

Examination Expertise Sharing in Engineering & Technology: Using INFLIBNET - Vidwan database

Chaman Sab M

Research Scholar

Dept. of Studies in Library and Information Science
Kuvempu University, Shankarghatta, Shimoga
Email: chamansabm@gmail.com

Dr. Dharani Kumar P

Asst. Professor

Dept. of Studies in Library and Information Science
Kuvempu University, Shankarghatta, Shimoga
Email dr.dharanikumarp@gmail.com

Dr. B. S. Biradar

Professor

Dept. of Studies in Library and Information Science
Kuvempu University, Shankarghatta, Shimoga
Email: bsbiradar53@rediffmail.com

Abstract - In recent years, scientists / researchers and other faculty members academics in growing numbers are starting to move their everyday work into the web, exploring new ways to spread, discuss, share and retrieval information outside of the traditional channels of scholarly publishing. As scholarly communication moves increasingly online, as it makes the transition from print to electronic format. The popularity of the Internet has helped electronic publications evolve further in to web publishing. VIDWAN is the premier database of profiles of scientists / researchers and other faculty members working at leading academic institutions and other R & D organisation involved in teaching and research in India. It provides important information about expert's background, contact address, Vidwan database has 24858 experts, 2922 plus organisations category and 330717 plus citations, highest expert's publications from Professors 2483, highest subject wise publications from Electrical and Electronic Engineering (724) and 1008 publications from Tamil Nadu state, experts by Engineering and Technology.

Keywords: Engineering & Technology, Experts database, INFLIBNET- Vidwan,

1. INTRODUCTION

VIDWAN is the premier database of profiles of scientists / researchers and other faculty members working at leading academic institutions and other R & D organisation involved in teaching and research in India. It provides important information about expert's background, contact address, experience, scholarly publications, skills and accomplishments, researcher identity, etc. The database developed and maintained by Information and Library Network Centre (INFLIBNET) with financial support from the National Mission on Education through ICT (NME-ICT). The database would be instrumental in selection of panels of experts for various committees, taskforce, established by the Ministries / Govt. establishments for monitoring and evaluation purposes. Vidwan provides quickly and conveniently information about expert to peers, prospective collaborators, funding agencies policy makers and research

scholar in the country, identify peer reviewers for articles and research proposal, discover prospective collaborators for on – going research projects, establish communication directly with the experts who possess the expertise needed by users and it create information exchanges and networking opportunities among scientists. The purpose of this study is to examine the research productivity of Engineering & Technology as evidenced by the number of research papers published during the period under investigation. In addition, this study also intends to examine the growth pattern, subject wise, organisational wise, state wise and R & D institution wise productivity, etc. from the publications Vidwan database.

2. OBJECTIVES OF THE STUDY

The focus of the study is on the following aspects:

- To examine the various subject experts listed in INFLIBNET - VIDWAN
- To identify the most prolific research institutions/organisations in the field of Engineering & Technology
- To study the distribution in different sub-disciplines of Engineering & Technology
- To identify the most prolific Indian authors in Engineering & Technology.
- To examine most experts produced form Indian states

3. MATERIALS AND METHODS

The study retrieved the data from INFLIBNET – VIDWAN (<http://vidwan.inflibnet.ac.in>) for this study during April 2018. The keyword subject category and Engineering & Technology in time field was used for searching the main experts data used in the study and this become the main search string. It was found that 6529 experts have been listed in various subject domains. Out of which 63767 experts were found in Engineering and Technology in INFLIBNET – VIDWAN database. Further data were analysed to find out the subject wise experts in various domains, Experts of Engineering and Technology in various institutions/organisations of Indian state, Experts by Engineering and Technology subdivisions, top 25 Institutions/Oragnisations of Indian states in VIDWAN database. The collected data were analysed using calculations with percentage and rankings.

4. DATA ANALYSIS

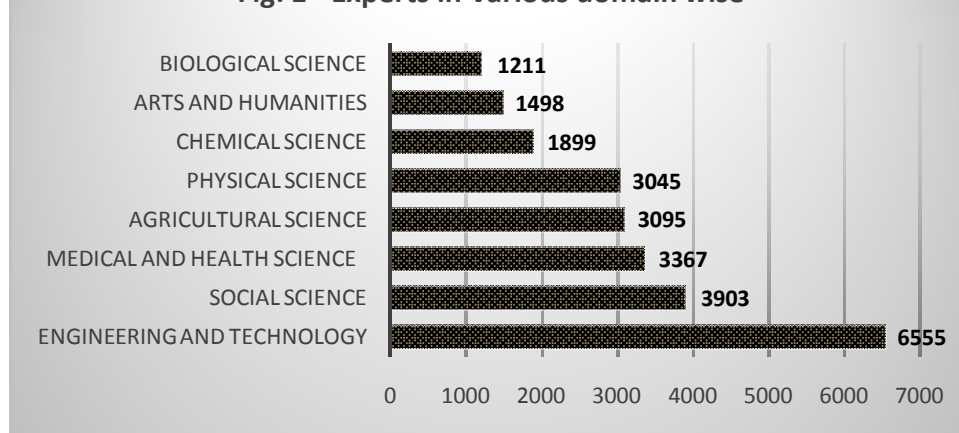
4.1. Subject wise Experts in various domains

Table 1 and Figure 1 analysed the subject wise experts in various domains, which are listed Vidwan database. The subject wise experts in various domains in Vidwan database. It is clearly shows that the Engineering & Technology has 6555 (26.6%) experts and placed first rank, the other ranked experts followed by Social Science 3903 (15.7%) placed second rank. The next place has got in 3367 experts in Medical and Health Science (13.7%) and followed by third position has received, next position is Agricultural Science 3095 (12.59%) has conformed. Physical science 3045 (12.4%) placed fourth, Chemical science

Table – 1: Experts in various domains wise

S.N	Subjects	No of Experts	Percentage	Rank
1	Engineering and Technology	6555	26.6	1
2	Social Science	3903	15.7	2
3	Medical and Health Science	3367	13.7	3
4	Agricultural Science	3095	12.59	4
5	Physical Science	3045	12.4	5
6	Chemical Science	1899	7.72	6
7	Arts and Humanities	1498	6.091	7
8	Biological Science	1211	5.2	8
	Total	24573	100 %	

Fig: 1 - Experts in Various domain wise



4.2.Experts by Engineering and Technology in various Organisations.

The study has also analysed top ten experts of Engineering and Technology in various Organisations. The deemed University includes Deemed University, Private, Government and Aided University since they less number of experts and it has merged. The Table:2 shows that the Institute of National Importance 2975 has large number of experts in the Vidwan database and placed first rank. It is further found that Research & Development has 903 experts and occupied second rank and followed by State Universes 891 placed third rank. It is also indicated that Deemed Universities has 334 experts and placed fourth rank and Technical Institutions has 308 experts and placed fifth rank, other institutions has 251 experts and placed sixth respectively.

Table – 2: Experts in various organisation wise

Sl. No	Description	No of Experts	Rank
1	Institute of National Importance	2973	1
2	Research & Development	903	2
3	State University	891	3
4	Deemed University	334	4
5	Technical Institutions	308	5
6	Other Institutions	251	6
7	Deemed Universities	207	7
8	Deemed Universities Pvt.	114	8
9	State PVT. Universities	104	9
10	Deemed Universities Govt.	13	10

4.3. Experts by Engineering and Technology subject wise.

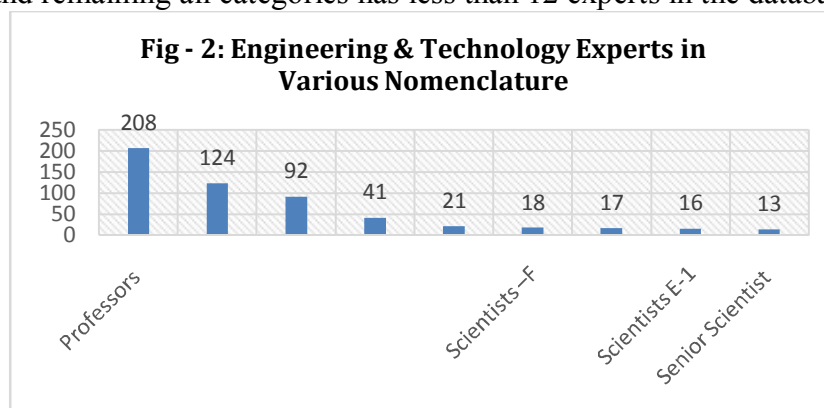
The table:3 shows that the experts by Engineering and Technology subjects of Karnataka as reflected by Vidwan database. It clearly shows that Aerospace Engineering has 65 experts and placed first place, which is followed by Mechanical Engineering 63 experts and placed second place. Electrical and Electronic Engineering has 60 experts and placed third rank, Civil Engineering has 40 experts and placed fourth rank, Chemical Engineering has 36 experts and placed fifth rank, Computer Science Artificial Intelligence has 33 experts and placed sixth rank, Materials Science Multidisciplinary has 33 experts and placed seventh rank, Computer Science & Software Engineering and Nanoscience and Nanotechnology has 13 experts and placed eighth and ninth and lastly Computer science Information system has 09 experts and placed tenth, where the first five subjects have more experts in Vidwan Database.

Table – 3: Experts in various organisation wise

Sl.No	Subject wise	No of Experts	Rank
1	Aerospace Engineering	65	1
2	Mechanical Engineering	63	2
3	Electrical and Electronic Engineering	60	3
4	Civil Engineering	40	4
5	Chemical Engineering	36	5
6	Computer Science Artificial Intelligence	33	6
7	Materials Science Multidisciplinary	33	7
8	Computer Science Software Engineering	13	8
9	Nanoscience and Nanotechnology	13	9
10	Computer Science Information Systems	09	10

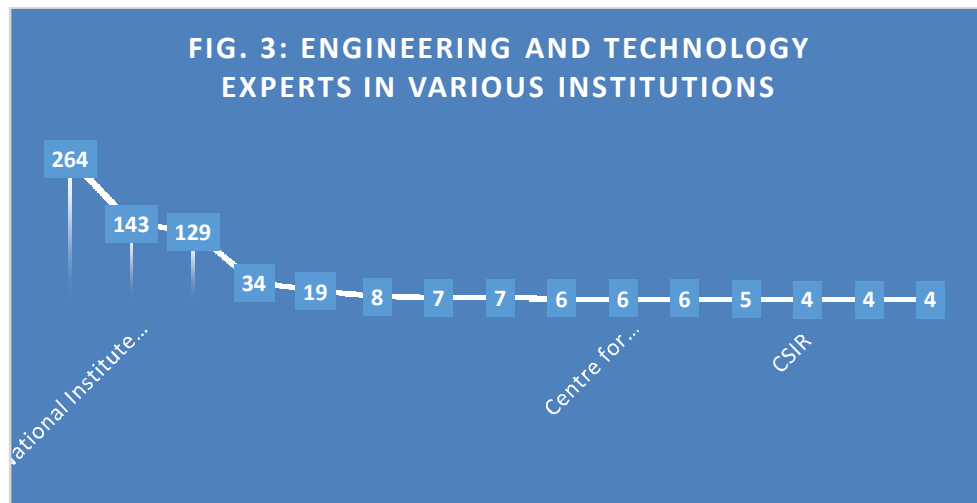
4.4. Engineering and Technology experts in various nomenclature

The study analysed the Engineering and Technology experts in various nomenclature of Karnataka in Vidwan database and same is given in figure- 2, the nomenclature of Professor includes Professor and Head, Head of the Department, Fig. 2. shows that the professor category has a good number of experts 208 and placed first rank. It is followed by Assistant professor Category 124, Associate professor Category 92 experts and placed third rank, Principal Scientist category 41 experts and placed fourth rank, senior principal Scientists category 21 experts and placed fifth rank, Scientist F category has 18 and placed sixth, Principal Research Scientist category has 17 experts and placed seventh, Scientist E-1 category has 16 experts and placed eighth, Senior scientists category has 13 experts and placed ninth and remaining all categories have less than 12 experts in the database.



4.5.Engineering and Technology experts in various Institutions

Fig. 3 shows that the Top fifteen educational institutions of Karnataka in the Vidwan database were analysed and the same is given in the figure.



It is observed from figure -3 that Indian Institute of Science, Bangalore has contributed 264 experts and placed first rank in Karnataka, followed by National Institute of Technology has 143 experts and placed second rank, National Aerospace Laboratories has 129 experts and placed third rank in Karnataka state, ISRO has 34 experts and placed fourth rank, Manipal Academy of Higher Education has 19 experts and placed fifth rank. Further, it is found that the remaining ten educational institutions were contributed less than 8 expert. It is also inferred that there is no vast difference in contributions of experts among the Karnataka educational institutions.

5. Findings

The following are the important findings of this study.

- It is found that 6555 experts by Indian Engineering and Technology subject category
- It is found that 2973 experts by Institution National Importance
- It is found that 61 experts by Aerospace Engineering subject in Karnataka
- It is found that 208 experts by Professors category of Engineering and Technology
- It is found that 264 experts produced by the Indian Institute of Science, Bangalore.
-

6 Conclusion

Research Information system plays that important role in exhibiting the institutional potentials in term of faulty Profiles, publications, project details , Grant and awards etc, In very special Engineering and Technology should come forward to contribute the Aerospace Engineering to identify the experts in the emerging areas of Engineering and technology.

References

1. Jayapragash, G., Muthraj, A., & Rajakumar, T. (2017). An Analysis of Profile Management System with Special Reference to Vidwan Database. 11th International CALIBER (pp. 106 - 112). Channai : INFLIBNET .

2. Panda, S., & Kannan, P. (2016). Vidwan -A subject expert database and National Researcher's Networks in India: An Overview. International Journal of Information Dissemination and Technology, 6(1).
3. Kannan, P. (2016). Semantic-based Researcher Profile Management System: Case Study on VIVO. INFLIBNET. 22(4).
4. Chaman Sab, M. (2016). Bibliometric Study of Ph.D. Theses in Library and Information Science as through INFLIBNET - Shodhganga. International journal of scientific research, 5(12), 53-55.

