

BOOK REVIEW

Informetric Studies: on physics theses of Indian Institute of Science, by K. G. Sudhier; B. R. Publishing Corporation, Delhi, 2017, ISBN : 9789386223548, Hardback, 240 pages, Rs. 1250.00

This work is an extension of the author's PhD thesis in Library & Information Science entitled "Informetric studies on physics theses of Indian Institute of Science". Various facets of the informetrics including bibliometrics, scientometrics, webometrics and altmetrics covering various topics including citation analysis, authorship studies, aging, obsolescence, and fundamental law's like Bradford's law of scattering, Lotka's law and Zipf's law have been discussed drawing on data taken from the author's PhD work.

The book has been structured into ten chapters. In the first chapter, Evolution of Metric Studies, the author has described the evolution of various terms in metric studies i.e., bibliometrics, scientometrics, informetrics, webometrics and altmetrics.

In the second chapter, informetrics, the author has shown the year-wise milestone of the evolution of informetrics starting from 1896 to 2016. The author has discussed various informetric laws including Bradford's law of scattering, Lotka's law of scientific productivity, Zipf's law of word frequency distribution in details. Author has also mentioned about some quantitative analysis and reference management software which can be used by researchers, librarians, etc., to analyze data.

In third chapter, the author has discussed in detail about citation analysis, its limitations and even objections to the use of citations. Various applications of citation analysis, including co-citation analysis, bibliographic coupling, literature mapping, obsolescence, co-word analysis, etc., are given. Citation analysis techniques such as author self-citation, h-index, g-index, p-index, etc., and how to rank the journals based on impact factor (IF),

immediacy index, etc., have been dealt with. The various citation databases or indexes such as Web of Science, Scopus, CiteSeerX, Google Scholar, etc., have also been described. In addition to the theoretical framework, the book also gives several examples based on the data take from the author's thesis.

Chapter four deals with Authorship Studies in which the author has explained the collaborative research trends in physics literature cited in doctoral theses of Indian Institute of Science (IISc). Authorship pattern in physics journals, degree of author collaboration, authorship pattern of books, etc., are given.

In the chapter five, the author has shown the use or application of aging and obsolescence studies which helps the library professionals and knowledge scientists to maintain a need-based collection in libraries.

Ranking of journals is the subject of chapter six that again gives analytical tables on ranked/preferred journals by IISc physicists, ranked list of Indian journals, JCR based list of Indian journals, geographical distribution of journals, publishers of journals, etc.

In chapter seven, the importance of studies on core books and ranking of books have been discussed with examples. The author has again shown various analysed data tables like ranking of books, publishers of books, places of publication of books, etc. An attempt to test the application of Bradford's law of scattering on journal citations of doctoral theses of IISc has been made in chapter eight.

Validity of Lotka's law to author productivity distribution in the field of physics literature is tested in chapter nine. In chapter ten, new trends that are emerging such as altmetrics that can be used for various quantitative and qualitative analysis in concurrence with the traditional techniques have been discussed. According to the author, altmetrics is a

new approach that can determine the quality and popularity of research more quickly than ever before based on the social web for analyzing and informing scholarship.

This book is an essential read for the library professionals, PhD scholars, researchers, policy and decision makers to learn and understand various techniques to evaluate research performance of an

author, institute, a particular field and also propose the science policy of a country.

Yatish Panwar
Senior Technical Officer
National Science Library, CSIR-NISCAIR
New Delhi
Email: yatish@niscair.res.in