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Impact of the Publications Pattern in Polypeptides: A Bibliometric Study

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ABSTRACT

The aim of research on Polypeptides studies output as a worldwide prospective. The study observes the beyond traits within side the particular research output of Polypeptides studies, primarily based on research patterns in the field of Polypeptides.The study discussed about Polypeptides data envisaged the author and publications trend, RGR and Dt time measured within the study. The study defines to understand strength and weakness of the research do by the Scientists across the worldwithin the area of Polypeptides. It's determined the publications trend was upwards and downward for reason behind to steadfast on the sphere of Polypeptides research.

Keywords: Polypeptides, Scientometrics, Year-wise Research output, RGR exponent, Dt Growth, Web of Science.

INTRODUCTION

Polypeptides are biomaterials composed of repeating amino acid units linked by a peptide bond. Polypeptides can conform to different three-dimensional architectures, depending on their chemical composition. Such versatility, coupled with their inherent biocompatibility and biological activity, make Polypeptides ideally suited for drug and gene transfer applications and in the development of tissue scaffolds Polypeptides are formed via sequential reactions of protected amino acids. Strong inter- and intra-molecular hydrogen bonding between peptidic sequences results in a tendency to strongly aggregate, leading to incomplete acylation/deprotection reactions. This, in turn, retards the progress of the polymerization reaction.

The natural biological functions of Polypeptides have led to self-assembled elastin oligopeptides being considered for use as non-thrombogenic coatings and matrices for tissue engineering and poly(glutamic acid) are synthetic homoPolypeptides being employed for drug and gene delivery applications, due to their biodegradable nature and pH sensitivity. These polymers and their benzyl derivatives have been further blended with poly(ethylene glycol), poly(ethylene oxide) and other hydrophilic polymer units to develop amphiphilicblock polymers for the fabrication of micelles and vesicles (Elena P. Ivanova, KaterynaBazaka, Russell J. Crawford, 2014).

Polypeptides are biomaterials composed of repeating amino acid units linked by peptide bonds. Polypeptides can adapt to a variety of three-dimensional structures, depending on their chemical composition. This diversity, combined with its inherent biocompatibility and bioactivity, makes the polypeptide ideal for drug and gene transfer applications, and in the development of tissue scaffolds, the polypeptide is formed through a continuous reaction of protected amino acids. Strong intermolecular and intra molecular hydrogen bonds between peptide sequences tend to aggregate strongly, resulting in incomplete acylation / deprotection reactions. This delays the progress of the polymerization reaction. Due to the natural biological function of the

Polypeptide, self-assembled elastin oligopeptides have been investigated for use as non-thrombogenic coatings and matrices for tissue engineering, and poly (glutamic acid) is a synthetic homopolypeptide. , Pharmaceutical biodegradability-and gene transport applications are used, pH sensitivity. These polymers and their benzyl derivatives were further blended with poly (ethylene glycol), poly (ethylene oxide) and other hydrophilic polymer units to develop amphipathic block polymers for the production of micelles and vesicles (Elena). P. Ivanova, KaterynaBazaka, Russell J Crawford, 2014).

REVIEW OF LITERATURE

Koenig (1983) examined pharmaceutical research from the perspective of bibliometrics. The study found a bibliometric correlation between the volume and proportion of successful drug studies, especially (frequently cited) clinical medical articles. This study shows that business studies reported in the Basic Biomedical Research Journal are cited as often as NIH-sponsored graduate studies. Schubert. A, Zsindely and Braun (1985) analyzed this and found that more productive author than the "average scientist" in the same country, but established the special importance of the reseacher. There was an association between the criteria of clinical medical publications and the prevalence of the countries involved.Baskaran (2013) analyzed that informatics focuses on understanding issues from a stakeholder perspective and applying information and other technologies as needed. That is, it deals with system problems first, not individual technologies in the system. In this regard, informatics considers the technology to be the answer to

technical decisions, as it believes that technology is "developed according to its own laws, has its own potential, and is limited only by available material resources." can do. Baskaran (2013) used a total of 6610 records from the Web of Science to contribute to the academic productivity and research of the encryption fields in four major countries: China, the United States, Taiwan, and Japan. It was analyzed that the distribution of diversity was evaluated and related research areas. Baskaran (2013) argued that doubling time (Dt) tends to increase and decrease in this study. The degree of cooperation and its average value is determined to be 0.963. The three institutions of are productivity leaders. That is, Aragappa University, National Chenking University, Anna University, where CECRI is located. Baskaranand Binu (2019) analyzed that most of the 416 respondents (98.8%) were looking for educational and research information. Research results can determine variousparameters of scientific access to electronic resources. Research facilitates the acquisition of electronic information and helps stimulate user research and academic thinking. Baskaran (2018) investigated the role of computers in the provision of education. Baskaran (2016) discussed the best papers published in the Bioinformatics Journal, and Harvard scientists contributed most of the papers to this study. Both RGR and DT showed this trend throughout the study. Baskaran (2015) investigated the three most important paradigm shifts in 21 library environments. Baskaran (2015) analyzed that US scholars contributed a total of 15832 (30.815%) of articles, 87.947% of which were published as journals. article. Harvard scientists have received a lot of attention in various research papers and occupy a leading position in research collaboration in the field of enzyme research. Baskaran (2012) argued that doubling time (Dt) tended to fluctuate during the study period. The results use the least squares method to exclude productive authors and the maximum likelihood method to examine the exponential growth of authors. In the process, it was decided that Lotka's law was applicable to graph theory research. Baskaran and Ramesh (2019) analyzed that the study analyzed that electronic information access patterns between faculty and staff play an important role in performing a variety of tasks for engineering respondents. According to this survey, the survey aims to analyze that 76% of respondents are male, of which 26% are female. Baskaran and Ramesh Babu (2019) investigated the publishing productivity of forensic outcomes from 1989 to 2016. Growth of publications in research, RGR and Dt of research results, cooperation between authors. Baskaran (2018) analyzed that the highest SD is 21. 71405 and 21.71405 Issues found Missing smartphone and lacking security of personal data. The best resume was 864.5, which was found in the absence of personal data security. Baskaranand Karuilancheran (2015) has a significance level of 29 degrees of freedom at C.V. 0.05, which gives a chi-square (X2) calculation of 5309,368. After that, the performance of researchers began to decline. It was supported by SPI, which is only between 9 and 10.

Baskaran (2014) discussed the quantitative analysis of the productivity and characteristics of citations from Library and Information Science (LIS) publications from 2003 to 2012. A total of 1,942 articles and 12,502 citations have been published in the SSCI-indexed LIS journal. 21.36% of the citations were received in 2012. Baskaran, C. (2013) analyzed that 70 (59.1%) of faculty members who participated in the survey learned through 28 (56%) guidance from teachers / managers. There is evidence that the majority of faculty and staff, 21 (42%), use their department to access information, and 28 (40%) of researchers access their department's e-journals. Baskaran (2019) analyzed 4,444,210 (55.26) respondents who were very happy with OPAC / Web-OPAC. 205 (53.90) respondents are very happy with EDatabases and 192 (50.52) respondents are very happy with the automated lending service.

Baskaran (2018) uses the software HistCite to publish on the number of publications, growth rate and doubling time, distribution of publications across journals, publication output, author patterns, and bioremediation research in India. We investigated a map of the impact of this on global quotes. , VOS viewer. Indian Institute of Technology, Baba Atomic Research Center, and CSIR are leading producers of research in the field of bioremediation. Sivakami and Baskaran (2016) analyzed a total of 64,030 datasets from the MEDLINE database in this study. Resources of all types showed the largest decline in 2010 and 2011, with an average of 2,784 publications per year. We conducted a time series analysis of the most productive countries (US) and India and compared the results over the next few years. Baskaran (2014) describes the quality of the collection in terms of books, magazines and resources. Yahoo is the most popular search engine for internet surfing. Book rental is a favorite of the staff. Saravanan and Baskaran (2019) investigated bibliographic binding, linguistic distribution, keyword distribution, geographical distribution of documents, and a history of local and global citations by established institutions. Analyzed by Bascalan (2019). Most of the 90 (33%), 76 (27.8), and 51 (18.7%) respondents said they "fully agree," "agree," "no comment," "easily accessible," and "prefer." I answered. Analyze large amounts of data. " Baskaran (2018) surveyed most publications in 44.15% of the two authors in the analysis of BM. Guptha has published 18 articles on DJ LIT and is the lead author. .

Baskaran, (2013) explored Degree of collaboration and its' mean value is found to be 0.963. The top three institutions with Alagappa University are Central Electro Chemical Research Institute, National Cheng King University, and Anna University. Baskaran and Sivakami, (2014) discussed Quantitative analysis is carried out to identify the literature growth, authorship pattern, collaboration and journal distribution on Swine influenza disease research based on data obtained from Pubmed databases for a period from 2006-2010. A total of 2360 articles were downloaded from Pubmed database using the search term "Swine*" subjected to bibliometric data analysis techniques. Baskaran (2013) analysed that Information science focuses on understanding problems from the perspective of stakeholders and then applying information and other technologies as needed. In other words, it tackles systemic problems first rather than individual pieces of technology within that system. In this respect, information science can be seen as a response to technological determination, the belief that technology "develops by its own laws, that it realizes its own potential, limited only by the material resources available, Baskaran (2013) analysed that a total number of 6610 records which were retrieved from the Web of Science was used to assess the academic productivity and distribution of research diversity of cryptography field from four major countries -China, USA, Taiwan and Japan which contributed more papers in cryptography and allied field of researches.

Baskaran (2013) discussed that Doubling time (Dt) was found to be increased and decreased trend in this study. Degree of collaboration and its means value is found to be 0.963. The top three institutions with Alagappa University are Central Electro Chemical Research Institute, National Cheng King University and Anna University. Baskaranand Binu (2019) analysed that Majority of respondents 416 (98.8%) are searching for educational and research Information. The findings of the study could identify the various parameters while access Electronic resources by the academic community. The study would helpful to bring to access Electronic Information for momentum of gain research and academic ideas among the users. Baskaran (2018) examined that computers became involved in the delivery of education, a proposed definition identifies the delivery of instructional materials, using both print and electronic media. Baskaran (2016) discussed the highest publication published in Bioinformatics journal and Harvard University scientists contributed highest number of publication in the study. RGR and DT is exhibits that fluctuating trend happening whole period of study.

Baskaran (2015) studied the three Major Paradigm Shifts 21st Century Library Setting, Revolutionary Changes, Library Roles, Millennial Generation, Cyber Infrastructure Characteristics, Major Challenges of 21st Century Librarian, Tasks, Library Should Be, the researchers expectations and so on. Baskaran (2015) analyzed the USA scientists have contributed totally 15832 (30.815%) items and include 87.947% percent are appeared as journal articles. Harvard University scientists are much attention in produced large number of research papers and they hold top level among research collaboration in enzyme research.Baskaran (2012) discussed that Doubling Time (D_t) has shown as fluctuating trend during the period of study. The result examined the author exponential growth using least squares excluding high productive authors and maximum likelihood method. Lotka's law is found to be applicable to graph theory research during the study period. Baskaranand Ramesh (2019) analyzed that The study analyses Electronic information access pattern among the faculty members is the significant role in the Engineering institutions towards various tasks to fulfil by the respondents. The study aim to analyze that 76 percent of the respondents are male and 26 percent of them are female observed from the study.

Baskaran and Ramesh Babu(2019) examined the publication productivity of Forensic Medicine output during 1989-2016. The growth of the publications, RGR and Dt of the research output, Collaboration of authors, Collaborative co-efficient etc. in the study. Baskaran (2018) analyzed the highest SD was 21. 71405 and 21.71405 the problems were found Do not have smart Phone and Lack of security on personal information. The highest CV was 864.5 found on Lack of security on personal information. Baskaranand Karuilancheran (2015) analyzed the C.V. at 0.05 significant level for 29 degrees of freedom is 42.56 and the calculated value of Chi-Square (X^2) obtained in this case is 5309.368. Afterwards, the performance of researchers started diminishing. It was supported by SPI that ranges between 9 and 10 only. Baskaran (2014) discussed the quantitative analysis of the productivity and characteristics of citations of Library and Information Science (LIS) publications during 2003-2012. A Total of 1942 contributions published and 12102 citations received in the LIS journals indexed in SSCI. 21.36% of citations were received in 2012. Baskaran, C. (2013) analyzed that faculty members who respondents to the study, 70 (59.1%) learned through guidance from their teachers/guide 28 (56%). It is proved that the highest proportion of faculty member, 21 (42%), use their department for accessing the information, while 28 (40%) of the research scholars were accessing their e-journals in their department itself. Baskaran (2019) analyzed the 210 (55.26) respondents are extremely satisfied on OPAC/Web OPAC. 205(53.90) respondents are extremely satisfied on E-Databases, 192(50.52) respondents are extremely satisfied on Automated circulation services. Baskaran (2018) explored the map the number of publications, growth rate and doubling time, scattering of publication over journals, and its impact on publication output, authorship patterns and Global citation score of bioremediation research publication in India using the HistCite, VOSviewer software. Indian Institute of technology, Baba atomic research centre and CSIR are the major producers of research output in the area of bioremediation. Sivakamiand Baskaran (2016) analysed that total of 64030 records were obtained from MEDLINE databases have been taken for this study. All kinds of resources are fallen in highest in the year 2010 &2011 with average publications of 2,784 per year. The Time series analysis ware carried out for the top most productive country (USA) and India to compare the research output in forth coming years. Baskaran (2014) discussed quality of collection with respect to books, Journals and e-resources. Yahoo is most popular search engine among the user for browsing the net. Book lending service is the most prefer by the staff.

Saravanan, and Baskaran (2019) examined the identifies bibliographic coupling of the institution, language distribution, keyword distribution, geographical distribution of the literature and Historiography on Local and Global Citation is also analyzed. Baskaran (2019) analyzed the majority 90 (33%), 76 (27.8) and 51 (18.7%) of the respondents of them recorded that “Strongly Agree”, “Agree”, and “No Comment” respectively to prefer “Easy to access massive amount of data to analyse”. Baskaran (2018) examined the majority of publications 44.15% representing by the two authors in the analysis BM. Guptha was published 18 papers in DJLIT, who is a ranked 1 author. It followed by Chenupathi K. Ramiah shored second his publications 11. University of Delhi, which is the top ranked institution.Binuand Baskaran (2017) analyzed the assess the user satisfaction with respect to the eresources and services. It reveals that majority of respondents are using e-resources at large extent or very large extent for different purposes. Users’ satisfaction level is very high with respect to various electronic resources and services available in the library. Ramesh Babu and Baskaran (2017) analyzed the analyses that research growth trend of Forensic Medicine during 1989-2015. It is observed highest out of Forensic Medicine research Forensic Medicine research in 2013 was 447 (11.05 %) of the publications, followed by 420 (10.38%) of the publication brought out in 2015. the doubling time of the publications also a fluctuate trend appears whole study period.Baskaran (2020) analyzed the lowest relative growth rate (RGR; 0.04) was found in 2008. 2010, 2012, and 2014 RGR rose up to 0.75 in 1990, and the average mean value of relative growth rate (RGR) is 0.15. The highest number of publications (293; 63.55%) accumulated from information science library science. This area has been ranked first among 21 research fields listed in the study. Baskaran (2020) describes Altmetrics use in public APIs across platforms to gather data with open scripts and algorithms. Altmetrics did not originally cover citation counts. It calculated scholar impact based on diverse online research output, such as social media, online news media, and online reference managers. Baskaran, C. (2020) analyzed the 11,941 total records on social networks and media retrieved from Web of Science database during the period of study. The predominantly records 2,576 (21.57%) of the publications brought out in 2018, followed by 2,281 (19.10%) records published in 2017. Palaniveland Baskaran (2018) studied the 2313 scholarly communications published in the Economic Affairs Journal. The analysis cover mainly the number of articles, form of document, the study is obtained from the SCOPUS database in 2313 results for thirty seven years in this results retrieved are analyzed using excel worksheets. Murugaiahand Baskaran (2013) analyzed the high number of papers was collaborated with United States researchers in the field of Human DNA. The study measures the performance based on several parameters, country year-wise growth rate, authorship pattern, collaborative index, collaborative coefficient, leading collaborative countries and authors have contributed publications in Human DNA research. Baskaran (2020) discussed the maximum 290 (12.20%) of the publications contributed by the researchers from Central Electro chemical Research Institute was highly collaborated with Alagappa Universities , which has top Citations and h-Index 3852 and 32 respectively. The propounded according to Google Scholar Metrics (GSM) SK Pandian was to be a top ranked researcher, despites his year wise citations shows 4491 and h-Index credited 36 during 2008-2018. Ramesh and Baskaran(2019) analyzed the respondents "Satisfied" with e-resources offering lecturing materials. This data presents that a large number of respondents 265 (51.0%) prefer gateway portal to a "Large Extent' and 139 (26.7%) of the respondents prefer to a "Very Large Extent". On the other hand, it has also been noticed that 105 (20.2%) of the respondents are "Less satisfied" whereas 11 (2.1%) of the respondents opted "No Comment". Baskaran (2018) discussed the majority of 63 (27.6%) specified “Aware”

and Usage of Whatsapp, 53 (23.2%) You Tube, 47 (20.6%) Google+, 46 (20.2%) Face Book, 23 (10.1%) Tumbler/Messenger, 21 (9.2%) Twitter, 18 (7.9%) Others and 17 (7.5%) Instagram. Functions appropriate to their parent institutions.

Baskaran (2021) analyzed the majority 134 (1.96%) of the publications contributed by the researchers from the University of California systems. Zhang Y was the top author has contributed 16(0.23%) of the publications in the field of Web 2.0, subsequently, Kolt GS, Li Q, Vandelantte C, Zhang J, the publications equally appears 13(0.19%) of the publications. Baskaranand Pitchaipandi (2021) analyzed the respondents highly prefer group sites (Yahoo, Google, and Whatsapp). The research analyses that social media tools for research the majority of the respondents highly preferred Facebook wall for shared the research information by the respondents in the eight Universities in Tamil Nadu. Pitchaipandiand Baskaran (2021) examined the 51.3% of the respondents visit 1/hr day in using WhatsApp. 78.9% of the respondents added the Whatsapp Groups from Friends of the respondents respectively. Among the WhatsApp as instructive help devices and administrations in a Thiruvalluvar University. Baskaran (2020) analyzed that there are twenty five institutions are listed, among them University of Washington has contributed highest 48 (0.98%) of the publications witnessed be a first position out of twenty five. Radhakrishnan andBaskaran, C. (2020) discussed there is a moderate correlation between Citation and Altmetric Score. Only one paper obtains citation and Altmetric score equally. Another paper gets citation and Altmetric score in near equal. Out of the 10 papers, four papers received more citations. Of the 4 highly cited articles, three papers receive very low Altmetric score and only one paper receives high Altmetric score.

Baskaranand Binu (2020) discussed that majority of respondents 109 (21.9%) are post graduates and 75 (17.8%) are having PG with NET qualification. Mean value for 'To borrow books' was 3.86 and assigned the rank one. Majority of respondents 416 (98.8%) are searching for educational and research Information. The findings of the study could identify the various parameters while access Electronic resources by the academic community. Baskaranand Ramesh (2020) analyzed that Two hundred fifty-one (48.3%) respondents rated that information sought from e-books are "excellent" while 205 (39.4%) of the respondents rated them as "very good." Two hundred eighty (53.8%) respondents "agree" that electronic journals save the time of the user while 219 (42.1%) of the respondents "strongly agree." A miniscule number, 21 (4.0%), respondents "disagree." Baskaran, C. (2020) discussed that Currently, ROAR lists 1,793 and Open DOAR lists about 1,966 IRs all over the world. It is found that more institutions (47) installed the D-Space (62%). It is followed by e-prints adopted (26), and two institutions implemented OAR through GSDL. Ramesh, P and Baskaran, C. (2019) analysed that at a large number of respondents 265 (51.0%) prefer gateway portal to a "Large Extent'and 139 (26.7%) of the respondents prefer to a "Very Large Extent". On the other hand, it has also been noticed that 105 (20.2%) of the respondents are "Less satisfied" whereas 11 (2.1%) of the respondents opted "No Comment".

Radhakrishnanand Baskaran (2019) analyzed that square root of total authors, who have contributed 7.94 % of the total contribution, is found to be 215.52 in Price square Root Law. The findings of Pareto's 80/20 rules state that 20% of the authors contributed only 46.60% of the total contribution. Baskaranand Babu, P. R. (2019) discussed the activity index and exponential growth of authors analysed during 1989-2016. The result of the study found that publications growth between 11 (0.26%) in 1989 and 447 (10.76%) in 201. RGR shows a fluctuates trend between 0.02 and 1.02 in 2005, 2006 and 1991 respectively. Complete twenty three years the research could be observed that RGR less than 1. Baskaran, C. (2018) discussed that highest of 2093 (13.94%) citations received by Prof. Sanjeeviraja out of 180 (11.41%) of the Publications during the period. Material Science has 5632 Citations for 488 Publications with the highest h-index was 37. Baskaranand Rameshbabu (2018) conducted the study largest output in was found 447 publications in 2013. It is found the DC between 0.64 and 0.94 and overall DC measured to be 23.08 throughout study period. The study could be found DC was an increased and a decreased trend appeared in the whole study period. Value n in the field of Forensic Medicine is being analysed, it has calculated the exponential growth is n= 4.4320914 for author. Radhakrishnan and Baskaran (2018) discussed that maximum number of articles 114 (4.83%) were published in the year of 2015. In the Authorship Pattern, the major contribution of articles was from two authors 776 (32.87%). The Time series analysis technique reveals the estimated future growth of articles in the Journal will be increased from 63.81 (2016) to 88.13 in 2020 and 93.66 in the year 2021. Murugiahand Baskaran (2014) analyzed the document types, journal articles were the highest numbers with 7210 papers or 99.26%. From this study, it is observed that the Journal of Biological Chemistry has published with 529 research papers and find top position which is accounted for 7.28% of the total articles. Sivakamiand Baskaran (2014) analyzed that kinds of resources are fallen in highest in the year 2010 & 2011. Collaborative authors' productivity is more than a single contribution. The degree of collaboration C= 0.884 represents 88 percent of collaborative authors article that were published during the study periods. Bradford's law fits well on sample. Baskaran, C. (2013) examined the Doubling time (Dt) was found to be increased and decreased trend in this study. Degree of collaboration and its means value is found to be 0.963. The top three institutions with Alagappa University are Central Electro Chemical Research Institute, National Cheng King University and Anna University. Veeramuthu and Baskaran (2018) analyzed the maximum articles 568 were published in the year 1999 and the minimum 46 in the year 1995. In the authorship pattern, the maximum articles 5131 were published by single author. The RGR in the starting year 1990 is 0.78 and 0.03 in the last year 2017. The Doubling time in the starting year 1990 was 0.88 and in the last year 2017 was 27.47. Baskaran (2011) emphasis on open access resources and initiatives in various institutions in India. It also explains about the Open Access Initiatives Repository policies and other issues. Baskaran, C. (2011) analyzed the Author's collaboration analyzed through Subramanian's formula and it expressed C= Nm/Nm+ Ns. Lotka's law and bradford's law of scattering were applied to count the author productivity and core journals in this specific subject. Lotka's law is n= 2 and Bradford's law scattering 1: n: n2. These have been analysed in this study. Pitchaipandiand Baskaran (2020) investigated the The social Networks and Media exchange information, ideas and pictures/videos in virtual communities and networks. The assessment of this study was the role and consumption of Social Networks/Media Research Communication by the Students and Research Scholars' Social Science at Alagappa University, Karaikudi, Tamilnadu. Senthil Kumar and Baskaran (2018) discussed the Journal named "Advanced Materials Research" ranked in the top position in contributing articles 59 (2.28%) in this field. The highly prolific author is Monteiro S.N who has contributed 41 articles 0.47 %. Krishnan and Baskaran (2018) studied the maximum articles 1084 were published by four authors. The RGR in the starting year 2000 is 0.71 and 0.12 in the last year 2017. The Doubling time in the starting year 2000 was 0.98 and in the last year 2017 was 5.96. In the Country wise distribution of articles, the major contribution was from China 1381 (19.21%). Baskaran, and Anbu, S. G. (2011) This research attempt to the internet based resources by the students of Hindustan college of Engineering, Chennai (India). The aim is to determine the use of Internet based resources by the students skills in handing the different types of documents can access to

academic and various purposes. This survey reflects the availability of e-resources and typically examines the quantum of their use in Hindustan college of Engineering.

OBJECTIVES OF THE STUDY

1. To examine the year wise research trend in Polypeptides Research,
2. To find out the RGR and Dt Value of Publication of Polypeptides
3. To investigate the RGR and Dt value of Journal Articles
4. To find out the RGR and Dt value of conference proceedings

METHODOLOGY

Research on polypeptides as a global perspective was also designed to track past trends in research on polypeptide research and supported sample data. This study assesses the growth of national literature in this area from 2001 to 2021, and thus its contribution to improving research productivity. Finally, relocate the unique data to Microsoft Office Excel format to avoid duplication of downloaded data. General data searched20242 publications, 10 duplicate publications deleted by researchers, and finally 19742 publications for analysis of this study.

RESULTS AND DISCUSSION

The research output analyzes on Polypeptides for twenty- five years from 2001 to 2021. Table1 is found that the very best productivity is recorded in 1995 with 767papers (4.48% of the entire papers at twenty-two years), followed by 756 (4.42%) of the publications in 1996. It's witnessed that the productivity of research ranges between about 3.49 % and 4.48% out of 14577 publications during the period of study. There has been a fluctuating trend shown within the research productivity from 2001 to 2021. (Figure-1)

Table –1 Year Wise Distribution of Polypeptides Research Output

Sl. No.	Year	No. of Publications	Percentage
1	2001	340	2.332
2	2002	374	2.565
3	2003	332	2.277
4	2004	321	2.336
5	2005	447	2.308
6	2006	489	2.281
7	2007	535	2.213
8	2008	584	2.226
9	2009	626	2.198
10	2010	711	2.171
11	2011	782	2.143
12	2012	796	2.118
13	2013	812	2.088
14	2014	861	2.061
15	2015	896	2.033
16	2016	902	2.006
17	2017	916	1.978
18	2018	936	1.951
19	2019	942	1.923
20	2020	984	1.896
21	2021	991	1.868
		14577	

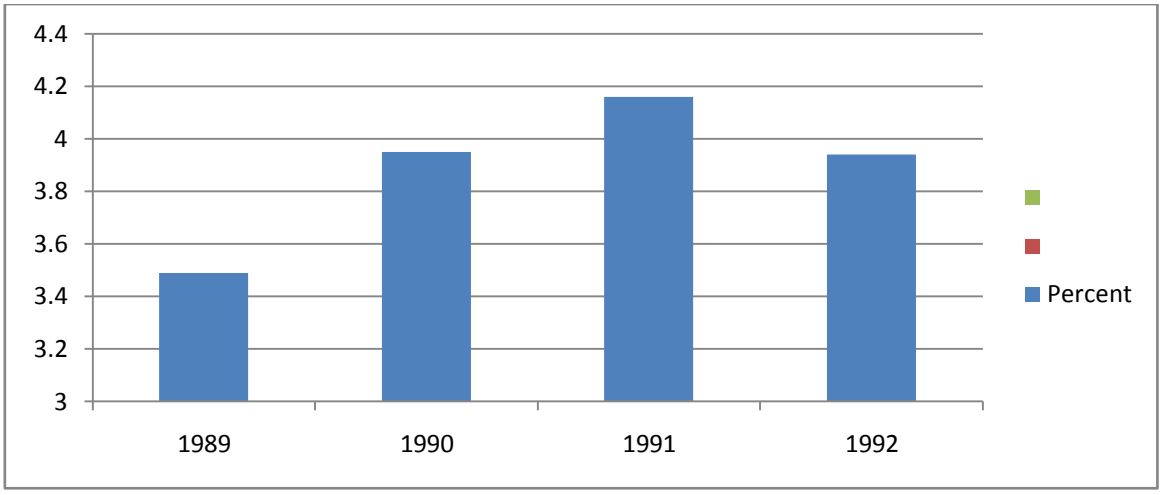

Figure 1 Year wise output of Polypeptides publications

This study aims to assess the research productivity of different countries and continents in the field of polypeptides. Using research publications from a variety of sources as benchmarks for measuring RGR, Table 2 shows the total Dt of polypeptide research results. Table 2 shows the published RGR and Dt in the research results of polypeptides in the worldwide literature during the research period.The lowest regional account for 2008, 2010 and 2012 was 0.04, but the regional account for 2014 increased to 0.75 in 1990, with an average regional account of 0.15. From the above discussion, it can be inferred that Dttended to increase from 0.95 to 17.33 and decrease from 13.86 in 2011. The averageDt was on the rise from 1.57 to 15.21, and the average dt was 8.89.

Table -2 Relative Growth Rate (RGR) and Doubling Time (Dt) of Polypeptides research

Sl. No.	Year	No. of Publications	W1	W2	W1-W2 R (a)	Doubling time
1	2001	340		5.82821	0	0
2	2002	374	5.82821	5.92423	-0.235	0.2398
3	2003	332	5.92423	6.02021	-0.903	0.001
4	2004	321	5.80521	5.77141	0.338	2.671
5	2005	447	5.82933	5.7595	0.306	3.4018
6	2006	489	5.82933	5.7305	0.593	4.6174
7	2007	535	5.81783	5.7015	0.88	5.833
8	2008	584	5.80633	5.6721	1.1672	7.0486
9	2009	626	5.79483	5.6435	1.454	8.2642
10	2010	711	5.79483	5.6145	1.74	9.4798
11	2011	782	5.78333	5.5855	2.027	10.6954
12	2012	796	5.77183	5.5565	2.314	11.911
13	2013	812	5.77183	5.5275	2.601	13.1266
14	2014	861	5.76033	5.4985	2.888	14.3422
15	2015	896	5.74883	5.4695	3.1754	15.5578
16	2016	902	5.73733	5.4405	3.462	16.7734
17	2017	916	5.72183	5.4115	3.749	17.989
18	2018	936	5.72183	5.3821	4.036	19.2046
19	2019	942	5.71433	5.3535	4.323	20.4202
20	2020	984	5.70283	5.3245	4.609	21.6358
21	2021	991	5.69133	5.2955	4.896	22.8514
		14577				

Table 3 shows that RGR and Dt, published by African scientists, contributed to the study of polypeptides. Average relative growth rate (RGR) from 0.08 to 0.15 and average Dt from 2037 to 9.70. Clearly, the average RGR showed the increasing and decreasing trends observed during the period. Also note that theDt value was found to be declining and increasing throughout the study period.

Table -3 Relative Growth Rate (RGR) and Doubling Time (Dt) ofPages

Sl. No.	Year	No. of Publications	Cumulative	W1	W2	W1-W2 R (a)	Doubling time
1	2001	7	7		1.94	0	0.00
2	2002	0	7	1.94	1.94	0.00	0.00
3	2003	3	10	1.94	2.30	0.36	1.93
4	2004	1	11	2.30	2.39	0.09	7.70
5	2005	4	15	2.39	2.70	0.31	2.24
6	2006	1	16	2.70	2.77	0.07	9.90
7	2007	3	19	2.77	2.94	0.17	4.08
8	2008	6	21	2.94	3.21	0.27	2.57
9	2009	2	27	3.21	3.29	0.08	8.66
10	2010	0	27	3.29	3.29	0.00	0.00
11	2011	4	31	3.29	3.43	0.14	4.95
12	2012	6	37	3.43	3.61	0.18	3.85
13	2013	6	43	3.61	3.76	0.15	4.62
14	2014	6	49	3.76	3.89	0.13	5.33
15	2015	3	52	3.89	3.95	0.06	11.55
16	2016	5	57	3.95	4.04	0.09	7.70
17	2017	5	62	4.04	4.12	0.08	8.66
18	2018	6	68	4.12	4.21	0.09	7.70
19	2019	6	74	4.21	4.30	0.09	7.70
20	2020	11	85	4.30	4.44	0.14	4.95
21	2021	8	93	4.44	4.53	0.09	7.70

The RGR and Dtof the Journal articles could be analyzed to reflect the increasing or decreasing trend of the study period. Table 4 shows that RGR and Dtare used in publications by scientists from Asian countries on polypeptide research. It is clear that relative growth rates have observed this fluctuating trend over the duration of the study. The relative growth rate was 0.64 in 1990 and 0.06 in 2013. The growth trend of doubling time (Dt) increased from 1.08 in 1990 to 11.55 in 2014. The averages of RGR and Dt were 0.13 and 7.24, respectively. It was observed that RGR and Dttended to increase and decrease throughout the study period

Table -4 Relative Growth Rate (RGR) and Doubling Time (Dt) Journal Articles

Sl. No.	YEAR	No. of Publications	Cumulative	W1	W2	W1-W2 R (a)	Doubling time
1	2001	117	117		4.76	0.00	0.00
2	2002	106	223	4.76	5.40	0.64	1.08
3	2003	115	338	5.40	5.82	0.42	1.65
4	2004	96	434	5.82	6.07	0.21	2.77
5	2005	132	566	6.07	6.33	0.26	2.67
6	2006	136	702	6.33	6.55	0.22	3.15
7	2007	123	821	6.55	6.71	0.16	4.33
8	2008	138	963	6.71	6.87	0.16	4.33
9	2009	159	1122	6.87	7.02	0.15	4.62
10	2010	145	1267	7.02	7.14	0.12	5.77

11	2011	163	1430	7.14	7.26	0.12	5.77
12	2012	146	1576	7.26	7.36	0.10	6.93
13	2013	146	1722	7.36	7.45	0.09	7.70
14	2014	143	1865	7.45	7.53	0.08	8.66
15	2015	107	1972	7.53	7.58	0.05	13.86
16	2016	136	2108	7.58	7.65	0.07	9.90
17	2017	173	2281	7.65	7.73	0.08	8.66
18	2018	166	2447	7.73	7.80	0.07	9.90
19	2019	154	2601	7.80	7.86	0.06	11.55
20	2021	192	2793	7.86	7.93	0.07	9.90
21	2021	174	2967	7.93	7.99	0.06	11.55

Table 5 analyzed RGR and Dt for polypeptide publications of the Conference Proceedings. It is clear that relative growth rates observed this fluctuating trend range between 0.04 and 0.28 during the study period. Doubling time (Dt) was a variable trend during the period. The averages of RGR and Dt were 0.14 and 8.16, respectively. From the above, it can be inferred that the relative growth rate during the survey period shows a fluctuating tendency. Doubling time tends to increase and decrease throughout the study period during the study period.

Table -5 Relative Growth Rate (RGR) and Doubling Time (Dt) Conference Proceedings

Sl. No.	Year	No. of Publications	Cumulative	W1	W2	W1-W2 R (a)	Doubling time
1	2001	182	182		5.20	0.00	0.00
2	2002	204	386	5.20	5.95	0.75	0.92
3	2003	205	591	5.95	6.38	0.43	1.61
4	2004	209	800	6.38	6.68	0.30	2.31
5	2005	263	1063	6.68	6.96	0.28	2.48
6	2006	265	1328	6.96	7.19	0.23	3.01
7	2007	292	1620	7.19	7.39	0.20	3.47
8	2008	317	1937	7.39	7.56	0.17	4.08
9	2009	301	2238	7.56	7.71	0.15	4.62
10	2010	315	2153	7.71	7.84	0.13	5.33
11	2011	350	2903	7.84	7.97	0.13	5.33
12	2012	212	3155	7.97	8.05	0.08	8.66
13	2013	316	3471	8.05	8.15	0.10	6.93
14	2014	310	3781	8.15	8.23	0.08	8.66
15	2015	264	4045	8.23	8.30	0.07	9.90
16	2016	322	4367	8.30	8.38	0.08	8.66
17	2017	300	4667	8.38	8.44	0.06	11.55
18	2018	283	4950	8.44	8.50	0.06	11.55
19	2019	284	5234	8.50	8.56	0.06	11.55
20	2021	273	5507	8.56	8.61	0.05	13.86
21	2021	281	5788	8.61	8.66	0.05	13.86

CONCLUSION

This study discussed research trends in polypeptide research publications during the period 2001-2021. The search string "polypeptide" was used in the article title search. The data range was from 1989 to 2013, and relevant data was collected only from the two subject areas in the Web of Science database. These are "life science" and "health science". In addition, "Life Sciences" covers source titles in agricultural and biological sciences, biochemistry, genetics and molecular biology, immunology and microbiology, neuroscience, pharmacology, toxicology and pharmacies, and interdisciplinary disciplines. doing. "Health Sciences" covers source titles in the fields of medicine, nursing, veterinary medicine, dentistry, medical professionals, and interdisciplinary fields. This study contains an analysis of studies published over 21 years from 1989 to 2013. In 1995, 767 jobs (4.48% of total jobs in 21 years) were found to be the most productive. Average relative growth rate (RGR) from 0.08 to 0.15 and averageDt from 2037 to 9.70. Clearly, the average RGR showed the increasing and decreasing trends observed during the period. It is clear that during the study period, this trend of relative growth was observed in the range of 0.04 to 0.28.

REFERENCES

- Elena P. Ivanova, KaterynaBazaka, Russell J. Crawford, (2014). Advanced synthetic polymer biomaterials derived from organic sources, Editor(s): Elena P. Ivanova, KaterynaBazaka, Russell J. Crawford, New Functional Biomaterials for Medicine and Healthcare, Woodhead Publishing,2014, PP. 71-99, https://doi.org/10.1533/9781782422662.71.
- Koenig M.E.D. A bibliometric analysis of pharmaceutical researchResearch Policy 1983; 12: 15–36.
- Schubert A, Zsindely S, Braun T. Scientometric indicators for evaluating the medical research output of mid-size countries. Scientometrics 1985; 7 ; 155-163.
- *Baskaran, C andSivakami, N(2014)Swine Influenza Research Output: A Bibliometric Analysis, SRELS Journal of Information Management,Vol.51 Issue 1, p13-20, http://www.srels.org/index.php/sjim/article/view/47191*
- *Baskaran,C. (2013)Scientometric Analysis of Cryptography Research Output, SRELS Journal of Information Management, Vol.50 Issue 4, p413-421.**http://www.srels.in/index.php/sjim/article/view/37422***
- Baskaran C. (2013) Research Growth Trend and Author Collaboration of Alagappa University in India during 1999-2011, International Journal of Library and Information Studies,Vol.3,Issue1,p57-64, https://www.ijlis.org/articles/research-growth-trend-and-author-collaboration-of-alagappa-university-in-india-during-19992011.pdf
- Baskaran C. (2016) A Scientometric study on Bioinformatics Literature during 1999-2013, International Journal of Library Science and Information Management (IJLSIM), Vol.2, Issue 4,p 62-71,
- Baskaran, C. (2015). Research productivity of enzymes literature: A Scientometric study. *International Journal of Library Science and Information Management (IJLSIM), 1*(2), 17-21.
- Baskaran, C.(2012) Research Productivity of Graph Theory during 2004-2011: a Bibliometric Study, SRELS journal of Information Management, Vol.49, Issue 6,p 683-691. http://www.srels.in/index.php/sjim/article/view/43933
- Baskaran C. and Ramesh Babu P. (2019). The substantial research on Quantitative analysis and Publications measure in Forensic Medicine. *Library Philosophy and Practice*, 1-17.https://digitalcommons.unl.edu/libphilprac/2145/
- Baskaran, C. (2018). Use of Social Networks (SNs) and Medias on Dissemination of Scholarly information among the Research Scholars in Alagappa University, Karaikudi, Tamil Nadu. *Journal of Advances in Library and Information Science*, *7*(3), 217-261.http://jalis.in/pdf/7-3/Baskaran.pdf
- Baskaran, C., &Karuilancheran, C. (2015). Activity Index and Lotka's Law Application with Diabetes and Allied Diseases in India during 1995–2013. *SRELS Journal of Information Management*, *52*(6), 423-431.http://52.172.152.24/index.php/sjim/article/view/83972
- Baskaran, C. (2014). Citations analysis on library and information science research: The quantitative approach from Web of Science. *SRELS Journal of Information Management*, *51*(3), 165-169.http://www.srels.in/index.php/sjim/article/view/50743
- Baskaran, C. (2013). Accessing pattern of Electronic Journals through UGC-INFONET by the faculty members and research scholars in Alagappa University: A Study. *Pearl: A Journal of Library and Information Science*, *7*(1), 31-37. https://www.indianjournals.com/ijor.aspx?target=ijor:pjolis&volume=7&issue=1&article=006
- Baskaran, C. (2018). Mapping of Bioremediation Research Output in India: A Scientometric Study. *Library Philosophy and Practice*, *2038*.https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5402&context=libphilprac
- Sivakami, N and Baskaran, C. (2016). Time series analysis of swine flu literature during 1991-2013. *International Journal of Library Science and Information Management*, *2*(1), 38-46. https://www.researchgate.net/publication/324537439
- Saravanan, S and Baskaran, C. (2019). Thirty Years of Global Literature on Bioleaching: A Scientometric Analysis. *Library Philosophy and Practice*, 1-17. https://digitalcommons.unl.edu/libphilprac/2230/

- Baskaran, C. (2018). Publication meant for highly quality research through LIS in India: The Special Reference to DESIDOC Journal of Library and Information Technology (DJLIT). *Library Philosophy and Practice*, 1-20.https://digitalcommons.unl.edu/libphilprac/2031/
- Ramesh Babu, P and Baskaran, C. (2017). Research Pattern on Forensic Medicine in Global Output: A Scientometric Analysis. *International Journal of Library Science and Information Management*, *3*(1), 53-64.https://www.researchgate.net/publication/324537543_
- Baskaran, C. (2020). Altmetrics research on the global output: A scientometric analysis. In *Measuring and Implementing Altmetrics in Library and Information Science Research* (pp. 62-73). IGI Global. https://www.igi-global.com/chapter/altmetrics-research-on-the-global-output/247745
- Baskaran, C. (2020). Altmetircs Research: An Impact and Tools. In *Measuring and Implementing Altmetrics in Library and Information Science Research* (pp. 1-10). IGI Global.https://www.igi-global.com/chapter/altmetircs-research/247735
- Baskaran, C. (2020). Research Patterns on the Social Networks and Media: A Scientometric Portrait. In *Handbook of research on emerging trends and technologies in library and information science* (pp. 189-207). IGI Global. https://www.igi-global.com/chapter/research-patterns-on-the-social-networks-and-media/241564
- Palanivel, K and Baskaran, C. (2018). Bibliometric Analysis of the Journal–Economic Affairs. *International Journal of Research in Library Science*, *4*(1), 7-15.https://www.researchgate.net/profile/Chinnasamy-Baskaran-2/publication/328215016_
- Murugiah, P and Baskaran, C. (2013). Assessment of Research Collaboration on Human DNA In Japan During 1990-2011. International Journal of Library and Information Studies, *3*, 2.p 9-16, https://www.researchgate.net/publication/324536941_
- Baskaran, C. (2020). Scientometric analysis of Publication trend on Information Management (IM). *Library Philosophy and Practice*, 1-15.https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=7794
- Radhakrishnan, S and Baskaran, C. (2020). Phytochemistry Literature: An Altmetrics Analysis. Library Philosophy and Practice (e-journal), p-112. https://digitalcommons.unl.edu/libphilprac/4048/
- Baskaran, C and Binu, P. C. (2020). The Faculty Members and Research Scholars Attain Academic and Research Thoughts by Accessing Electronic Information in the Universities of Kerala, India. *Library Philosophy and Practice*, 1-26.https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=7038
- Baskaran, C. (2020). Initiatives of an Institutional Repository (IR) of the Academic Institutions in the Indian Scenario: Prospects and Challenges. In *Handbook of Research on Emerging Trends and Technologies in Library and Information Science* (pp. 208-214). IGI Global. https://www.igi-global.com/chapter/initiatives-of-an-institutional-repository-ir-of-the-academic-institutions-in-the-indian-scenario/241565
- Radhakrishnan, S., &Baskaran, C. (2019). Authorship Productivity and Applicability of Lotka's Law in Phytochemistry Literature, Library Philosophy and Practice (e-journal). 3618,https://digitalcommons.unl.edu/libphilprac/3618/
- Baskaran, C., &Babu, P. R. (2019). Activity Index and Author Exponential Growth on Forensic Medicine. Journal of Social Sciences, p19-28. https://thescipub.com/abstract/10.3844/jssp.2019.17.28
- Baskaran, C. (2018). Citations impact of the faculties in Alagappa University, Karaikudi, Tamil Nadu. *Pearl: A Journal of Library and Information Science*, *12*(3), 300-309.https://www.indianjournals.com/ijor.aspx?target=ijor:pjolis&volume=12&issue=3&article=013
- Baskaran, C and Rameshbabu, P. (2018). Publication Pattern and Research Colloboration of Forensic Medicine During 1989-2016.8(1), IJLIS,105-115.https://www.ijlis.org/articles/publication-pattern-and-research-colloboration-of-forensic-medincine-during-19892016.pdf
- Radhakrishnan.Sand Baskaran C. (2018) Journal of Solar Energy Engineering, Transactions of the ASME : A Scientometric Analysis, Journal of Advances in Library and Information Vol. 7. No.1. Pp.103-108, file:///C:/Users/student/Downloads/64.pdf
- Murugiah, P and Baskaran, C. (2014) Status of Human DNA Research in the United States of America: A Scientometric Analysis, Journal of Advances in Library and Information Science, Vol. 3. No.4. Pp328-334. http://jalis.in/pdf/pdf3-4/Murugiah.pdf
- Sivakami, N and Baskaran, C. (2014). A Scientometric Analysis Of Research Productivity In Wine Flu Disease. International Journal of Library and Information Studies,4(4).https://www.ijlis.org/articles/a-scientometric-analysis-of-research-productivity-in-wine-flu-disease.pdf
- Baskaran, C. (2013). Research growth trend and author collaboration of Alagappa University in India during 1999-2011. *International Journal of Library and Information Studies*, *3*(1), 57-64.https://www.researchgate.net/publication/324537117_
- Veeramuthu, P and Baskaran, C. (2018). Scientometric Analysis Of The Journal "Nature Biotechnology". "Knowledge Librarian" An International Peer Reviewed Bilingual E-Journal of Library and Information Science Volume: 05, Issue: 02, 217-228https://www.researchgate.net/publication/328215023_
- Senthil Kumar P.A and Baskaran, C. (2018)Scientometric Analysis of Synthetic Fiber Literature. Library Philosophy and Practice (e-journal).pp1-11, https://core.ac.uk/download/pdf/220153043.pdf
- Krishnan, P and Baskaran, C. (2018) Scientometric Analysis of the Journal "Green Chemistry". International Journal of Research in Library Science, 4(1), 16-24.

- Baskaran C. (2013) Research Growth Trend and Author Collaboration of Alagappa University in India during 1999-2011, International Journal of Library and Information Studies, .3 (1), 57-64, https://www.ijlis.org/articles/research-growth-trend-and-author-collaboration-of-alagappa-university-in-india-during-19992011.
- Baskaran C. (2013). Research growth trend and author collaboration of Alagappa University in India during 1999-2011. International Journal of Library and Information Studies, 3(1),57-64. https://www.ijlis.org/articles/research-growth-trend-and-author-collaboration-of-alagappa-university-in-india-during-19992011.pdf
- Baskaran C. (2016). A Scientometric study on Bioinformatics literature during 1999-2013. International Journal of Library Science and Information Management(IJLSIM), 2(4),62-71.
- Baskaran C. (2015). Research productivity of enzymes literature: A Scientometric study, International Journal of Library Science and Information Management(IJLSIM),1(2),17-21.
- Baskaran C. (2012). Research productivity of Graph theory during 2004-2011: A Bibliometric study, SRELS journal of Information Management,49(6),683-691. http://www.srels.in/index.php/sjim/article/view/43933
- Baskaran C and Karuilancheran C. (2015). Activity Index and Lotka's Law Application with Diabetes and Allied Diseases in India During 1995–2013, SRELS Journal of Information Management, 52(6). http://www.informaticsjournals.com/index.php/srels/article/view/3298