (1991-92) 181-215.
- Arora J and Kaur S P, Bibliometric analysis of core journals on Immunology: a study based on the Annual Review of Immunology, *Annals of Library Science and Documentation*, 41 (3) (1994) 81-94.
- 8. Arora K and Sen B K, Use of impact factor as a valid measure for evaluating the performance of a scientific paper, In Proceedings of the paper presented at the Third International Conference on Informetrics, Bangalore, 9-12 August 1991.
- 9. Arunachalam S and Markanday S, Science in the middle-level countries: a bibliometric analysis of scientific journals of Australia, Canada, India and Israel, *Journal of Information Science*, 3 (1) (1981) 13-26.
- 10. Arunachalam S, Citation as a sociometric tool, *Science Today*, 13 (4 October) (1978) 14.
- 11. Arunachalam S, Information for science and technology in India, *Journal of Information Science*, 4 (4) (1982) 137-148.
- 12. Arunachalam S, Rastogi S K and Shankar P S, Electrochemical research in India, *In Proceedings of the paper presented at the DRTC Seminar*, 1978, p. 169-73.
- Arunachalam S, Scientific journals in India: their relevance to international science, *Science Today*, (March) (1979) 45-50.\
- Arvinda P and Pulla R V, Literature of archaeological anthropology: a citation analysis, *Annals of Library Science* and Documentation, 36 (3) (1989) 85-90.
- 15. Arvinda P and Pulla R V, Physical anthropological literature: a citation analysis, *ILA Bulletin*, 25 (1) (1989) 19-25.
- Aulakh G S, Jain H C and Kochhar V B, Bibliometric study of Indian phytochemical literature-growth pattern and scatter, *Journal of Library and Information Science*, 8 (1) (1983) 83.
- 17. Baburanjan A, IEEE Transactions on Computers: a bibliometric analysis, *IASLIC Bulletin*, 33 (2-3) (1988) 53-59.
- Bandopadhyay D R, A quantitative study of book issues, In Proceedings of paper presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985, P. 109-116.

- Bandopadhyay S and Bhattacharjee K K, Identification of research trends by citation analysis: a case study in glass technology, *In Proceedings of paper presented at the 15th IASLIC Conference*, Bangalore, 26-29 December 1985, P. 47-52.
- Barooah P K, Pattern of information use by Indian entomologists, Annals of Library Science and Documentation, 40 (3) (1993) 104-114.
- Begum K J and Sami L K, Research collaboration in agricultural science, *International Library Review*, 20 (1) (1988) 57-64.
- Begum K J and Sami L K, Scatter and seepage of literature in psychology, *Deccan Information Scientist*, 1 (1986) 86-97.
- Begum K J and Sami L K, Trends in Indian agricultural research: analytical study, *Annals of Library Science and Documentation*, 33 (4) (1986) 163-172.
- Bhat V G and Elisharaju R, Ranking of periodicals in the field of astronautics and aeronautics, *Annals of Library* Science and Documentation 24 (3-4) (1977) 114-118.
- Bhat V G, Abstracts of biochemistry in various abstracting services, Annals of Library Science and Documentation, 20 (1-4) (1973) 105-108.
- Bhat V G, Kesarvani S K and Bhattacharyya, Channels of publishing Indian environmental research literature, *In Proceedings of the paper presented at the DRTC Seminar* 1978, P. 71-74.
- Bhattacharjee K K, Scattering coefficient and rank of periodical literature on glass and ceramics, *IASLIC Bulletin*, 20 (1) (1975) 1-16.
- 28. Bhattacharya K K and Sen B K, Application of citation analysis is supergravity: a nascent subject, *In Proceedings of the paper presented at the 15th IASLIC Conference*, Bangalore, 26-29 December 1985, P. 127-133.
- Bhattacharyya K, Coverage of documents on physical chemistry in three abstracting periodicals, *In Proceedings of* the paper presented at the DRTC Seminar, 1 (1963) 53-61.
- Bose P C, Use of microprocessors in bibliometric analysis. <u>In</u> Nagarajan S, ed. Use of Microcomputers in Information Analysis and Library Applications. New Delhi: Batra Book Service, 1988, 118-121.
- Bozimo D O, Some citation characteristics of medical research in Nigeria, *International Library Movement*, 9 (2) (1987) 77-86.
- 32. Chakraborty A R and Chakraborty B, Giants in library and information science *Annals of Library Science and Documentation*, 25 (1-9) (1978) 52-54.
- Chakraborty A R, Citation characteristics of marine geology, *Annals of Library Science and Documentation*, 18 (2) (1971) 88-91.
- 34. Chakraborty A R, Early attempts of documentation of geological literature in India a review, *Annals of Library Science and Documentation*, 18 (3) (1973) 132-140.
- Chakraborty A R, Scatter of Indian geological documents in Indian and foreign periodicals, *Annals of Library Science* and Documentation, 17 (1-2) (1970) 47-53.

- 36. Chakraborty A R, Trend towards team research in geology, *IASLIC Bulletin*, 26 (3) (1981) 141-146.
- 37. Chandra S R V and Divakar P, A bibliometric analysis of mathematical biology literature, *In Proceedings of the paper presented at the 15th IASLIC Conference*, Bangalore, 26-29 December 1985, P. 17-22.
- 38. Chandran D, Evaluation of biochemical journals by citation indexing, *IASLIC Bulletin*, 27 (3) (1982) 121-126.
- 39. **Das Gupta A K**, Librametric study. <u>In An essay in personal bibliography Ranganathan festschrift vol. 2 –a bibliography of writings on and by Dr. S R Ranganathan. 1967. p. 13-21.</u>
- Das P P, Information use pattern and analysis of literature in the field of social action, *IASLIC Bulletin*, 38 (3) (1993) 133-136
- 41. Deogan M S, Online bibliometrics, *Lucknow Librarian*, 19 (1) (1987) 43-48.
- 42. Deshmukh G R and Kumar A, Ranking of periodicals in the field of soil conservation, *Annals of Library Science and Documentation*, 29 (1) (1982) 26-28.
- 43. Dharmapurikar R G, Citation analysis: an important tool for knowledge organization, *In Proceedings of the paper* presented at the 2nd International ISKO Conference, Sarada Ranganathan Endowment for Library Science, Bangalore, 1992, p. 108-111.
- Dhawan S M and Phull S K and Jain S P, Selection of scientific journals: a model, Journal of Documentation, 36 (1) (1980) 24-41.
- 45. Dhawan S M and Yadav R S, A study on most frequently cited journals by Indian scientists in physics, *Annals of Library Science and Documentation*, 19 (4) (1972) 185-192.
- 46. Dhawan S M, Phull S K and Jain S P, Letter to the editor, *Journal of Documentation*, 36 (1980) 269.
- 47. Dittakavi N R, Ranking of research journals in the field of physical education, *International Library Movement*, 16 (4) (1984) 175-183.
- 48. Dutta S and Rajagopalan T S, Literature citations in scientific & technical periodicals a survey, *Journal of Scientific and Industrial Research*, 37A (July) (1958) 259-261.
- Eb Inuma Y, Improvement of Rocchio's measures for output: ranking preference in reference retrieval, *International information, communication and education*, 6 (1) (1987) 45-54
- 50. Egghe L, Methodological aspects of bibliometrics, *Library Science with a slant to Documentation and Information Studies*, 25 (3) (1988) 179-191.
- Garfield E, Mapping science in the Third World Part 2, International Information, Communication and Education, 5 (1) (1987) 30-44.
- Garfield E. Mapping science in the Third World, *International Information, Communication and Education*, 5

 (1) (1986) 42-57.
- Garudadwajan B and Murthy H S S, Bradford distribution: an application to the study of core collection of periodicals in aeronautics and related subjects, *Library Science with a slant* to Documentation and Information Studies, 20 (3) (1983) 159-178.
- 54. George M and Parthasarathy V V, Documentation in electrochemistry, *Library Science with a slant to*

- Documentation and Information Studies, 1 (2) (1964) 147-183.
- Gera J C, Social Science Citation Index: its efficacy for information retrieval, *Library Herald*, 15 (3/4) (1973/74) 132-45
- Ghosh J S and Neufeld M L, Uncitedness of articles in the Journal of the American Chemical Society, *Information Storage and Retrieval*, 10 (11-12) (1974) 365-369.
- 57. Ghosh J S, Documentation in commercial fisheries, *Library Science with a slant to Documentation and Information Studies*, 2 (3) (1965) 228-252.
- 58. Ghosh J S, Documentation in Indian zoology, *IASLIC Bulletin*, 10 (4) (1965) 210-217.
- Ghosh J S, Literature searching with the Science Citation Index: an experimental study, *Annals of Library Science and Documentation*, 14 (3) (1967) 133-142.
- Ghosh J S, The citation index, *IASLIC Bulletin*, 13 (4) (1968) 248-258.
- 61. Ghosh J S, The information content of titles in contraception literature, *Journal of chemical information and computer sciences*, 17 (1) (1977) 36-40.
- 62. Ghosh J S, Uncitedness of articles in Nature: a multidisciplinary scientific journal, *Information Process & Management*, 11 (5-6) (1975) 165-169.
- Goil N K, Coverage of Indian documents on economics by four bibliographical periodicals, In *Proceedings of the paper* presented at the DRTC Seminar, 1 May 1963, P. 101-11.
- 64. Gopinath M A, Across the frontiers impact of foreign journals in library science in India: a citation analysis, *Library Science with a slant to Documentation and Information Studies*, 30 (1) (1993) 17-24.
- Guha B, Gupta A K, Joseph A and Kachroo M L, Scattering of articles by Indian authors in foreign periodicals: a sample survey, *Annals of Library Science and Documentation*, 12 (2) (1965) 76-86.
- Guha B, Sen B K and Neogi R N, On change of titles of periodicals Pt 1, Annals of Library Science and Documentation, 22 (2) (1975) 45-59.
- Guha B, Sen B K and Neogi R N, On change of titles of periodicals Pt 2, Annals of Library Science and Documentation, 22 (3) (1975) 93-107.
- 68. Guha B, Sen B K and Neogi R N, On change of titles of periodicals Pt 3, *Annals of Library Science and Documentation*, 23 (2) (1976) 157-168.
- Guha B, Sen B K and Neogi R N, On change of titles of periodicals Pt 4, Annals of Library Science and Documentation, 23 (3) (1976) 213-222
- Guha B, Sen B K and Neogi R N, On change of titles of periodicals Pt 5, Annals of Library Science and Documentation, 24 (3-4) (1977) 131-137.
- 71. Gunjal S R and Naidu G H, Application of citation analysis for journal use study in agricultural extension: A case study. *In Proceedings of the paper presented at the 15th IASLIC Conference*, Bangalore, 26-29 December 1985, P.117-120.
- 72. Gupta A K, Characteristics of documents cited by Indian physicists: a case study, In *Proceedings of the paper presented at the DRTC Seminar* 7, 1969, Paper JB.

- 73. Gupta B M, A citation analysis of internal and external connections of a research branch: a case study of solar energy research in the USSR, *Annals of Library Science and Documentation*, 27 (1-4) (1980) 61-65.
- Gupta B M, Citation analysis and dynamics cited information in antennas, *Herald of Library Science*, 19 (4) 1980 297.
- Gupta B M, Citation analysis of solar energy research in USSR, *Journal of Library and Information Sciences*, 2 (2) (1977) 202-219.
- Gupta B M, Sharma S C and Mehrotra N N, Subject-based publication activity indicators for medicinal and aromatic plants research, *Scientometrics*, 18 (5-6) (1990) 341-361.
- 77. Gupta D K, Author productivity patterns: geoscientific literature of Nigeria for the period 1904-1979, *Library Science with a slant to Documentation and Information Studies*, 30 (2) (1993) 76-89.
- 78. Gupta D K, Authorship trends: a bibliometric study on AIDS, *International Information, Communication and Education*, 5 (2) (1986) 183-188.
- 79. Gupta D K, Bibliometric and structural study on in-vitro fertilization and embryo transfer, *Annals of Library Science and Documentation*, 34 (2) (1987) 52-60.
- 80. Gupta D K, Bibliometric study of AIDS literature 1981-84, *Annals of Library Science and Documentation*, 35 (1) (1988) 34-42.
- 81. Gupta D K, Bibliometric study of literature on Ethiopian librarianship 1944-1992, *Library Science with a slant to Documentation and Information Studies*, 31 (4) (1994) 208-216.
- 82. Gupta D K, Collaboration in research output: a review and case study of entomological research in Nigeria 1900-1973. *International Information, Communication and Education*, (1) (1986) 57-75.
- 83. Gupta D K, Collaborative research trends in exploration geophysics, *Annals of Library Science and Documentation*, 40 (2) (1993) 48-55.
- 84. Gupta D K, Collaborative trends in early research of computer-based storage and retrieval of geoscience information, *IASLIC Bulletin*, 31 (2) (1986) 55-64.
- 85. Gupta D K, Development of exploration geophysics and its information activities, *Annals of Library Science and Documentation*, 33 (3) (1986) 117-125.
- Gupta D K, Lotka's law and its application to author productivity distribution of psychological literature of Africa, 1966-1975 Part I, Herald of Library Science, 28 (1-2) (1989) 11-12.
- Gupta D K, Lotka's law and its application to author productivity distribution of psychological literature of Africa 1966-1975, Herald of Library Science, 28 (4) (1989) 318-326
- 88. Gupta D K, Scientometric study of exploration geophysics: author productivity trends, *Annals of Library Science and Documentation*, 39 (4) (1992) 145-152.
- 89. Gupta S, Citation patterns in a Nigerian theological journal, *IASLIC Bulletin*, 39 (2) (1994) 81-88.
- 90. Humayoon K S, Authorship trend and solo research in bibliometrics: a bibliometric study, *Library Science with a*

- slant to Documentation and Information Studies, 31 (2) (1994) 87-90.
- 91. Humayoon K S, World literature on bibliometrics: authorship and growth patterns, *ILA Bulletin*, 28 (3-4) (1993) 87-94.
- 92. Ijari S R and Kannappanavar B U, Periodical literature of geology: a citation analysis study to determine obsolescence factors and patterns, *Indian Journal of Information, Library and Society*, 2 (1) (1989) 77-84.
- 93. Jawahar Lal, Characteristics of information sources used by Indian geologists: a bibliometric study, *CLIS Observer*, 11 (1-2) (1994) 12-24.
- 94. Joshi A N and Maheswarappa B S, Multiple authorship trends in different subjects of science and technology: a review of literature, ILA *Bulletin*, 30 (1-2) (1994) 31-37.
- 95. Kabir S H, Citations in Indian agricultural research an analysis, *Annals of Library Science and Documentation*, 37 (3) (1990) 102-109.
- Kademani B S, Kalyane V L and Balakrishnan M R, Scientometric portrait of P K Iyengar, Library Science with a slant to Documentation and Information Studies, 31 (3) (1994) 155-176.
- 97. Kalyane V L and Kalyane S V, Scientometric portrait of M S Swaminathan, *Library Science with a Slant to Documentation and Information Studies*, 31 (1) (1994) 31-46.
- Kalyane V L and Vidyasagar Rao K, Collaboration trends in sugarcane research - a case study, *Annals of Library Science* and Documentation, 39 (1) (1992) 9-11.
- 99. Kalyane V L and Vidyasagar Rao K, Quantification of credit for authorship, *ILA Bulletin*, 30 (3-4) (1994-95) 94-96.
- 100. Kannappanavar B U and Nulvi C N, Authorship trend and solo research in rural transformation: a bibliometric study, ILA Bulletin, 27 (1) (1991) 38-41.
- 101. Karanjai A, Munshi Usha M and Sen B K, Are the JCR impact factors of Indian S&T journals reliable, Annals of Library Science and Documentation, 39 (1) (1992) 26-30.
- 102. Karisiddappa C R, Sangam S L and Maheshwarappa B S, Information use pattern of Indian historians, *IASLIC Bulletin*, 34 (2) (1989) 47-53.
- 103. Karki M M S, Environmental science research in India, *Scientometrics*, 18 (5-6) (1990) 343-373.
- 104. Kesarwani S K, Sinnarkar S N and Bhat S G, Bibliometric study of scientific contribution by NEERI scientists, *In Proceedings of the paper presented at the 15th IASLIC Conference*, Bangalore, 26-29 December 1985, p. 23-28.
- 105. Khaiser J B and Sharda B A, Journals most frequently cited by Indian linguists: a citation analysis, *Annals of Library Science and Documentation*, 31 (3-4) (1984) 173-180.
- 106. Kochhar V B, Subba Rao A, Arora A M and Elhence D, Materials research in India: a quantitative analysis of publications output in scientific journals, *Journal of Library* & *Information Science*, 17 (2) (1992) 198-206.
- 107. Kochhar Ved B and Verma R K, Indian biotechnology literature: a bibliometric study. *Annals of Library Science* and Documentation, 34 (2) (1987) 61-70.
- 108. Korennoi A A, Scientometric classification of research groups, *International information, communication and education,* 11 (1) (1992) 13-25.

- 109. Kretschmer H, Significance of the logarithm of number of publications for the measurement of social stratification in co-authorship networks, *International information, communication and education,* 12 (1) (1993) 63-84.
- 110. Kretschmer H, The citation structure of the international journal of Genetics from the psychological point of view, *IASLIC Bulletin*, 39 (3) (1994) 97-106.
- 111. Krishnan A and Surinder M, Indian documents in chemistry and technology: a study of the coverage and quickness of reporting in international documentation tools, *In Proceedings of the paper presented at the DRTC Seminar 1*, May 1963.
- 112. Kulkarni S M, Bibliometric study of Anthropology Directory, In Proceedings of the paper presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985, P. 121-126.
- 113. Kumar N and Kochhar V B, Growth pattern and impact of Indian scientific periodicals on world scientific literature: a study based on SCI, *ILA Bulletin*, 33 (1) (1988) 177-187.
- 114. Kumar N and Sen B K, Indian Science Citation Index a bibliometric tool, SIS Annual Convention, Pune, January 1992.
- 115. Kumar N, Citation analysis of PhD theses in business management, *Library Herald*, 26 (1-4) (1987/1988) 104-114.
- 116. Kumar N, Literature contribution in Journal of Environmental Biology: a bibliometric study, *Annals of Library Science and Documentation*, 3 (1-2) (1986) 31-40.
- 117. Kumar S, Information sources in history of science in India: a scientometric study of periodical literature, *Library Herald*, 31 (1-2) (1992) 72-75.
- 118. Kumbar T S, Most frequently cited journals in the field of fluid mechanics, *International information, communication and education*, 11 (2) (1992) 197-209.
- 119. Kundra R and Garg K C, Growth and scatter of alcohol fuel literature, *Annals of Library Science and Documentation*, 34 (1) (1987) 36-40.
- 120. Kundu A K, Citations of the source journals in the field of library science and their ranking, *Annals of Library Science and Documentation*, 27 (1-4) (1980) 130-134.
- 121. Kundu A K, Self-citations by Indian library scientists, Annals of Library Science and Documentation, 28 (1-4) (1981) 39-41.
- 122. Lal A, Citations in agricultural research, *Journal of Library and Information Science*, 13 (2) (1988) 175-183.
- 123. Lal A, Literature contribution in *Indian Journal of Genetics* and *Plant Breeding*: a citation analysis, *Annals of Library Science and Documentation*, 40 (2) (1993) 65-76.
- 124. Lal A, Most important journals from the point of view of Indian soil scientists: a bibliometric study, *IASLIC Bulletin*, 38 (3) (1993) 123-131.
- 125. Lal A, Ranking of periodicals in the field of soil science, Annals of Library Science and Documentation, 37 (2) (1990) 67-73.
- 126. Lal Arjun, A trend in citation pattern in agriculture research in Bihar, *IASLIC Bulletin*, 34 (2) (1989) 65-72.
- 127. Lazarem V S and Safonenko O K, Specific feature of biomedical publications of magnetic fluids as a scientific

- branch (as revealed by means of a bibliometric study), *IASLIC Bulletin*, 39 (2) (1994) 49-62.
- 128. Luthra K L, Comparative use of Chemical Abstracts and Index Chemicus, *Herald of Library Science*, 10 (2) (1971) 122-130.
- 129. Madkey V D and Rajyalakshmi D, Citation analysis of PhD theses in environmental science and engineering used by NEERI scientists during 1977-1991, Annals of Library Science and Documentation, 41 (2) (1994) 63-78.
- 130. Mahapata M, On the validity of the theory of exponential growth of scientific literature, *In Proceedings of the paper presented at the 15th IASLIC Conference*, Bangalore, 26-29 December 1985, P. 61-70.
- 131. Mahapatra G and Kaul R, Bibliometric analysis of citation classics in life sciences, *Library Science with a slant to Documentation and Information Studies*, 31 (3) (1994) 129-134
- 132. Mahapatra G and Kaul R, Self-citation by Indian botanists, *ILA Bulletin*, 27 (4) (1992) 161-167.
- 133. Mahapatra G, Correlation between growth of publications and citations: a study based on growth curves, *Annals of Library Science and Documentation*, 41 (1) (1994) 8-12.
- 134. Mahapatra G, Highly cited authors, journals and books in Indian library and information science literature, *Annals of Library Science and Documentation*, 1 (4) (1994) 127-134.
- 135. Maheshwarappa B S and Mathias S A, Authorial collaboration in various disciplines of the physical sciences of India: a bibliometric study, *Journal of Library and Information Science*, 12 (2) (1987) 136-155.
- 136. Maheshwarappa B S and Mathias S A, Research collaboration in various disciplines of the applied sciences in India 1965-83: a bibliometric study, *IASLIC Bulletin*, 32 (2) (1987) 105-114.
- 137. Maheshwarappa B S and Nagappa B, Research collaboration in the field of phytopathology: a bibliometric study, *Annals of Library Science and Documentation*, 34 (4) (1987) 173-176.
- 138. Maheshwarappa B S and Nagaraju A, Botanical literature in India 1973-1983, *International Library Review*, 20 (4) (1988) 509-515.
- 139. Maheshwarappa B S and Ningoji M M, Growth of literature in the field of science and technology in India, *International* information, communication and education, 11 (2) (1992) 186-197.
- 140. Maheshwarappa B S and Ningoji M M, Growth of literature in the field of applied sciences in India 1965-89, *International information, communication and education*, 12 (2) (1993) 191-200.
- 141. Maheshwarappa B S and Ningoji M M, Study of the growth of biological science literature in India from 1965-89, *ILA Bulletin*, 29 (1-2) (1993) 47-55.
- 142. Maheshwarappa B S and Prakash B P, Literature use pattern by the researchers in the field of botany: a citation study of doctoral theses, *Journal of Library and Information Science*, 7 (1) (1982) 15-32.
- 143. Maheshwarappa B S and Surya Rao K, Journal literature of food science and technology: a bibliometric study, *Annals of Library Science and Documentation*, 29 (3) (1982) 126-134.

- 144. Maheshwarappa B S and Usha G N, Seed pathology literature. *International Library Review*, 21 (1) (1989) 99-114.
- 145. Maheshwarappa B S, Bibliographical phenomena of phytomorphology literature: a citation analysis, *Annals of Library Science and Documentation*, 30 (1) (1983) 22-30.
- 146. Maheshwarappa B S, Nagappa B and Onkarmurthy B N, Information use patterns of Indian geoscientists: a citation study, *Library Herald*, 25 (2-3) (1986) 68-79.
- 147. Malwad N M, Citation indexes and analyses, *Science Today*, 13 (4) (1974) 11-19.
- 148. Malwad N M, Journal ranking, *Science Today*, 13 (4) (1978) 16.
- 149. Mamadpalli S, Publication activities of NAL scientists: a case study, In *Proceedings of the paper presented at the* DRTC Seminar, 1978, P. 75.
- 150. Mandal A and Sain C R, Collaborative research by the scientists of a particular country vis-a-vis by the scientists of different countries in the field of geoscience, *IASLIC Bulletin*, 38 (3) (1993) 137-138.
- 151. Mandal M and Mahapatra M, Determination of significant authors in literary work: some bibliometrical observations in 20th century literature, In *Proceedings of the paper presented at the 15th IASLIC Conference*, Bangalore, 26-29 December 1985, P. 9-15.
- 152. McDonald L, A communication model of the scientific school, *Library Science with a slant to Documentation and Information Studies*, 30 (2) (1993) 65-70.
- 153. Mehla R D, Publication pattern of Indian agricultural theses, *IASLIC Bulletin*, 32 (2) (1987) 75-80.
- 154. Mehrotra R and Lancaster F W, Where Indian scientists publish, *Current Science*, 53 (13) (1984) 684-688.
- 155. Mitra A C, Literature cited by Indian scientists: a study of the use pattern of literature and its English language, foreign language, and domestic components published in various periods, *Annals of Library Science and Documentation*, 19 (3) (1972) 119-145.
- 156. Mitra A C, The bibliographical reference: a review of its role, *Annals of Library Science and Documentation*, 17 (3-4) (1970) 117-123.
- 157. Mitra P, Problems related to evaluation and the assessment of continuity of scientific ideas in history of science, *Science and Culture*, 44 (8) (1978) 346-352.
- 158. Mittal R, Acquisition and distribution of primary and secondary serials in information science in India an analytical study. *Annals of Library and Information Studies*, 37 (1) (1990) 28-34.
- 159. Munshi U and Karanjai A, Recency of citations and the place of work of scientists, *Annals of Library Science and Documentation*, 35 (1) (1988) 43-44.
- 160. Munshi U M amd Vashishth C P, Impact factor of Indian agricultural journals, *Library Herald*, 31 (1-2) (1992) 1-12.
- 161. Munshi U M and Vashishth C P, Recency of citations, Journal of Library and Information Science, 18 (1) (1993) 25-31.
- 162. Munshi U M and Vashishth C P, Visibility index, *ILA Bulletin*, 28 (1-2) (1992) 1-5.

- 163. Munshi U M, Karanjai A and Sen B K, Citation behaviour of chemical scientists: a case study, *ILA Bulletin*, 27 (2) (1991) 47-53.
- 164. Munshi U M, Karanjai A and Sen B K, Indian medical periodicals and Science Citation Index, *IASLIC Bulletin*, 35 (1) (1990) 43-46.
- 165. Munshi U M, Vashishth C P and Gautam J N, Journal preferences in agricultural sciences, *ILA Bulletin*, 29 (1-2) (1993) 1-13.
- 166. Munshi U M, Vashishth C P and Gautam J N, Research collaboration in agricultural sciences, *ILA Bulletin*, 28 (3-4) (1993) 57-60.
- 167. Musib S K and Mahapatra M, Use of citational analysis in studying the microstructure of a subject: a case study in economics, In Proceedings of the paper presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985, P.53-60.
- 168. Musib S K, Age of literature studies in agricultural economics, *Annals of Library Science and Documentation*, 33 (1-2) (1986) 27-30.
- 169. Musib S K, Age of literature studies in philosophy, *Journal of Library and Information Science*, 12 (1) (1987) 46-52.
- 170. Musib S K, Age of literature studies in phycology, *IASLIC Bulletin*, 33 (1) (1988) 15-18.
- 171. Musib S K, Form of literature studies in agricultural economics, *Herald of Library Science*, 25 (3-4) (1986) 185-189.
- 172. Musib S K, Subject dispersion studies in international economics, *Annals of Library Science and Documentation*, 36 (12) (1989) 39-40.
- 173. Nag D K and Satapathi C, Journals cited most frequently by Indian earth scientists, *International information, communication and education,* 6 (1) (1987) 68-71.
- 174. Nag D K, Indian Journal of Earth Science: an analysis, *IASLIC Bulletin*, 29 (3) (1984) 107-111.
- 175. Nag D K, Saha B B and Satapathi C, Pattern of use of earth science literature by Indian geologists: a citation analysis, *In Proceedings of the paper presented at the 15th IASLIC Conference*, Bangalore, 26-29 December 1985, P.101-108.
- 176. Nagarathna R A, Use of documents by nuclear physicists and metallurgists: a case study, In *Proceedings of the paper presented at the DRTC Seminar* 9, 1971, Paper BD.
- 177. Naidu G and Hemsunder, Compilation of core periodicals in poultry science, *Herald of Library Science*, 26 (3-4) (1987) 170-176.
- 178. Naranan S, Bradford's law of bibliography of science: an interpretation, *Nature*, 227 (1970) 631-632.
- 179. Naranan S, Power law relations in science bibliography- a self-consistent interpretation, Journal of Documentation, 27 (2) (1971) 83-97.
- 180. Neelameghan A, Buche V V and Gupta B S S, Distribution pattern of the duplication of discoveries, *Nature*, 227 (1970) 1060.
- 181. Neelameghan A, Documentation of the history of medicine in India, *Annals of Library Science and Documentation*, 10 (3-4) (1963) 116-142.

- 182. Nweke K M C, Bradford's law and the journal titles cited by research scholars in zoology at the Ibadan University Nigeria, *IASLIC Bulletin*, 34 (3) (1989) 97-104.
- 183. Nweke K M C, Citation analysis study of authors of the literature used by research scholars in zoology at the Ibadan University Nigeria, *Annals of Library Science and Documentation*, 36 (12) (1989) 139-147.
- 184. Parvathamma N, Gunjal S R and Nijagunappa R, Growth pattern of literature and scientific productivity of authors in Indian earth science 1978-88: bibliometric study, *Library Science with a slant to Documentation and Information Studies*, 30 (2) (1993) 54-64.
- 185. Rajagopalan T S and Sen B K, An essay on informatics: a study on growth and development, *Annals of Library Science and Documentation*, 33 (1-2) (1986) 1-12.
- 186. Rajagopalan T S and Sen B K, Reporting of Indian mathematics literature in the Mathematical Reviews and Bulletin Signaletique, *Annals of Library Science and Documentation*, 12 (3) (1965) 137-150.
- 187. Rajagopalan T S and Sen B K, Reporting of Indian physics literature in the Physics Abstracts, *Annals of Library Science and Documentation*, 11 (4) (1964) 87-95.
- 188. Rajagopalan T S, Deo M S, Mukherji S and Tripathy G N, Coverage of Indian documents on agriculture in three bibliographical periodicals, In *Proceedings of the paper presented at the DRTC Seminar* 1, May 1963.
- 189. Rajagopalan T S, Sen B K, Roy S and Gogia K L, Reporting of Indian agricultural literature in some CAB abstracting services, *Annals of Library Science and Documentation*, 12 (2) (1965) 87-88.
- 190. Rajan T N, Micro documents in Indian economics: a sample survey, In *Proceedings of paper presented at the DRTC Seminar I*, May 1963, P. 219-224.
- 191. Raju R E and Kavitha, Frequently cited periodicals by Indian organic chemists: a citation analysis, *Annals of Library Science and Documentation*, 33 (1-2) (1986) 56-66.
- 192. Rana M S and Agarwal S, Authorship trends in Indian wildlife and fisheries literature: a bibliometric study. *Annals of Library Science and Documentation*, 41 (1) (1994) 13-18.
- 193. Rana M S, Information use pattern of wildlife managers, *Library Herald*, 30 (2-4) (1991-92) 264-265.
- 194. Ranganathan S R, Language barrier and coverage by abstracting periodical, In *Proceedings of the paper presented at the DRTC Seminar* 1, May 1963, 63-81.
- 195. Rangarajan K S and Gupta B M, Analysis of the choice of journals for publication by Indian physicists, *Journal of Library and Information Science*, 4 (2) (1979) 144-161.
- 196. Rangarajan K S, Gupta B M, Bose P R and Chandrasekharan S, Physical research in India: a bird's eye view, *Physical News* (*India*), 11 (2) (1980) 1-8.
- 197. Rangra V K, Sharma U R and Saxena R S, Reporting of Indian chemical literature in *Referativnyi Zhurnal Khimiya*, *Annals of Library Science and Documentation*, 19 (2) (1972) 81-86.
- 198. Rao C V S, Citation analysis of papers of an Indian chemical journal, In Proceedings of paper presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985, P. 41-46.

- 199. Rao C V S, Librametry: a statement of limitations and values, *In Proceedings of paper presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985,* 93-100.
- 200. Rao D G and Talwar V G, Scatter and seepage of information in antennas, *Herald of Library Science*, 19 (4) (1980) 297.
- 201. Rao D G, Citation of documents in radio engineering: a case study, In *Proceedings of the paper presented at the DRTC* Seminar, 9 1971, P.205-216.
- 202. Rao D G, Scatter and seepage of documents on radio engineering, In *Proceedings of the paper presented at the* DRTC Seminar 1, May 1963, P.167-180.
- 203. Rao G S R, Pattern of use and search for documents by specialists: a case study through citation analysis, questionnaire, and interview. In *Proceedings of the paper* presented at the DRTC Seminar 9, 1971, Paper BC.
- 204. Rathore R S and Mishra R, Contributions in biochemistry in India: a bibliometric comparison, *IASLIC Bulletin*, 26 (1) (1981) 23-26.
- 205. Rao I K R, Bibliometric models: an entropy approach and their applications, *In Proceedings of paper presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985*, P. 1-8.
- 206. Rao I K R, Dispersion of documents on survey analysis: Bradford, and Pareto distributions, *Library Science with a slant to Documentation and Information Studies*, 9 (3) (1972) 396-403.
- 207. Rao I K R, Growth of periodicals and obsolescence of articles in periodicals: a case study in sociology, *Library Science with a slant to Documentation and Information Studies*, 11 (2) (1974) 92-95.
- 208. Rao I K R, Journal productivity in economics, *Informetrics*, (1989/90) 251-280.
- 209. Rao I K R, Obsolescence and utility factors of periodical publication: a case study. Library Science with a slant to Documentation and Information Studies, 10 (3) (1973) 297-307
- 210. Rao I K R, Quantitative methods for library and information science, (Wiley Eastern; New Delhi), 1983.
- 211. Rao I K R, The distribution of scientific productivity and social change, *Journal of the American Society for Information Science*, 31 (2) (1980) 111-122.
- 212. Reddy E R, Rao K N and Md. Burhanuddin, Duplication of periodicals in selected libraries in Hyderabad: an analysis, *Annals of Library and Information Studies*, 37 (1) (1990) 1-19.
- 213. Reddy K M, Compilation of retrospective bibliography by citation mapping, Annals of Library Science and Documentation, 29 (3) (1982) 138-142.
- 214. Reddy K M, The phenomenon of scatter of subject literature, *IASLIC Bulletin*, 29 (1) (1984) 11-18.
- 215. Reddy V P and Sharma C B S R, Bibliometric study of research publication in Indian environmental genetic toxicology, *IASLIC Bulletin*, 33 (1) (1988) 7-14.
- 216. Rousseau R, Determination of a core of a bibliography, *IASLIC Bulletin*, 38 (2) (1993) 49-57.

- 217. Rousseau R, Lotka's law and its Leimkuhler representation, Library Science with a slant to Documentation and Information Studies, 25 (3 (1988) 150-178.
- 218. Rousseau R, Pielou's axiom and N-dependent concentration measures, *International information, communication and education*, 11 (1) (1992) 43-63.
- 219. Roy R and Paul Mohan, Citation analysis: a new tool for the modern librarian, *IASLIC Bulletin*, 25 (3) (1980) 109-116.
- 220. Roy R, Comments on citation study of materials science departments, *Journal of Metals* (June) (1976) 29-30.
- 221. Roy R, Roy N R and Johnson, Jr G G, Approximating total citation counts from first author counts and from total papers, *Scientometrics*, 5 (2) (1983) 117-124.
- 222. Roychoudhury S P and Mahapatra M, Validity and scope of Bradford's scatter law: Some observations, *In Proceedings of paper presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985*, P.71-79.
- 223. Sangam S L and Biradar B S, Pattern of information use by Indian surgical scientists: a citation study, *Annals of Library and Information Studies*, 37 (4) (1990) 133-142.
- 224. Sangam S L, A citation analysis of doctoral dissertations in history, CLIS Observe, 3 (3-4) (1986) 57-67.
- 225. Sangam S L, Citation pattern in electronics, *Herald of Library Science*, 26 (4) (1987) 168-174.
- 226. Sangam S L, Information use pattern of researchers in the field of psychology: a citation study, *IASLIC Bulletin*, 34 (2) (1989) 55-63.
- 227. Sangam S L, Obsolescence of literature in economics, *ILA Bulletin*, 25 (2) (1989) 59-66.
- 228. Sangam S L, Ranking of periodicals in the field of anthropology: a citation study of PhD dissertations accepted by Karnatak University, Dharwad during 1964 to 1982, *Deccan Information Scientist*, 1 (1986) 1-19.
- 229. Sangameswaran S V and Gopinath M V, Bibliographic organisation of food literature in the Commonwealth: role of India, Library Science with a Slant to Documentation and Information Studies, 17 (1) (1980) 19-25.
- 230. Seetharama S, Documents on survey analysis, *Library Science with a Slant to Documentation and Information Studies*, 9 (3) (1972) 384-395.
- 231. Sen B K and Kumar N, Indian contribution in bibliometrics (1958-1984): a review, *Annals of Library Science and Documentation*, 33 (3) (1986) 85-103.
- 232. Sen B K and Kumar S, Evaluation of recent scientific output by bibliometric method, *Scientometrics*, 23 (1) (1992) 31-46.
- 233. Sen B K and Lakshmi V V, Indian S & T journals in the Science Citation Index, *Scientometrics*, 23 (2) (1992) 29-56.
- 234. Sen B K, From bibliometrics to informetrics. In Proceedings of paper presented at the Workshop on Bibliometrics and Scientific Communication, Calcutta, 1 February 1986.
- 235. Sen B K, Gera J C, Gogia K L and Rajagopalan T S, Reporting of Indian medical literature in the *Index Medicus* and the *Excerpta Medica*, *Annals of Library Science and Documentation*, 13 (1) (1966) 1-24.
- 236. Sen B K, Growth of Bengali scientific periodicals (Bengali), *Granthagar*, 18 (12) (1969) 479-489.

- 237. Sen B K, Growth of Indian scientific periodicals: an outline of a comprehensive bibliography, *Annals of Library Science and Documentation*, 25 (1-4) (1978) 22 -30.
- 238. Sen B K, Indian contribution in Nobel lectures, *Annals of Library Science and Documentation*, 16 (1) (1969) 35-36.
- 239. Sen B K, Kumar S et al. Bibliometrics: a tool for scientific evaluation, *ILA Bulletin*, 24 (4) (1989) 194-207.
- 240. Sen B K, Normalised impact factor, *Journal of Documentation*, 48 (3) (1992) 318-325.
- 241. Sen B K, Pandalai T A and Karanjai A, Standard impact factor, In Proceedings of paper presented at the Fourth International Conference on Bibliometrics, Informetrics, and Scientometrics, Berlin, 11 - 15 September 1993.
- 242. Sen B K, Place of Indian scientific periodicals in the world abstracting services (Bengali), *Granthagar*, 15 (22) (1966) 432-436.
- 243. Sen B K, Scattering of the research work for rural areas among the Indian scientific periodicals: a case study, In Proceedings of paper presented at the Annual Convention and Conference of SISCOM 12, Hyderabad, January 1993.
- 244. Sen S K and Gan S K, A mathematical extension of the idea of bibliographic coupling and its applications, *Annals of Library Science and Documentation*, 30 (2) (1983) 78-82.
- 245. Sen S K and Gan S K, Biobibliometrics: concept and application in the study of productivity of scientists, *International Forum on Information and Documentation*, 15 (3) (1990) 13-21.
- 246. Sengupta I N and Deshpande K S, International channel of communication of biophysics literature, *Annals of Library Science and Documentation*, 33 (4) (1986) 143-149.
- 247. Sengupta I N and Kumari L, Bibliometrics evaluation of biochemical research in India. *Library Herald*, 26 (1-4) (1987/1988) 91-103.
- 248. Sengupta I N and Kumari L, Impact of Indian contributions on the overall growth of biochemical knowledge: a bibliometric analysis, In Proceedings of paper presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985, P. 29-40.
- 249. Sengupta I N et al, Bibliometric evaluation of cancer literature on experimental cytology, *In Proceedings of paper* presented at the 15th IASLIC Conference, Bangalore, 26-29 December 1985, P. 81-91.
- 250. Sengupta I N, A new bibliometric technique of quantitative evaluation of core journals of basic biomedical sciences. <u>In</u> Guha B, ed. In the Library and Information Science Horizon: a Collection of Essays in honor of Dr. V A Kamath, presented by the Bombay Science Librarians' Association (BOSLA); New Delhi: Allied Publishers, 1986. 329-368.
- 251. Sengupta I N, Bibliometric research: Growth of biomedical literature, (SBA Publications; Calcutta), 1988, p. xiii, 366.
- 252. Sengupta I N, Choosing microbiology periodicals: a study of the growth of literature in the field, *Annals of Library Science and Documentation*, 21 (3) (1974) 95-111.
- 253. Sengupta I N, Choosing pharmacology periodicals: a study of the growth of literature in the field, *Annals of Library Science and Documentation*, 21 (1-2) (1974) 1-21.

- 254. Sengupta I N, Course material of workshop on scientific communication and bibliometrics, (Indian Institute of Chemical Biotechnology; Calcutta), 1988.
- 255. Sengupta I N, Scientometric study to evaluate the growth of biomedical literature: Part II Biochemistry and microbiology, *International information, communication and education*, 7 (1) (1988) 28-40.
- 256. Sengupta I N, Scientometric study to evaluate the growth of biomedical literature Part III-Physiology and pharmacology, *International information, communication and education*, 7 (2) (1988) 161-179.
- 257. Sengupta I N, Scientometric study to evaluate the growth of biomedical literature: Part IV-Biophysics, *International* information, communication and education, 8 (2) (1989) 188-207.
- 258. Sengupta I N, Three new bibliometric parameters and physiology periodicals, *Annals of Library Science and Documentation*, 35 (3) (1988) 124-127.
- 259. Sengupta I N, Three new bibliometric parameters and their application to research periodicals in the field of pharmacology, *ILA Bulletin*, 24 (2) (1988) 61-67.
- 260. Sengupta I N, Three new bibliometric parameters to rerank microbiology periodicals, Annals of Library Science and Documentation, 36 (3) (1989) 69-74.
- Sengupta I N, Workshop on scientific communication and bibliometrics, *Herald of Library Science*, 27 (1-2) (1988) 91-94.
- 262. Shah L K, Interpreting readership data: a new multivariate approach through visualization, *Library Science with a slant* to *Documentation and Information Studies*, 30 (3) (1993) 103-117.
- 263. Shah P R, Coverage of documents on manmade fibres in Chemical Abstracts, with a scheme of classification. In *Proceedings of paper presented at the DRTC Seminar 1*, May 1963, P. 63-81.
- 264. Shalini R and Khan M A, Communication behaviour of Indian geophysics: a citation analysis, *International Library Review*, 19 (4) (1987) 401-411.
- 265. Sharada B A and Sharma J S, A study of bibliographic coupling in linguistic research, *Annals of Library Science* and Documentation, 40 (4) (1993) 125-137.
- 266. Sharada B A, Bibliometric studies in linguistics and bibliometric laws, *Library Science with a slant to Documentation and Information Studies*, 30 (2) (1993) 71-75.
- 267. Sharda B A and Devaki L, Contribution of journal articles by Indian linguists at the international scene, *Annals of Library and Information Studies*, 37 (1) (1990) 35-52.
- 268. Sharma P and Garg K C, Bibliometrics of solar power research in India, *IASLIC Bulletin*, 38 (4) (1993) 155-160.
- 269. Shukla M C, Coverage of the immunology literature in Biological Abstracts, Chemical Abstracts and Excerpta Medica: a study of overlap, time lag and Indian contributions, *Annals of Library and Information Studies*, 33 (1-2) (1986) 41-56.
- 270. Singh H, Saxena S K, Application of biotechnology in mass health care literature trend, *Annals of Library Science and Documentation*, 39 (1) (1992) 19-25.

- 271. Singh D, Jindal S C, Abbas S M and Ansari M M A, An analytical study of ILA conference papers, *Library Herald*, 32 (3-4) (1994-95) 144-152.
- 272. Singh J P, Citation patterns of optical engineering, *ILA Bulletin*, 25 (1) (1989) 26-36.
- 273. Singh M, Studies of chemical literature and changes in the ranking of periodicals by citation analysis of data for 1967-76, *Annals of Library Science and Documentation*, 25 (1-4) (1978) 55-61.
- 274. Sinha S C and Ullah M F, Citation profile of Dr V S Ramachandran: a bibliometric analysis of his highly cited articles and books in the area of cement and concrete chemistry, Annals of Library Science and Documentation, 40 (1) (1993) 21-31.
- 275. Sinha S C and Ullah M F, Eleven years of CBRI research output 1980-90: a bibliometric study, *Annals of Library Science and Documentation*, 40 (3) (1993) 77-91.
- 276. Sinha S C, A bibliometric analysis of a research field: literature of building science, *International Library Movement*, 11 (1) (1989) 22-34.
- 277. Sridhar M S, A sociometric analysis of informal communication among Indian satellite technologists, *Library Science with a slant to Documentation and Information Studies*, 25 (2) (1988) 78-111.
- 278. Srivastava A K, Authorship collaboration and information seeking habit in petroleum exploration, *Library Herald*, 31 (3-4) (1992-93) 95-100.
- 279. Stanley M K, Distribution of publications of the animal scientists (including fisheries) of the University of Agricultural Sciences Bangalore, *Annals of Library Science and Documentation*, 33 (1-2) (1986) 20-26.
- 280. Subramanian R and Navaneethan R, Library Science with a Slant to Documentation and Information Studies 1981-1990: a bibliometric study, Library Science with a Slant to Documentation and Information Studies, 29 (3) (1992) 157-161
- 281. Subramanyan K and O'Pecko M M, Environmental research journals, Environmental Science and Technology, 13 (8) (1979) 927-928.
- Subramanyan K, Bibliometric investigation of computer science journal literature. PhD Dissertation, University of Pittsburg, 1975.
- 283. Subramanyan K, Bibliometric studies of research collaboration: a review, *Journal of Information Science*, 6 (1) (1983) 33-38.
- 284. Subramanyan K, Citation and significance, 76 (905) (1975) 227-228
- 285. Subramanyan K, Core journals in computer science. *IEEE Transactions on Professional Communication*, PC-19 (2) (1976) 22-25.
- 286. Subramanyan K, Criteria for journal selection, *Special Library*, 66 (8) (1975) 367-371.
- 287. Subramanyan K, Lotka's law and the literature of computer science, *IEEE Transactions on Professional Communication*, PC-22 (4) (1979) 187-189.
- 288. Subramanyan K, Scientific journals: a review of the current trends of future prospects, *Unesco Bulletin for Libraries*, 29 (4) (1975) 192-201.

- 289. Tsai Bor-Sheng, Mapping metrics for subject-object coordinated field recognition and representation, *Library Science with a slant to Documentation and Information Studies*, 30 (3) (1993) 91-102.
- 290. Ullah M F, Contribution of Indian hydrologists in Journal of Hydrology: a scientometric analysis, *Annals of Library Science and Documentation*, 41 (3) (1994) 95-101.
- 291. Upadhyay J L, Ghosh B N and Sengupta I N, Bibliometric analysis of breast cancer literature, *Indian Journal of Information Library and Society*, 2 (3-4) (1989) 269-284.
- 292. Vaidyanadhan R, 25 years of the Journal of the Geological Society of India, *Journal of the Geological Society of India*, 25 (1) (1984) 7-19.
- 293. Vaishnav A A and Deo V N, Literature of computerised library and information services: a bibliometric study, *Library Science with a slant to Documentation and Information Studies*, 30 (2) (1993) 45-53.
- 294. Verma A K and Verma M, Study of age distribution of journal citation in the *American Economic Review*, *ILA Bulletin*, 29 (1-2) (1993) 14-20.

- 295. Verma M, Citation analysis of some selected Indian journals in economics, *Annals of Library Science and Documentation*, 41 (1) (1994) 33-40.
- 296. Verma N, Analysis of contributions of ILA Bulletin, *ILA Bulletin*, 30 (3-4) (1994-95) 73-83.
- 297. Verma R K, Sharma Y K and Khatri H S D, Trends in nuclear research and its publications: an analysis based on five years' coverage in the Indian Science Abstracts, *Annals* of Library Science and Documentation, 29 (2) (1982) 64-69.
- 298. Verma S C and Murthy A T, Citation in thesis: a study, *IASLIC Bulletin*, 16 (4) (1971) 29-33.
- 299. Verma S C and Murthy A T, Use of literature by research scholars in political science and economics, *Library Herald*, 12 (1) (1970) 58-65.
- 300. Vetal S N, Bibliographical control of medical literature, *Library Herald*, 11 (4) (1970) 268-275.
- 301. Voveriene O and Trumpiene A, Bibliometrics, scientometrics and informetrics their relationship and interactions, *IASLIC Bulletin*, 39 (4) (1994) 175-179.