Chapter 6

Findings and Suggestions
CHAPTER 6

FINDINGS AND SUGGESTIONS

1. Research output of the universities under study in scientific literature is increasing every year in an average of 303 papers per year (Table 1).

2. University of Delhi is the most productive university (7,031) in scientific research followed by Banaras Hindu University (3,834) and Aligarh Muslim University (2,087).

3. Article is the most popular form of publication (16317, 85.20%) among the authors of universities under study followed by conference papers (1413, 7.37%) and reviews (807, 4.21%) (Table 2).

4. JNU and DU has highest inter-university collaboration in Scientific research (1,273) followed by DU and JMI (205). It was also found that BHU and JMI has no collaboration and AMU and AU has only one collaboration (Table 3).

5. Trends in collaboration in research indicate that all central universities collaborate with totally different institutes. Exceptions are Indian Institute of Technology, Inter University Accelerator Centre India and Bhabha Atomic Research Centre (Table 4).

6. The study indicates that out of the top ten most preferred periodicals authors from AMU, AU and BHU preferred to contribute articles both nationally and internationally, whereas authors from DU, JMI and JNU preferred periodicals of foreign origin.

7. The study shows, Physics and Astronomy(3,302) are the most productive research fields during the period of study followed by Biochemistry, Genetics and Molecular Biology (3,257) and Chemistry (3,100).
8. The study found that in AMU Kabir-ur-Din (115), Deptt. of Chemistry, in AU Lallan D.S Yadav (52), Deptt. of Chemistry, in BHU, Anil Kumar Singh (144), Deptt. of Chemistry, in DU Vasudha Bahatnagar (130), Deptt. of Computer Science, in JMI, Shakil Ahmad (97), Deptt. of Chemistry and in JNU, Ramasare Prasad (50) School of Life Sciences have produced maximum number of articles (Table 7).

9. Results indicate that in AMU, Mumtaz Ahmad Quraishi (859), in AU, Vineet Kumar Singh (545), in BHU, Shayam N. Sundar (3581), in DU, R.K. Shivpuri (1204), in JMI Zaheer Abbas Khan (64) and in JNU, Ramakrishna C. Ramaswamy (901) are the most cited authors (Table 7).

10. In AMU, Mumtaz Ahmad Quraishi has maximum h-index (15), in AU, Vineet Kumar Singh (14), in BHU, Shyam and Sunder (34), in DU, R.K. Shipuri (19) and in JMI Anwar Ali (15) and in JNU Ramkrishan C. Ramaswamy (15) (Table 7).

11. The most prolific author in all six central universities is Anil Kumar Singh (144), Dept. of Chemistry, University of Delhi and the most cited author is Shyam N. Sundar (3581) and also has maximum h-index (34), Kalaazar Medical Research Centre, Banaras Hindu University.

Tenability of Hypothesis

The tenability of types can be checked in the light of above findings.

Hypothesis I

There is a constant growth in the scientific publications of all the central universities of all the central universities under the study.

Table 1 indicates that there is a constant growth in scientific publication, increasing every year in an average 303 papers per year. So, this hypothesis proved to be true.
Findings and Suggestions

Hypothesis II

University of Delhi has more scientific productivity in comparison with other central universities.

Table 1 shows that University of Delhi (7031) is the most productive university followed by Banaras Hindu University (3834) and Aligarh Muslim University (2087). This support truthfulness of hypothesis.

Hypothesis III

Article in the most popular form of communication among faculty members of the universities under study.

It is clear from the results (Table 2) article is the most popular form of communication (16317, 85.20%) in compare to other forms, among faculty members of the universities under study. Thus the hypothesis proved to be true.

Suggestions

1. With the exception of BHU, none of the universities in this study is currently accredited by National Assessment and Accreditation Council (NAAC). To improve the quality of scientific productivity of faculty members in central universities, the universities should invite NAAC to measure their performance.

2. h-Index of most of the faculty member are low. It can be suggested that the faculty members should concentrated on quality of publications rather than quantity.

3. Universities should encourage faculty members by giving incentives based on their research output.

4. An enabling environment should be provided in the universities for more research oriented activities.
5. The Government should extend more funds to the universities for the purpose of fostering research activities.

**Recommendations for Further Study**

1. Similar type of study may be conducted among all the central universities in the country to know scientific productivity of faculty members.

2. A study also be conducted among some prominent state universities to compare their research output.

3. To get more vivid picture of scientific productivity of centrally funded academic institutions, a comparative study could be conducted among central universities and Indian Institute of Technology (IITs) and Indian Institute of Management (IIMs).