

Publication Outlets of Faculty Members in VNIT, Nagpur

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Abstract: - *This paper focuses on publication outlets of faculty members in VNIT Nagpur, Proposed research, Objective of the study, Hypothesis of the study, Scope and limitation of the study, Research methodology, Language wise productivity, Subject wise productivity, Designation wise productivity, Gender wise productivity and Year wise productivity, Major findings and Implications.*

Key Word: - **Publication outlets, Productivity of faculty members**

Introduction

The publication of the information gathered by the faculty members or Scientists is a prestige to the institution. Research and development, demonstration, up-scaling and commercialization in the field of modern engineering and technology have positions themselves in the driving seat both in the developed and developing countries. The field of engineering and technology is being promoted in the country keeping in view its enormous potential to improve various engineering applicable branches to create opportunities for employment generation and to add to the economic progress of the nation through environmentally sustainable industrial development. The rapid technological

development and the exponential growth of information have changed the traditional concept of engineering field. NITs create knowledge and ideas, conduct, teaching and research and provide for interpretation and extension of knowledge. This work is chiefly done by the generation of ideas through printed and non-printed media which is the representative of human thought. Knowledge pertaining to Visvesvaraya National Institute of Technology (VNIT) is divided into the various departments in the field of Engineering and Technology to organize the related knowledge and conduct the examination smoothly by the VNIT in which faculty members (Male /Female) are working as Assistant Professors, Associate Professors and Professors and

playing vital role in various activities in their interested field i.e. Academic, Research, publications and Social.

Proposed Research

Many information scientists have used different terms for bibliometric studies. The pioneering work was statistical analysis of the literature by Cole and Eagles in 1917, Second attempt was made by Hulme in 1923. He used the term “Statistical bibliography to refer the application of quantitative techniques to libraries. He defined statistical bibliography as “to shed light on the process of written communication and of the nature and course of development of a discipline by means of counting the various facts of written communication”(Kumar and Kumar 2005). Dr. S. R. Ranganathan in 1948 at the ASLIB conference held at Lamington Spa coined the term Librametry on the lines of Biometry, Econometry, Psychometry, etc. (Guha, 1993). He defined librametrics as the used of Mathematical and Statistical methods for analyzing library activities and library resources. (Ravichandrarao & Neelamaeghan, 1992). The British Standards Documentation Term (1976) defines bibliometrics as “Study of the use of documents and patterns of publications in which mathematical and statistical methods have been applied”.

Objective of the Study

Present study has been undertaken with a view

1. To find out language wise productivity of faculty members in VNIT;
2. To analyzed subject wise productivity;
3. To find out designation wise productivity;
4. To find out gender wise productivity; and
5. To find out the Year wise productivity

Hypothesis of the Study

The hypothesis formulated for the study as

1. More the publications are published in English Language;
2. More the experience more the productivity; and
3. Male faculty members produce more publications than female.

Scope and Limitations of the study

The study is confined to the publication outlets of faculty members in VNIT Nagpur. The publication outlets of faculty members who was working at present up to the year 2012. The study is a survey of productivity of publications brought out by faculty members. The productivity of publications included all the (National/International) conferences, seminar, workshops, research papers, Journal's Articles, Ph. D. guided by Supervisor, Books & Chapters in Books by Authors and other Research by faculty members.

Research Methodology

Survey of faculty members are used for this study and questionnaire technique is used to collect the data from the faculty members in VNIT Nagpur. The Questionnaire was contained with bibliographical description of faculty members and their publications only i.e. personal information, curriculum activities, International and National Journals, Conference, Seminars, workshops, Symposiums, Books, Chapters in Books, Ph. D. guided by Supervisor and others publications. Collected data has been analyzed by statistical techniques and presented data in tabular as well as in graphical form. For the purpose of analyzing the data collected, some statistical techniques have also been used. In addition, some of the tools, techniques used for analyzing includes bibliometrics tools and techniques to come to the conclusions.

Figure no. 1: Language Wise productivity of Faculty Members in VNIT

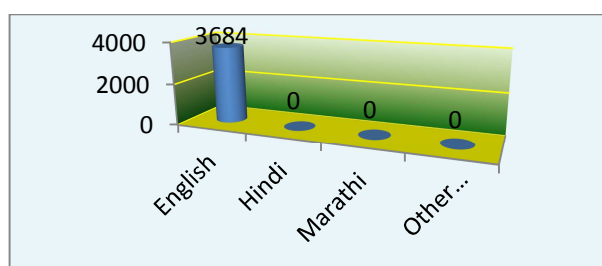


Figure no. 1 shows that language wise productivity of faculty members in VNIT up to the year 2012. 100% publications are published in alone English language by all faculty members, means the Engineering and Technology subjects are dominated by English language. This

indicates that “More the publications are published in English language”(hypothesis no.1) is valid.

Figure no. 2 : Subject Wise Productivity of Faculty Members

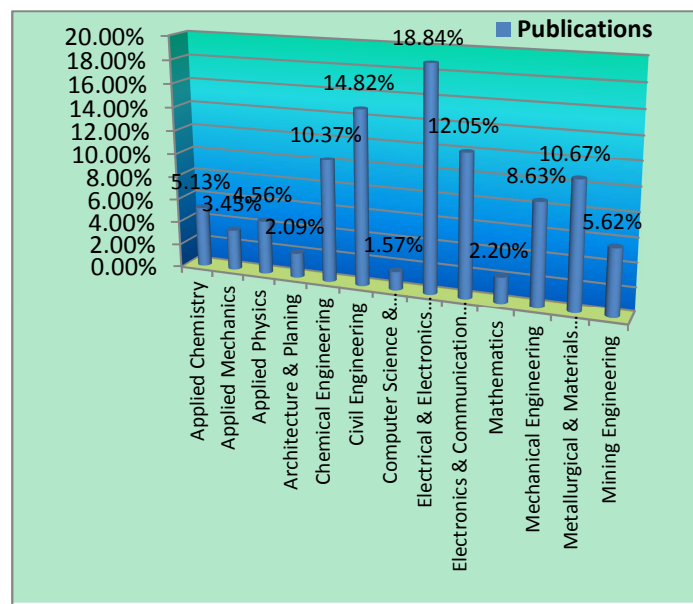


Figure no. 2 reveals that amongst the total number of 3684 publications, the department/subject of Electrical & Electronics Engineering ranked first. The department of Electrical & Electronics Engineering contributed to 18.84% publications, followed by department of Civil Engineering contributed to 14.82% publications, department of Electronics & communication Engineering contributed to 12.05% publications, department of metallurgical & materials Engineering contributed to 10.67% publications and department of chemical Engineering contributed to 10.37% publications and other department have least productivity.

Figure no. 3: Designation Wise Productivity of Faculty Members

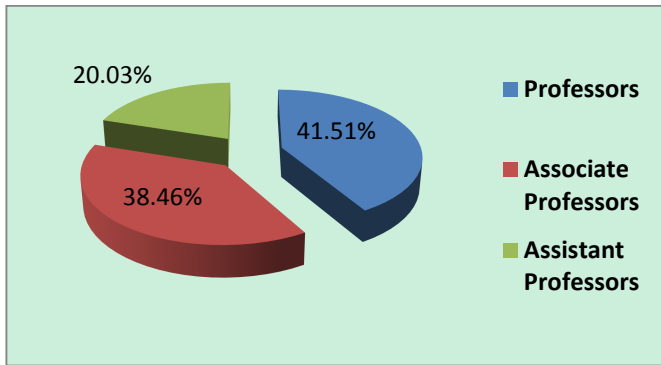


Figure no. 3 reveals that designation wise productivity of faculty members who published total 3684 publications. Professors and Associate Professors, combinely have contributed to 79.97% publications. It can be further noted that on an average 41.51% publications were published by professors, 38.46% by Associate professors and 20.03% by Assistant professors, which means senior people published more number of publications. This indicates that **“More the experience more the productivity”** (hypothesis no. 2) is valid.

Table no. 1: Gender wise Productivity of faculty Members

Gender	No. of Faculty Members	Total no. of Publications	Productivity
Male	100	3428	93.05%
Female	21	256	6.95%
Total	121	3684	100%

Table no. 1 shows that gender wise productivity of faculty members in VNIT. Male faculty members have published 3428 publications giving 34.28 publications per male faculty members and

female faculty members have published 256 publications giving 12.19 publications per female faculty members. It can also be observed that male faculty member have published 2.8 times more publications than female faculty members. This indicates that **“Male faculty members produce more publications than female”** (hypothesis no.3) is valid.

Figure no. 4: Years Wise Productivity of faculty Members

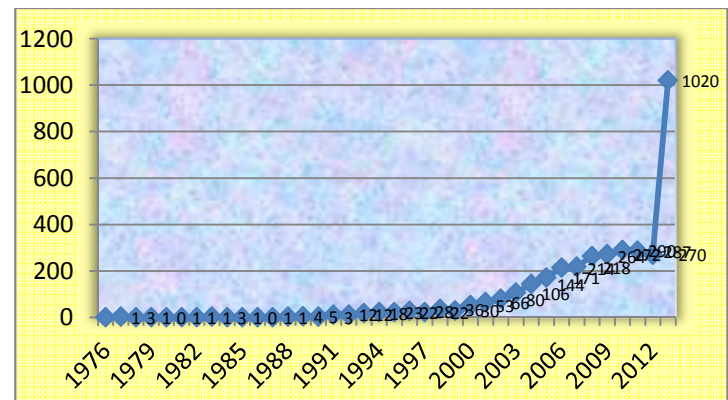


Figure no. 4 reveals that year wise productivity of faculty members. Most productive year was 2010, as total productivity in this year was 290 publications, followed by 287 publications in 2011, 272 publications in 2009 and 270 publications in 2012. As regards the year and subject wise productivity, the department of Chemical Engineering has produced 56 publications in the year 2009 which is highest number in year wise publication during 1976 to 2012 time period. The table also reveals that, the department Civil Engineering has produced 53 publications in the year 2008 which are second highest in the year wise publications. The department Chemical Engineering has produced

49 publications in the year 2011 and 46 publications in the year 2010, which are third and fourth highest in the year wise publications. Year wise productivity is increased from 1999 to 2010, and then it has been decreased in 2011 and 2012. Year wise productivity is increased-decreased manner means fluctuation productivity during the period of 1976 to 1998, then year wise productivity is increased from 1999 to 2010, means productivity is continuously increased up to 12 years and then productivity is decreased from 2011 to 2012.

Major Findings

1. Total 3684 publications are contributed by 121 faculty members in VNIT.
2. 100% publications are published in alone English language by all faculty members, means the Engineering and Technology subjects are dominated by English language. This indicates that **“More the publications are published in English language”**(hypothesis no.1) is valid. (Figure no. 1)
3. The study regarding the subject wise productive, the department/subject of Electrical & Electricals Engineering ranked first. The department of Electrical & Electronics Engineering contributed to 18.84% publications, followed by department of Civil Engineering contributed to 14.82% publications, department of Electronics & communication Engineering contributed to 12.05% publications, department of

metallurgical & materials Engineering contributed to 10.67% publications and department of chemical Engineering contributed to 10.37% publications and other department have least productivity. (Figure no. 2)

4. The study regarding the designation wise productive, Professors and Associate Professors, combinely have contributed to 79.97% publications. It can be further noted that on an average 41.51% publications were published by professors, 38.46% by Associate professors and 20.03% by Assistant professors, which means senior people published more number of publications. This indicates that **“More the experience more the productivity”** (hypothesis no. 2) is valid. (Figure no. 3)
5. The study regarding the gender wise productive, male faculty members have published 3428 publications giving 34.28 publications per male faculty members and female faculty members have published 256 publications giving 12.19 publications per female faculty members. It can also be observed that male faculty member have published 2.8 times more publications than female faculty members. This indicates that **“Male faculty members produce more publications than female”** (hypothesis no.3) is valid. (Table no. 1)
6. The study regarding the year wise productive, most productive year was 2010 as total

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Implications

Based on the results/findings of the study the following are the implications

1. VNIT should make various journals as peer review journal with wide circulation at national as well as international level.

2. Understanding research activity is one of the motivating factor, the faculty members undertake research activity to the maximum extent possible and should write articles on the area of research field.
3. Research is an continuously process, the faculty members should publish their research work on regular basis.
4. The faculty members in 'department of computer science and engineering', 'department of architecture and planning' and 'department of mathematics' need to increase their productivity.
5. The faculty members in designation of assistant professor need to increase their productivity.
6. The female faculty members need to increase their productivity.
7. The faculty members should write in peer review journal in the subject concerned with the highest impact factor, which ultimately will increase impact factor of the faculty members.

References

1. Baburajan A, IEEE Transaction on Computers : A Bibliometric Analysis, *IASLIC Bulletin*, 33 (2/3) (1988) 53-59.
2. Bibliometrics, Available at <http://en.wikipedia.org/wiki/Bibliometrics> (Accessed on 26 September 2015).
3. Devarajan G, *Bibliometric Studies*, (ESS ESS Publications; New Delhi), 1997.

4. Dutta Bidyarthi and Sen B K, Indian Journal of Pure and Applied Mathematics : An Analysis of Citation Pattern, *IASLIC Bulletin*, 46 (4) (2001) 221-226.
5. Kalyane V L and Sen B K, Research productivity of Tibor-Braun: An Analytical chemist–Cum Scientometrician, *Annals of Library and Information Studies*, 502) (2003) 47-61.
6. Kannappanavar B U, Swamy Chidananda, Vijay Kumar M, Publishing trends of Indian chemical scientists: a bibliometric Study, *Annals at Library and Information Studies*, 51(1) (2004) 39-41.
7. Kumar P S G, *Research Methods and Statistical Techniques*, 1stedn (B R Publishing Corporation; Delhi), 2004, p. 465-541.
8. Panda B D, *Research methodology for library science (With statistical methods and bibliometrics)*, (Anmol Publication; New Delhi), 1997.
9. Parvathamma N, *Bibliometrics its origin and applications*. In C. R. Karisiddappa, S. L. Sangam and B. S. Maheswarrappa (Ed.), *Current studies in library and information science Vol.-2*, (Nanak Publication; Delhi), 1993, p.161-183.
10. Sen B K, Indian contribution in bibliometrics 1958-1984: a review, *Annals of Library Science and Documentation*, 33 (3) (1986) 85-103.
11. Sengupta I N and Lalita Kumari, Bibliometric evaluation of biomedical research in India part I, *Library Herald*, 26 (1-4) (1987-88) 91-103.
12. Sharma Rakesh Mani, Research publication trend among scientist of central potato research institute: a bibliometric study, *Annals of Library and Information Studies*, 56 (2009) 29-34.
13. Vijay K R, Bibliometric Study of Research publication Trends Among Indian Scientist and Technologists, *Annals of Library and Information Studies*, 32 (3) (2005) 77-81.
14. Visvesvaraya National Institute of Technology – Wiki, Available at http://en.wikipedia.org/wiki/Visvesvaraya_National_Institute_ofTechnology (Accessed on 10 July 2016)