Publication Pattern of Tezpur University

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Introduction



The publishing pattern in research <u>serves as a backbone</u> within the academic community, facilitating the dissemination of <u>new knowledge and discoveries</u>, <u>establishing scholarly</u> <u>reputation</u>, and <u>tracking research impact and productivity</u>.

The present study helps in identifying <u>top faculty members</u>, <u>analyzing departmental productivity</u>, and <u>examining</u> <u>publication distribution</u>.

Objective of the Study



To find the highly cited publications with respect to author



To determine top 10 faculty members based on publications and citations.



To analyze most productive departments based on the number of publications.



To find the distribution of research publications with respect to departments.

Methodology



The study involved data collection from two primary sources:

- 1. Tezpur University IRINS Faculty Profile (https://tezu.irins.org/)
- Web of Science database.

The collected data from both sources were then meticulously organized and analyzed using MS Excel.

Similar Works/ Research

- Sevukan et al., (2024) conducted a study that focuses on analyzing research output in plant sciences by faculty members in central universities of India using bibliometric methods. A total of 348 bibliographic records from ISI Science Citation Index Extended (SCIE) spanning the years 1997 to 2006 were analyzed. Results indicate that the literature in plant sciences has grown steadily over the study period, with articles being the predominant publication type. Collaboration in plant sciences research among central universities is found to be significant.
- ➤ Bansode & Khot, (2022) proposed a study analyzing the publishing patterns of faculty members at Shivaji University, Kolhapur, department-wise from 2015 to 2019. The primary objectives include examining the publication patterns of faculty members, departments, and their scholarly publications along with citations. Research articles in journals emerge as the most prominent form of research output during the study period, followed by conference proceedings publications and miscellaneous categories.

Similar Works/ Research

Palasubramani et al., (2019) study focused on 15 instances of academic and research organizations, examining faculty members, departments, scholarly publications, citations, and impact. Findings highlighted KL University, Guntur, for having the highest number of faculty members, while the Indian Institute of Technology, Madras, received the most citations from Scopus and Crossref, indicating significant scholarly impact. IRINS facilitates institutions in effectively highlighting research achievements and contributing to knowledge advancement in their respective fields.

Overview - Data Analysis and Findings

The scholarly resources provided <u>encompass 6,879 publications</u>, including <u>4,724 journal articles</u> and <u>1,200 conference proceedings</u>, reflecting the institution's commitment to knowledge dissemination and academic excellence.

Tezpur University's impact is underscored by an impressive <u>citation count of 1,54,490,536</u>, indicative of the significant influence and recognition garnered by its faculty's contributions to the academic community.

Highly Cited Publications - Data Analysis and Findings

Notable papers include -

- Network Anomaly Detection: Methods, Systems and Tools by Bhuyan et al.
- A Green and Facile Approach for the Synthesis of Water Soluble Fluorescent Carbon Dots from Banana Juice by De and Karak.
- Recent Trends in the Pretreatment of Lignocellulosic Biomass for Value-Added Products by Baruah et al.

The data also highlights collaborative efforts between **Tezpur University** and other institutions such as the **University of Electro-Communications** in Japan and Nanyang Technological University in Singapore.

Productive Authors - Data Analysis and Findings

The top 10 authors from Tezpur University in Web of Science are as follows that had made significant contributions to their respective fields.

- 1. Prof. Niranjan Karak, Department of Chemical Sciences (268 publications, 9,313 Citation, H-index: 51).
- 2. Prof. Ramesh Deka, Department of Chemical Sciences (219 publications and 4,108 citations).
- **3. Prof. Ashis K. Mukherjee**, Department of Molecular Biology and Biotechnology (133 publications and 3,915 citations).

Most Productive Department -Data Analysis and Findings

Followings are the most productive departments having higher scholarly footprints -

- Department of Chemical Sciences (Publication 1184, Scopus Citations of 23,202 and Crossref 2507, and H-index of 63)
- Department of Electronics and Communication Engineering (Publications 770).

Other departments such as *Law* and *Education* exhibit lower publication counts and citation metrics.

Distribution of Publications - Data Analysis and Findings

Name of Department	Journal articles	Conference proceedings	Book chapters	Books	Others
Applied Sceinces	19	2	5	0	5
Assamese	16	1	7	1	2
Business Administration	31	4	5		9
Central Library	8	8	3	1	5
Chemical Sciences	1124	25	74		72
Civil Engineering	46	19	7	1	1
Commerce	32	1	1		
Computer Science and Engineering	4	13	1	0	
Cultural Studies	28	1	30	1	4
Department of Assamese	8				
Education	13		7	1	
Electrical Engineering	30	25	3		1
Electronics and Communication Engineering	373	376	36	0	23
Energy	295	103	77	0	44
English	54	6	30	7	8
English and Foreign Languages	10		3	1	1
Environmental Science	330	8	30	0	37
Food Engineering and Technology	425	1	43	8	48
Hindi	0	0	0	0	0
Law	1	0	0	0	0
Mass Communication and Journalism	21	3	4	1	0
Mathematical Sciences	266	12	3	2	4
Mechanical Engineering	188	139	62	7	10
Molecular Biology and Biotechnology	515	21	39	7	113
Physics	749	99	26	0	26
Research Insitute for Ubiquitous Energy Devices	69	2	8	0	9
Social Work	5	0	2	0	4
Sociology	20	0	26	5	6

CONCLUSION



In conclusion, IRINS stands as a pivotal tool for fostering collaboration and scholarly networking within the academic and R&D community which seamless integration with existing research management systems and support for academic identities ensure widespread access to scholarly publications, promoting transparency and accountability in research evaluation.



By recognizing the top faculty members, analyzing departmental productivity, and assessing publication distribution, this study sheds light on the diverse scholarly landscape, emphasizing the importance of data-driven approaches in understanding and enhancing scholarly contributions.



Overall, IRINS and the insights gained from publishing patterns contribute significantly to the promotion of academic excellence and innovation within the global research community.

