



Hyderabad Karnataka Librarians'
Association

Research Contribution Of University Of Mysore: A Study Based On Web Of Science Database (1980-2014)

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ABSTRACT

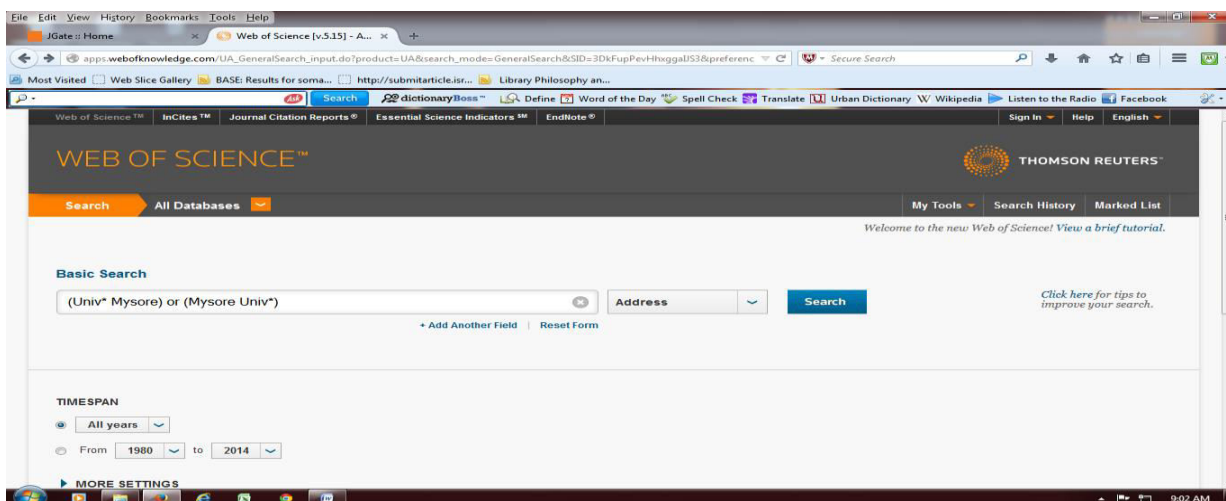
In the present changing information landscape, Librarian activities are changing due to online or digital technology development. The present paper explained the research contribution of University of Mysore, based on the science database Web of science. University of Mysore researcher and Scientist contribute around 3807 documents published in International and National Journals under institutional address search term. In the year 2011 (309) documents are published. Chemistry is dominated field in total contribution. Prof. Yathirajan H S contributes 457 documents in the field of chemistry. Journal Ranking, Subject wise, Research area, and others will explain.

Key words: Scientometrics; Publication Productivity; Web of Science; Journal Ranking; Mysore University

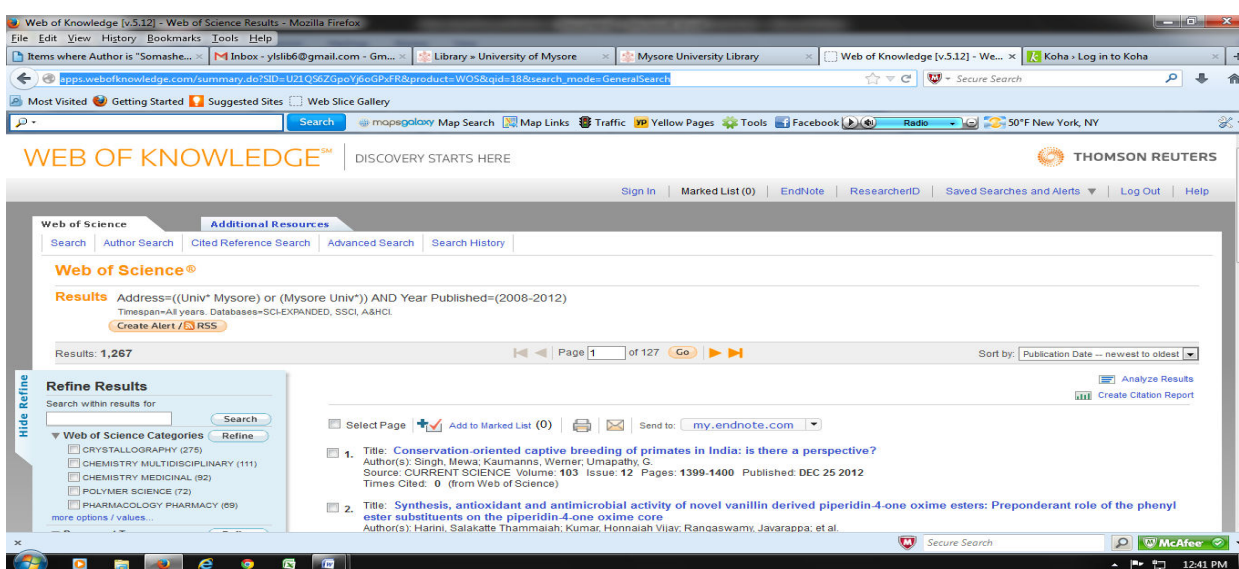
1. INTRODUCTION

“Face is the index of Mind” it means the outputs of scholarly, qualitative research publications, are most identification symbol of any Institutions. International identified, patent oriented research works are ranked the Institutions and Universities. Research publications are intellectual assets of any Institutions or University. The research works are published in different forms of Books, Conference proceedings, journal Articles and other forms. The publication may be published in national, International level or other forms. The publication are published any forms but it not indexed in any source. The impact of technological development the research publications are published anywhere in any time that covered and indexed in world famous databases like Web of Science, Scopus, Google Scholars and other national and international science and social science databases. These databases are secondary source of any investigator or researcher or scientists. This database is very helpful to avoiding duplicate works and copying the research works. The present study based on research contribution of Mysore University based on world famous science database Web of science database.

Web of science one of world famous science database it is very essential for scientific research community. It is primary resource channels of any scientific investigators. Web of Science provides information to researchers, administrators, faculty, and students with quick, powerful access to the world's leading citation databases. Authoritative, multidisciplinary content covers over 12,000 of the highest impact journals worldwide, including Open Access journals and over 150,000 conference proceedings. The researcher will find current and retrospective information in the sciences, social sciences, arts, and humanities. But science is dominated area of research area. Overcome information overload and focus on essential data across more than 250 disciplines.



Screen shot of web of science front screen



Screen shot of web of science search result screen

Web of Science, provides access to the world's leading citation databases. It searches over 10,000 journals from over 45 different languages across the sciences, social sciences, and arts and humanities with back files to 1900. The citations (or footnotes) allow one to navigate forward, backward, and through journal articles and both journal and book-based proceedings. Its Analyze Tool also helps in finding hidden trends and patterns, gain insight into emerging fields of research, identify leading researchers, institutions, and journals, and trace the history of a particular field of study. The access to Web of Science is provided to 100 universities of the consortium through the N-LIST Programmed funded by MHRD.

The *Web of Science Core Collection* consists of nine indexes containing information gathered from thousands of scholarly journals, books, book series, reports, conferences, and more. The first three citation indexes contain the references cited by the authors of the articles. You can use these references to do cite reference searching. This type of search allows you to find articles that cite a previously published work. It fully covers over 12,000 highly acclaimed impact journal worldwide.

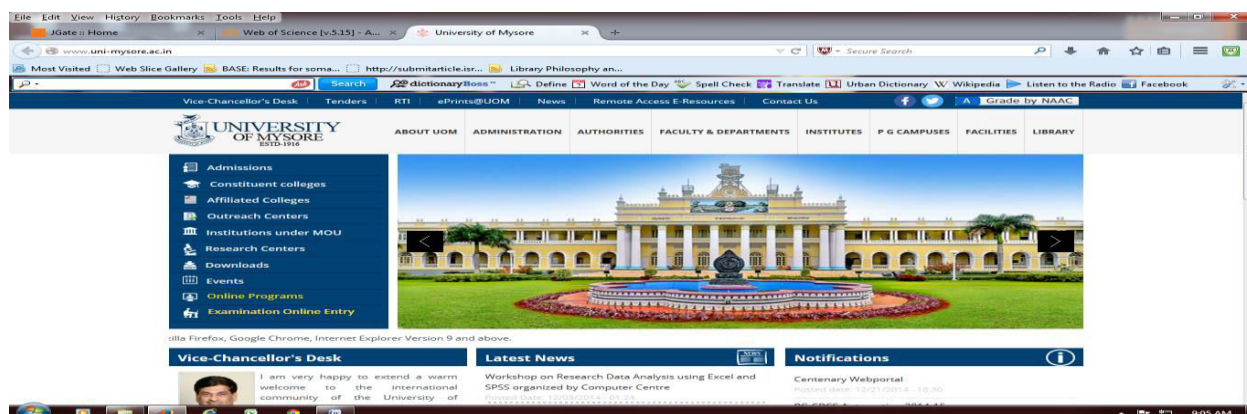
- Science Citation Index Expanded (SCI-Expanded) -- 1900-present
- Social Sciences Citation Index (SSCI) -- 1900-present
- Arts & Humanities Citation Index (A&HCI) -- 1975-present

Book citations are seamlessly integrated with other citation indexes in *Web of Science Core Collection* to provide a complete citation count of an author's published work. The two chemistry indexes allow you to create structure drawings to find chemical compounds and reactions.

The search in web of science data base the key word "India" result is 5, 20,893 documents, other search term is "Karnataka" the result shows 56200 documents are published.

2. MYSORE UNIVERSITY

The University of Mysore was established on 27th July, 1916 during the benevolent reign of the Maharaja of Mysore, His Highness Nalvadi Krishnaraja Wodeyar (1884-1940). The genesis of the University of Mysore stems from a five year long in-depth reading and analysis on higher education across the globe. The aims are 'promoting teaching and research in conventional and traditional domains of Arts, Humanities, Pure and Applied Sciences and Professional disciplines'. Today the University has 42 Postgraduate Departments at the Main Campus, Manasagangotri, 2 Postgraduate Centers in Mandya and Hassan with 5 Postgraduate Departments each and one Satellite Centre at Chamarajanagar with 3 Postgraduate Departments. It is providing higher education to about 85 lakhs students, of which over 10,000 are Postgraduates. As many as 1400 students are from 50 countries pursuing higher studies in this University. After assessing its overall performance, the University of Mysore was first accredited by National Assessment and Accreditation Council (NAAC) with Five Star status in the year 2000 and has been reaccredited in 2006 at **A+ level** again NACC reaccredited **A grade** in 2013. Current Science has ranked the University of Mysore as one of the top 20 Universities in Scientific and Research activities.



Screen shot of the Mysore University Web site

The University Library has a collection of 6.2 lakhs including books, E-books, reference works and journal back volumes. The E-resource Portal developed by the library staff in this regard user are ready to access to 6500 UGC-INFONET E-journals, 7000 Open Access Journals, 17000 licensed e-books and e-print portal, CIRC portal, OPAC of near to Five lakhs bibliographic records in cloud environment.

3. OBJECTIVE OF THE STUDY

The objectives of the study are;

- To identify the research output of Mysore University
- To evaluate the year wise research output
- To analyze the Ranking of Journals publications
- To analyze type of materials

- e. To determine the subject fields and
- f. To analyze the top ten authors contributions

4. METHODOLOGY

The investigator identified the document source from Web of Science data base. They collected the data and entered in Excel sheet. Researcher organize the data according to predetermine fields. Tat are Year wise contribution, author wise, Document wise, Research area wise, Research field wise, and Journal publication wise analyzed and incorporate the result and findings.

5. DATA ANALYSIS

Analysis of data is the ultimate step of research process. It is inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information and suggesting conclusions. It is the link between raw data and conclusions.

5.1 Research contribution of University of Mysore year wise (1989-2014)

The researcher accessed the web of science data base and collects the data year wise publications and analyzed. The Table -1 states the details of contributions of University of Mysore publication covered in Web of science data base (1989 – 2014).

Table -1 Research contribution of University of Mysore year wise (1989-2014)

Sl. No.	Year	Documents	CF	Percentage	CF
1	2014	205	205	5.39	11.14
2	2013	219	424	5.75	11.14
3	2012	205	629	5.39	16.53
4	2011	309	938	8.12	24.65
5	2010	290	1228	7.62	32.27
6	2009	264	1492	6.94	39.21
7	2008	203	1695	5.33	44.54
8	2007	304	1999	7.99	52.53
9	2006	262	2261	6.88	59.41
10	2005	198	2459	5.20	64.61
11	2004	157	2616	4.13	68.74
12	2003	111	2727	2.92	71.66
13	2002	150	2877	3.94	75.60
14	2001	111	2988	2.92	78.52
15	2000	78	3066	2.05	80.57
16	1999	109	3175	2.86	83.43
17	1998	70	3245	1.84	85.27
18	1997	97	3342	2.55	87.82
19	1996	46	3388	1.21	89.03
20	1995	56	3444	1.47	90.50
21	1994	55	3499	1.45	91.95
22	1993	69	3568	1.81	93.76
23	1992	78	3646	2.05	95.81
24	1991	59	3705	1.55	97.36
25	1990	55	3760	1.45	98.80
26	1989	46	3806	1.20	100.00
	Total			100.00	

Table- 1 reveals that around 3806 documents are contributed and published in International and national journal and other forms, In the year 2011 (309) documents are published followed 2007 (304) it is indicate from the 1989 to 2014 major research publication are published in 2001 to 2014(75%). But this data not yet digitized all publications of our researcher. Any how the year wise contribution day to day it is growth will decline. That's why UGC and University authority to encourage the research activity for research publications.

5.2 Document wise contributions

The researcher are contributed or published in different forms it may published in Journal articles, Meetings, Reviews, Editorials, Notes, Abstracts, and other forms but main dominated is articles.

Table -2 Forms wise document contributions

SL. No	Type of Document	Documents	CF	Percentage	CF
1	Articles	3598	3598	94.51	94.51
2	Meetings	95	3693	2.49	97.00
3	Reviews	77	3770	2.02	99.02
4	Editorial	24	3794	0.64	99.66
	Others	13	3807	0.34	100.00
	Total	3807		100	

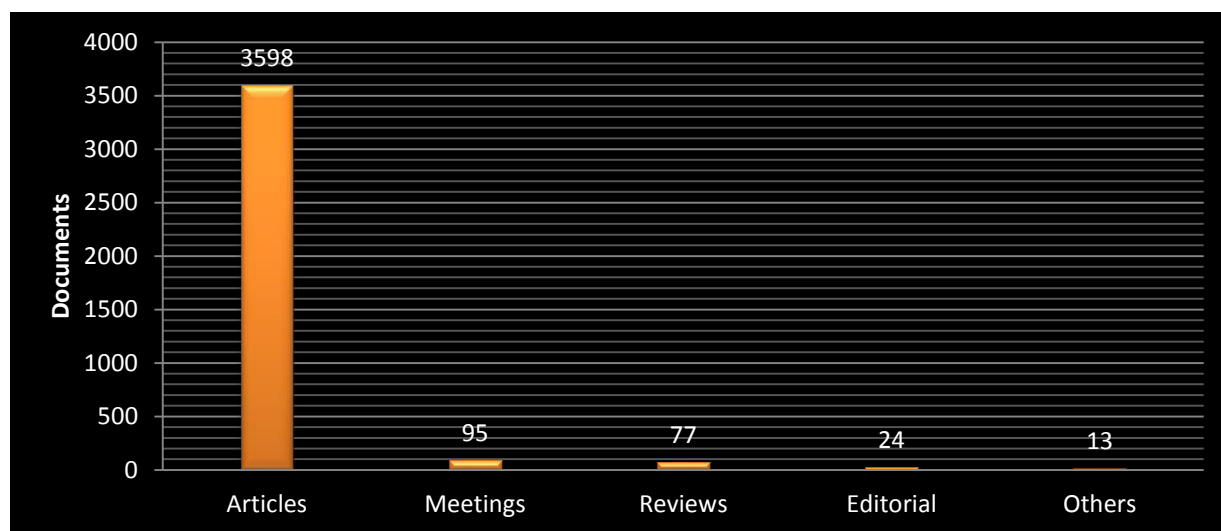


Figure 1 Forms wise document distribution

Table 2 and figure- 1 state that Journal article (3598) is predominated contributions followed Meetings (95), Reviews (77), and editorials is (24). It shows University of Mysore researcher very much interest in journal article publications.

5.3 Document distribution of Research domains

The Research domains distributed science & technology, Social Science, and Arts & Humanities but major part of research domains is Science and Technology, The table -3 and Figure -2 are stated the details.

Table- 3 Document distribution of Research domains

SL. No	Subject	Documents	CF
1	Science & Technology	3754	98.76
2	Social Science	38	0.99
3	Arts & Humanities	9	0.23
	Total	3801	100

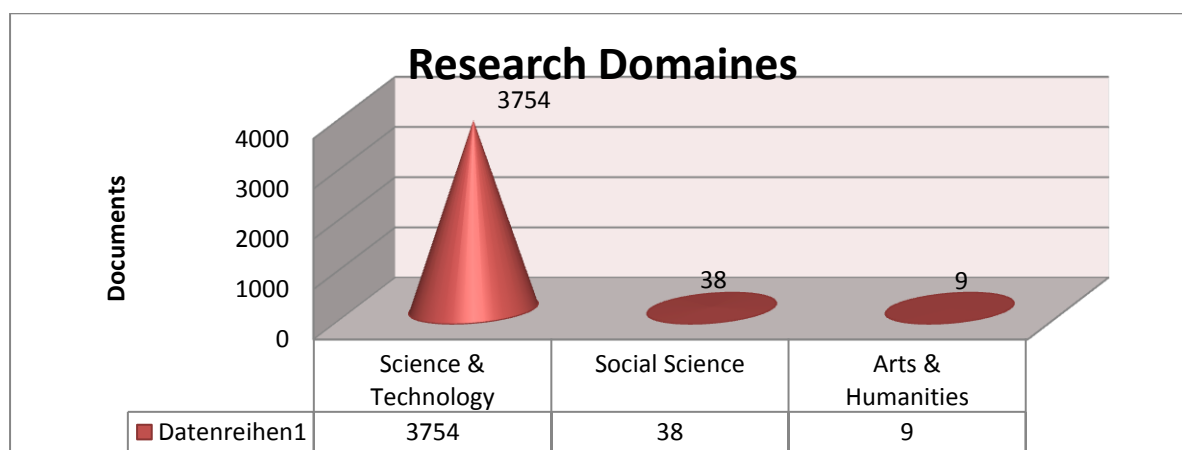


Figure -2 Document distributions of Research domains

Table-3 and Figure 2 are reveals that Science & technology (3754) followed Social Science (38) and Arts & Humanities (9). It shows in web of science data base University of Mysore researcher contribute highest in Science and Technology in the field of social science researcher must to dedicate and published the articles in International recognized journals. But our social researcher contributed and published in International and national journals, those journals are not covered in Web of science data base. This is the main drawback of social research publication very less in web of science data base.

5.4 Distribution of research area wise contributions

University of Mysore publications are distributed in all the fields but web of science covered science publication. The Chemistry and physics is major contributor of research publications. The details are explained in table -4 and figure 3

Table- 4 Distribution of research area wise contributions

SL. No	Research areas	Documents	CF	Percentage	CF
1	Chemistry	954	954	25.05	25.05
2	Crystallography	707	1661	18.57	43.62
3	Pharmacology & Pharmacy	312	1973	8.19	51.81
4	Material Science	215	2188	5.64	57.45
5	Physics	214	2402	5.62	63.07
	Others	1405	3807	36.90	100.00

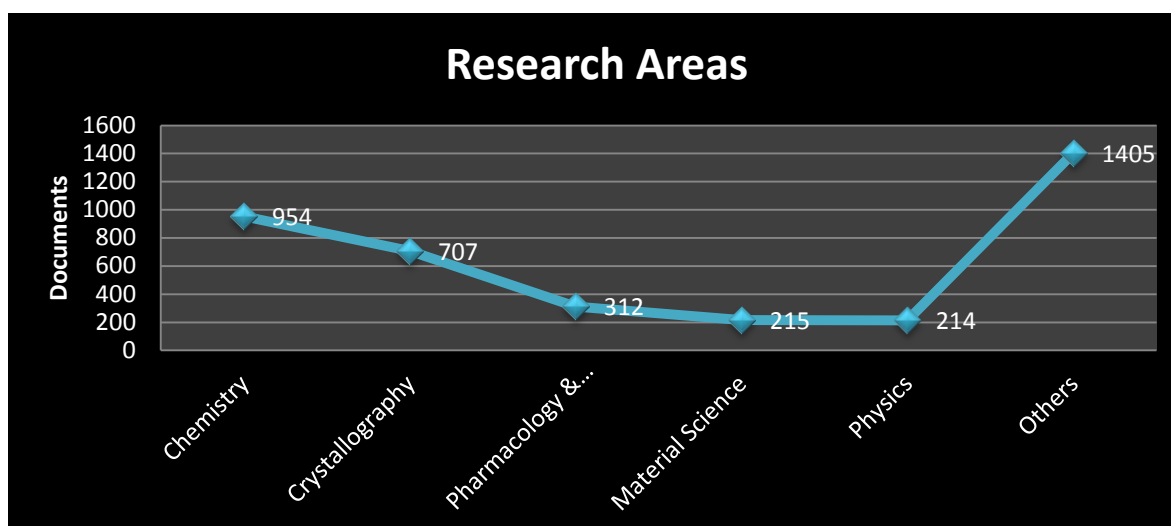


Figure -3 Distributions of research area wise contributions

Table 4 and Figure 3 explained the research area Chemistry (954) followed Crystallography (707), Pharmacy (312), Material Science (215) and Physics (214). This shows the Mysore University major contribution is Chemistry and Crystallography very predominated. In this result the researcher of other subject researcher aware to contribute the research publications.

5.5 Journal article Publications (Ranking) distributions

The Researcher of University of Mysore are published the documents in different national and International journals. The web of science covered all most all International journals within that our researcher published mainly USA, UK, France, Bulgaria, and other International and Indian Journals.

Table -5 Journal wise publications

Sl .No	Journal title	Article published	CF	Percentage	CF %	Country
1	Acta crystallographica section e structure reports online	466	466	12.24	12.24	USA
2	Molecular crystals and liquid crystals	68	534	1.79	14.03	UK
3	Current science	64	598	1.68	15.71	India
4	Journal of applied polymer science	56	654	1.47	17.18	USA
5	Indian journal of chemistry section b organic chemistry including medicinal chemistry	54	708	1.42	18.6	India
6	Journal of the geological society of India	44	752	1.16	19.76	India
7	Asian journal of chemistry	43	795	1.13	20.89	India
8	Journal of chemical crystallography	39	834	1.02	21.91	USA
9	Synthetic communications	35	869	0.92	22.83	USA
10	Journal of food science and technology Mysore	34	903	0.89	23.72	India
11	Spectrochimica acta part a	31	934	0.81	24.53	France

	molecular and biomolecular spectroscopy					
12	Oxidation communications	30	964	0.79	25.32	Bulgaria
13	Molecular crystals and liquid crystals science and technology section a molecular crystals and liquid crystals	29	993	0.76	26.08	UK
14	Indian journal of chemical technology	29	1022	0.76	26.84	India
15	Toxicon	28	1050	0.74	27.58	UK
16	European journal of medicinal chemistry	28	1078	0.74	28.32	France
17	Tetrahedron letters	25	1103	0.66	28.98	UK
18	Journal of the Indian chemical society	25	1128	0.66	29.64	India
19	E journal of chemistry	25	1153	0.66	30.30	India
20	Bulgarian chemical communications	25	1178	0.66	30.94	Bulgaria
	Other Journals	2629	3807	69.06	100.00	
	Total	3807		100.00		

The table -5 reveals that, Acta crystallographica Section -E structure reports online (466) 12.24% is the major published journal followed Molecular crystals and liquid crystals (68) Current science (64). The first twenty ranked journals seven titles are Indian publications others are USA, UK, France, and Bulgaria.

5.6 Major research contributor of University of Mysore

University of Mysore researcher is contributing several publications in different forms. The contributors are Chemistry researchers are highest. The table-6 and figure - 4 is explained in detail.

Table -6 Top ten research contributors of University of Mysore

SL. No	Contributors	Documents	CF	Percentage	CF	Subjects
1	Yathirajan. H S	457	457	12.00	12.00	Chemistry
2	Narayana. B	321	778	8.43	20.43	Chemistry
3	Basavaiah K	170	946	4.47	24.90	Chemistry
3	Rangappa. K S	164	1112	4.31	29.21	Chemistry
4	Jasinski I S P	163	1275	4.28	33.49	Chemistry
5	Prasad J S	146	1421	3.84	37.33	Physics
6	Sridhar M A	138	1559	3.62	40.95	Physics
7	Butcher R J	137	1696	3.60	44.55	Chemistry
8	Somashekar R	127	1823	3.34	47.89	Physics
9	Shetty H S	124	1947	3.26	51.15	Botany
10	Sarojini B K	122	2069	3.20	54.35	Chemistry
11	Gowda D C	108	2177	2.84	57.19	Chemistry
12	Others	1630	3807	42.82	100.00	Science
	Total	3807		100.00		

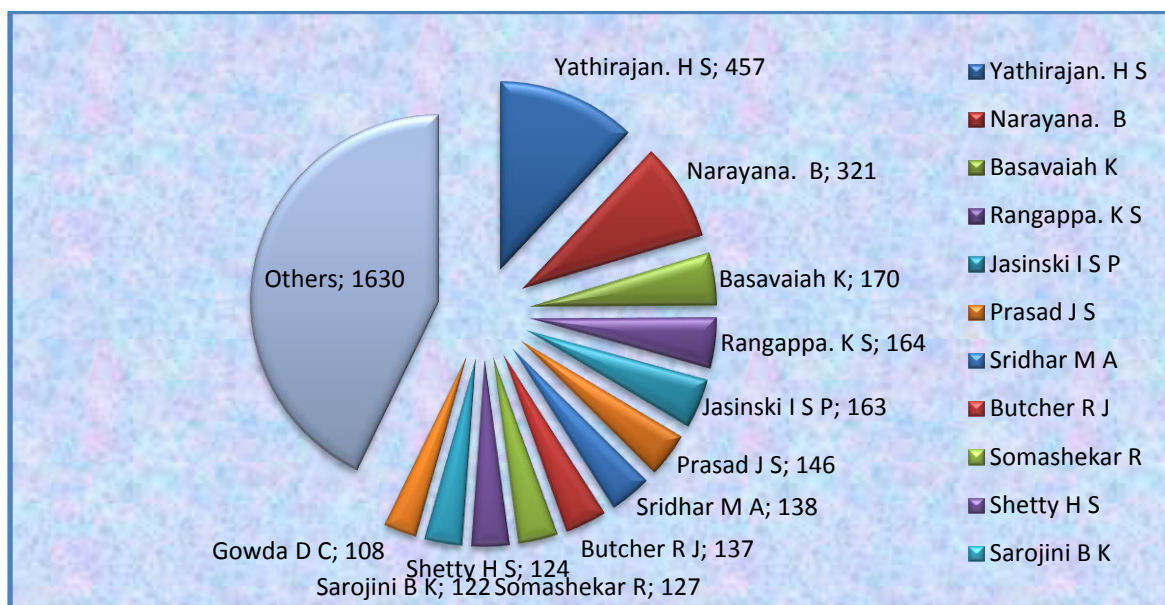


Figure -4 Top ten research contributors of University of Mysore

Table -6 and figure - 4 reveals that Prof. Yathirajan H S (457) followed Narayan B (321) Basavaiah K (170), Our Honorable Vice Chancellor K. S. Rangappa (164) and Exe Vice Chancellor J S Prasad (146) documents are published. First five contributors are Chemistry department researcher but Our Honorable Exe Vice Chancellor J S Prasad is Physics department. In total Chemistry and Physics contributions are the highest in web of science data base

6. FINDING

The study reveals that and finding the

- The highest contributions or publications in the year 2011 (309) followed 2007 (304).
- Journal article (3598) is predominated contributions followed Meetings (95) and other forms.
- Science & technology (3754) followed Social Science (38) and Arts & Humanities (9) research domains.
- The research area is mainly Chemistry (954) followed Crystallography (707), Pharmacy (312), Material Science (215) Physics (214) and other subjects.
- The top published journal is Acta crystallographica Section -E structure reports online (466) 12.24% is the major published journal followed Molecular crystals and liquid crystals (68) Current science (64) of India is third place.
- University of Mysore Prof. Yathirajan H S (457) followed Narayan B (321) Basavaiah K (170); Our Honorable Vice Chancellor K. S. Rangappa (164) and Exe Vice Chancellor J S Prasad (146) is major contributor of research publications.
- The researcher of Chemistry and Physics are the highest published document in web of science data base.

7. SUGGESTION

The study identified some suggestion based on the result and findings it will help to University systems that are;

- The research contribution are declined year to year must create awareness and develop the research activity to academic and teaching scholars.

- b) To provide infrastructure facility to scholars.
- c) To advise and enrich the knowledge to young researcher for research publications.
- d) Social science researcher contribution very less, please to show the decline records and gives importance to social science research activity.
- e) The social science researcher must to dedicate to research work and published the articles in International recognized journals.

8. CONCLUSION

Universities education system not only the produces master degree it also produce the research work, it is a part and parcel of university academic activity. The research work is most important because it shows the credentials to University quality and academic achievement of each academic scholar. The above study shows the research work are predominated in chemistry and Physics subject only so other research work did not developed . The University and UGC must study the condition and evaluate the university environment. They University authority should create the awareness to academic scholars for research publications. Today University dynamic role is taken in research and academic activity. Society will observe the university activity it needs to enrich the knowledge and contribute to right one to society.

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