

**Research Contributions of Current Faculty Members of Bharathidasan University:
with Special Reference to Web of Science**

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Abstract

Now a day's research publications are plays important role in any higher leaning and research institutions. This paper describes the analysis of Research publications of current faculty members of Bharathidasan University. The data were collected from Web of Science database (<https://www.webofknowledge.com/>) in during December 2018. The study found that 2671 Research Publications by 91 current faculty members from science and social science departments. The study also found that Department of Chemistry has contributed 519 (19.43%) research publications and Professor "Lakshmanan M" (Department of Non Linear Dynamics) has published 266 publications with 5994 citations.

Keywords: *Bharathidasan University, University Research Contributions, Faculty Publications, Citations.*

1. Introduction

Research contributions are plays the important role in any higher learning and research institutions. The research contribution is the showcase of any institutions to get the collaborations, funding opportunity and to show the research developments. Higher learning and research institutions are evaluated by the National Assessment and Accreditation Council (NAAC) and National Institutional Ranking Framework (NIRF) for the quality and ranking based on the research contributions.

2. Review of Literature

Bebi and Kumar, Shailendra (2018)¹ examined the research output of women faculty in physics in 10 central universities in India. The data was collected for the period of 2011-15 (5 years). A total of 36 women physics faculty members contributed 282 papers. The study mainly focused on research output, citations, h-index, i10-index, place of women authors when writing papers jointly, proportion of women authors per paper and the central university with highest number of women authors and papers. The results showed that women authors acted as corresponding author more as compared to first or both (first and corresponding). University of Delhi topped the rank in terms of highest women contributors and papers. The ratio of women authors per article was found 0.3. Journal of Applied Physics was found to be the most preferred journal by women authors in Physics. **Sivakumar, B (2018)**² examined the analysis of research publications of the faculty of Bharathiar University, Coimbatore. Bibliographic records of 4645 items were retrieved from Scopus database between 1982 and 2015 and increasing publications trends were seen in Bharathiar University. The average output of the organization was 137 per year. Among the 4645 papers published in the span of 34 years, highest number of 748 papers was published in the year 2015. The total numbers of citation received by the papers were 50964 and the citing articles were 3559. The average citation per article was 14.3. **Sivakumaren, K. S. (2017)**³ examined the publications of Anna University (Chennai) indexed in Indian Citation Index (ICI). The relevant data for the study have been extracted from ICI. The search term “Anna University” has been used as the keywords. A total of 1,780 unique records in the period of 2004-2017 have been downloaded and analysed under various categories. Out of 1,780 records, top 10 records alone have been considered for this study. Microsoft Excel has been used to analysis the data using simple calculations. It is found that 37(17.30%) publications of Kanmani, S have been indexed. 504 (26.53%) publications by Anna University faculty members were on science and technology. In collaboration with other institutions, 223 publications have been published in addition to 1,780 publications of Anna University. **Meera and Surendra Kumar Sahu (2015)**⁴ aimed to depict the research performance of University College of Medical Science (UCMS) in different areas or subfields of medical and health sciences. This study is based on a bibliometric analysis of scientific research output. The data of UCMS’

research output are collected from the SCOPUS database by using different searching techniques. It is found that in scopus total of 2557 research papers have been published by researchers of UCMS since 1975 to November 2013. The result shows that 25.6 percent of total publications is made by three authorship collaboration and USA is the most preferred country by the researchers for research collaboration. **BM Gupta and Adarsh Bala (2011)**⁵ analyzed the research activities of India in medicine during 1999–2008. It further analyzed the medical research output by disease and organs. The publication data on medicine has been retrieved by using SCOPUS database. India holds 12th rank among the productive countries in medicine research consisting of 65,745 papers with a global publication share of 1.59% and registering a growth rate of 76.68% for the papers published during 1999–2003 to 2004–2008. High quality research in India is inadequate and requires strategic planning, investment and resource support.

3. Research Methodology

The Faculty member's data were collected from Bharathidasan University website (<http://www.bdu.ac.in/>)⁶ and publications data collected from Web of Science database (<https://www.webofknowledge.com/>)⁷ for this study. It is found that 2671 Research Publications by 91 current faculty members as on 12 Jan 2019. The study also aimed to analyze University Department wise Research Publications, top ten Departments, top 20 faculty members, and top five faculty member funding publications.

4. Objectives of the Study

The following are the objectives of the study.

- To analyze the department wise research publications of Bharathidasan University
- To identify the top ten departments.
- To identify the top 20 Faculty members of Bharathidasan University
- To find out the top five faculty members funding publications

5. Data Analysis and Interpretation

5.1 Department wise Research Publications

Bharathidasan University research publications were analyzed by department wise and ranked accordingly.

Table.1

Department wise Research Publications

S. No	Name of the Department	No. of Research Publications	Percentage	Rank
1	Department of Animal Science	281	10.52	4
2	Department of BSM	1	0.03	23
3	Department of Biochemistry	77	2.88	11
4	Department of Bioinformatics	100	3.74	8
5	Department of Biomedical Science	75	2.80	12
6	Department of Biotechnology	89	3.33	9
7	Department of Botany	86	3.21	10
8	Department of Chemistry	519	19.43	1
9	Department of Commerce and Financial Studies	9	0.33	19
10	Department of Computer Science and Applications	10	0.37	18
11	Department of Educational Technology	1	0.03	23
12	Department of Environmental Biotechnology	102	3.81	7
13	Department of Environmental Science and Management	15	0.56	17
14	Department of Geography	4	0.14	20

15	Department of Library and Information Science	1	0.03	23
16	Department of Marine Biotechnology	74	2.77	13
17	Department of Marine Science	111	4.15	6
18	Department of Mathematics	47	1.75	15
19	Department of Medical Physics	67	2.50	14
20	Department of Microbiology	193	7.22	5
21	Department of Non Linear Dynamics	406	15.20	2
22	Department of Physics	361	13.51	3
23	Department of Remote Sensing	37	1.38	16
24	Department of Social Work	3	0.11	21
25	Department of Women's Studies	2	0.07	22
Total		2671		

Table 1 shows that university department wise research publications. The Department of Chemistry has highest (519 and 19.43%) publications and placed first position and it is followed by Department of Non Linear Dynamics 406 (15.20%) publications have placed second position. A good number (77 and 2.77%) of research articles published by the Department of Marine Biotechnology and placed thirteenth position. It is further found that Bharathidasan School of Management (BSM), Department of Educational Technology and Department of Library and Information Science has less number of research publications and placed twenty third position.

5.2 Top Ten Departments

Table.2

Top Ten Departments

S. No	Name of the Department	No. of Research Publications	Percentage	Rank
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1	Department of Chemistry	519	19.43	1
2	Department of Non Linear Dynamics	406	15.20	2
3	Department of Physics	361	13.51	3
4	Department of Animal Science	281	10.52	4
5	Department of Microbiology	193	7.22	5
6	Department of Marine Science	111	4.15	6
7	Department of Environmental Biotechnology	102	3.81	7
8	Department of Bioinformatics	100	3.74	8
9	Department of Biotechnology	89	3.33	9
10	Department of Botany	86	3.21	10

Table 2 indicates that the top ten department and it is found that the Department of Chemistry has highest (519 and 9.43%) publications and placed first rank and it is followed by Department of Non Linear Dynamics with 406 (15.20%) publications and placed second rank. It is further found that Department of Botany has less number of (86 and 3.21%) publications and placed tenth rank.

5.3 Top 20 Faculty members of Bharathidasan University

Table.3

Top 20 Faculty members of Bharathidasan University

S. No	Name of the Faculty	No. of Research Publications	H- Index	Citations	Rank
1	Lakshmanan M (Department of Non Linear Dynamics)	266	41	5994	1
2	Thomas Muthiah P	171	21	1687	2

	(Department of Chemistry)				
3	Palaniandavar M (Department of Chemistry)	137	43	6018	3
4	Arumugam S (Department of Physics)	113	18	981	4
5	Archunan G (Department of Animal Science)	106	17	880	5
6	Senthilvelan M (Department of Non Linear Dynamics)	95	19	1062	6
7	Ramesh Babu R (Department of Physics)	90	18	808	7
8	Geraldine Veronica Vimala Rani P (Department of Animal Science)	88	22	1465	8
9	Ramesh R (Department of Chemistry)	84	28	1820	9
10	Thajuddin N (Department of Microbiology)	79	19	1678	10
11	Jeganathan K (Department of Physics)	67	18	1110	11
12	Muruganandam P (Department of Medical Physics)	60	19	1207	12
13	Natarajaseenivasan K (Department of Microbiology)	56	14	651	13
14	Selvaraj S (Department of Bio Informatics)	50	17	1357	14
15	Rajasekar S (Department of Physics)	49	15	742	15
16	Manickavasagam M (Department of Biotechnology)	45	16	922	16

17	Thamilmaran K (Department of Non Linear Dynamics)	45	12	492	17
18	Muthusamy S (Department of Chemistry)	44	12	407	18
19	Santhanam P (Department of Marine Science)	43	6	128	19
20	Sabari Girisun T C (Department of Physics)	42	13	429	20

Table 3 shows that top 20 faculty members of Bharathidasan University. It is found that “Lakshmanan M” (Department of Non Linear Dynamics) has 266 publications with 5994 citations in web of science and placed first rank and it is followed by “Thomas Muthiah P” (Department of Chemistry) 171 publications with 1687 citations and placed second rank. It is further found that “Sabari Girisun T C” (Department of Physics) has only 42 publications with 429 citations and placed twentieth rank.

5.4. Top five faculty members Funding publications and Citations

Table.4

Top five faculty members Funding publications and Citations

S. No	Name of the Faculty	No. of Research Publications	Funding Publications	Funding publication Citations	Rank
1	Lakshmanan M (Department of Non Linear Dynamics)	266	119	1,437	1
2	Thomas Muthiah P (Department of Chemistry)	171	51	304	4
3	Palaniandavar M	137	46	1413	5

	(Department of Chemistry)				
4	Arumugam S (Department of Physics)	113	87	680	2
5	Archunan G (Department of Animal Science)	106	75	542	3

Table 4 shows that the top five faculty members funding publications and citations. Faculty member “Lakshmanan M” (Department of Non Linear Dynamics) has highest (119) funding publications with 1437 citations have placed first position and it is followed by “Arumugam S” (Department of Physics) 87 funding publications with 680 citations have placed second position. It is further found that “Palaniandavar M” (Department of Chemistry) has only 46 funding publications and received 1413 citations have placed fifth position.

6. Conclusion

Now-a-days the higher learning institutions are playing the important role in Indian Educational System to meet the institution standards and reputations. In India higher learning institutions are evaluated based on quality parameters by the Accreditation and ranking agencies like NAAC, NIRF, etc. To meet this quality evaluation, institution are to be provide the research contributions of only current faculty members. Hence this study will be useful for the Bharathidasan University to know the current research performance.

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