

Journal of Electrical Engineering & Electronic Technology : A Scientometric Analysis

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Abstract:

According to, a journal, academic in nature which is published using the World Wide Web, such a journal usually uses internet technology refereeing of papers. Many e- journals pride themselves on rapid refereeing and consequent rapid publication. (Gupta, 1998); According to “A publication in any Medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely.” (Yogendra Singh, 2000); E- Journals defined as the grouping of information that is sent out in electronic form with some regularity,. It covers any serial or serial like publication available in electronic format, which is produced published and distributed electronically.

Keyword: Electrical Engineering, Scientometric, Bibliometric, Authorship, Analysis, etc

Information:-

The term was introduced and came into prominence with the finding of a journal named scientometric by T. Braulin in 1977. Scientometric is a part of the sociology of science and has application to science and has application to science policy making. Originally published in Hungary and currently from Amsterdam scope of journal to publish all those studies of quantitative aspect of science as discipline or economic activity. It involves quantitative studies activates among other publication and so overlaps with a bibliometric to some extent. Scientometric is a branch of science. According to Bankapur, M.B. and Kumbar M. “Scientometrics is a more general than bibliometrics. It is interesting to know, that both disciplines have a large overlap. It is surprising to learn certain comments stating that scientometrics, using bibliometric techniques is a part of bibliometrics.” Scientometrics has been traditionally concerned with the analysis of the “information” parameters of science, such as of paper, patents, journals, laws of ageing and dissimilation of scientific information, citation process etc.

Objectives of the studies

The main objective of the present studies issue follows -

- 1) To Find Distribution of contributions (volume wise).
- 2) To Find Authorship Pattern of Contributions
- 3) To Find Authorship Pattern of Contributions (ISSUE wise)
- 4) To Find Contribution (Institution –wise)
- 5) To Find The Geographical distribution of contribution International level is shown.
- 6) To Find Average Citation per contribution in each volume
- 7) Average Page (per volume and per contribution) contribution.

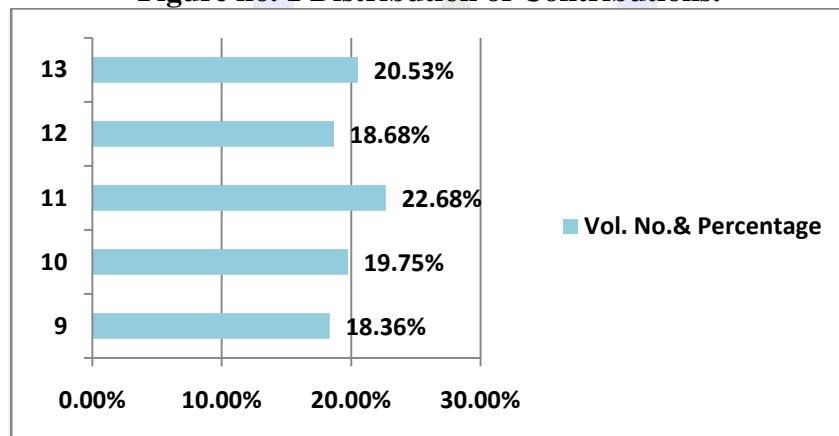
Distribution of contributions (volume wise) .

The distribution of contributions is shown in table No.1

Table No.1 Distribution of Contributions

| Year | Vol. No. | No. of Issue | No. of Contribution | Percentage |
|--------------|----------|--------------|---------------------|-------------|
| 2014 | 9 | 12 | 119 | 18.36% |
| 2015 | 10 | 12 | 128 | 19.75% |
| 2016 | 11 | 12 | 147 | 22.68% |
| 2017 | 12 | 12 | 121 | 18.68% |
| 2018 | 13 | 12 | 133 | 20.53% |
| TOTAL | | 60 | 648 | 100% |

Figure no. 1 Distribution of Contributions.



(Source: Table No. 1)

Table No. 1 & Figure No. 1 depicts the details regarding the number of Articles published during 2014-2018 which was 648 and the year wise analysis of the contribution shows that average number of per year contribution is maximum i.e. 147 (22.68) in the year 2016.

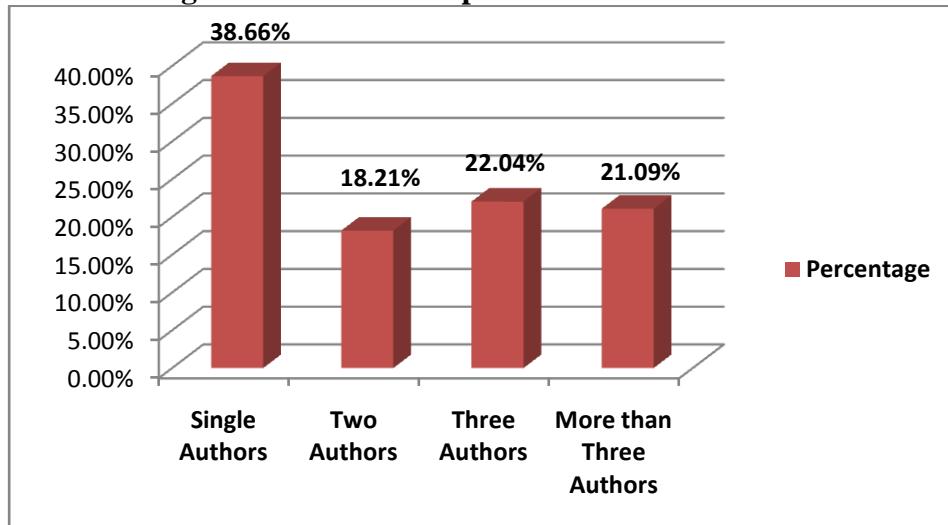
Authorship Pattern of Contributions

The authorship pattern of contributions is for shown in Table No.2.

Table No. 2 Authorship Pattern of Contribution.

| No. of Authors | No. of Contribution | Total No. of Authorship | Percentage |
|--------------------------------|---------------------|-------------------------|----------------|
| Single Authors | 416 | 416 | 38.66% |
| Two Authors | 98 | 196 | 18.21% |
| Three Authors | 79 | 237 | 22.04% |
| More than Three Authors | 55 | 227 | 21.09% |
| TOTAL | 348 | 1076 | 100.00% |

Figure No.2 Authorship Pattern of Contribution



(Source: Table No. 1)

Table No. 2 & Figure No. 2 Indicates that the details about the authorship pattern 348 articles (38.36%) out of 416 articles have been contributed by Single author who is followed by more than Three Authors 55 (21.09%), 98 articles (18.21%) by two authors and 79 articles, (22.04%) by three authors. Where “Hypothesis No. 1 is valid **“Majority of the contributions are contributed by Single Author”**.

Authorship Pattern of Contributions (Volume wise)

The authorship pattern of contributions is revealed in table in 3 given below.

Table No.3 Authorship Pattern of Contribution (Volume-wise)

| Vol. No | Single Author | Two Author | Three Author | More than Three Authors | Total |
|--------------|---------------|------------|--------------|-------------------------|------------|
| 9 | 89 | 27 | 0 | 3 | 119 |
| 10 | 78 | 11 | 9 | 30 | 128 |
| 11 | 101 | 20 | 26 | 0 | 147 |
| 12 | 66 | 19 | 33 | 3 | 121 |
| 13 | 82 | 21 | 11 | 19 | 133 |
| Total | 416 | 98 | 79 | 55 | 648 |

Figure No.3 Authorship Pattern of Contribution (Volume-wise)

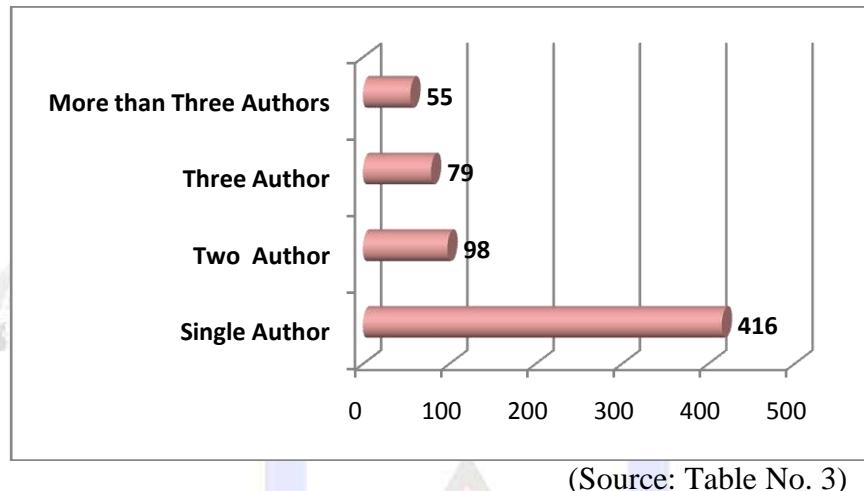


Table No.3 and Fig No. 3 Shows the authorship pattern of contributions volume-wise regarding contributions by a single author records the highest contributions (416), However the two author contributions, (98) shows the three author contributions (79), the more than three author contributions (55), reflects the maximum percentage.

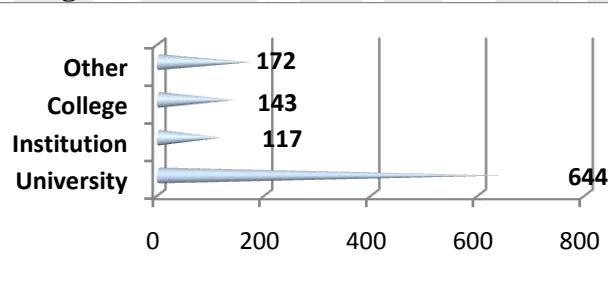
Contribution (Institution -wise)

Contribution is displayed in the table no.4.

Table No.4 Institution wise contribution

| Vol. No | Year | University | Institution | College | Other | Total |
|--------------|------|------------|-------------|------------|------------|-------------|
| 9 | 2014 | 219 | 0 | 37 | 0 | 256 |
| 10 | 2015 | 102 | 33 | 12 | 52 | 199 |
| 11 | 2016 | 148 | 19 | 42 | 35 | 244 |
| 12 | 2017 | 115 | 46 | 25 | 69 | 255 |
| 13 | 2018 | 60 | 19 | 27 | 16 | 122 |
| Total | | 644 | 117 | 143 | 172 | 1076 |

Figure no. 4 Institution wise contribution



(Source: Table No.4)

Table No. 4 & Fig No. 4 depicts the geographical distribution of contributions, University wise at the national level followed by institutions and colleges. It is inferred from the above table that university – wise contribution maximum is 1076 contributions were 644 contribution and College and Intuition contribution was 143 & 117 contributions & lastly others 172 contribution. **Hypothesis No.2 hence i.e. maximum number of contribution is at university level.**

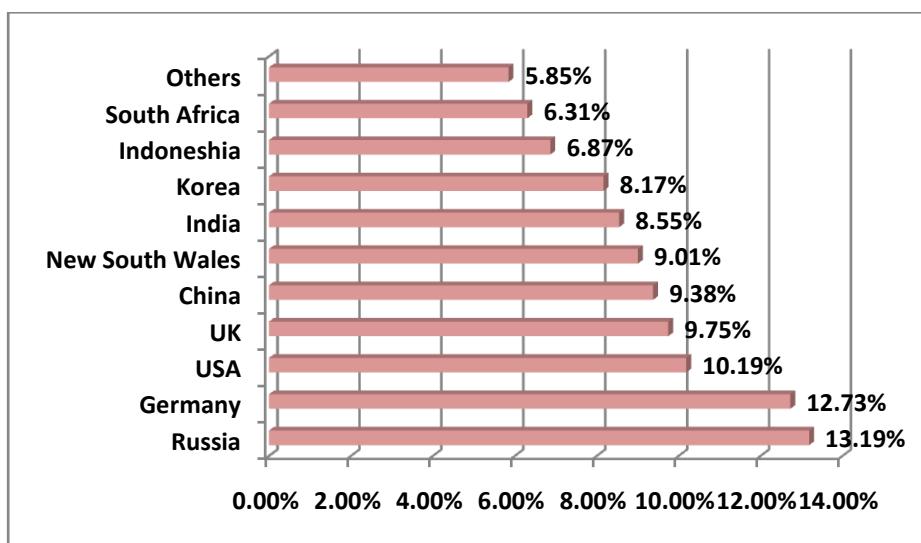
The Geographical distribution of contribution International level.

Geographical distribution of contribution International level follows as:

Table No.5 Geographical distribution of contribution in International level.

| Sr. No | Name of State | No. of Contribution | Percentage |
|--------------|-----------------|---------------------|-------------|
| 1 | Russia | 142 | 13.19% |
| 2 | Germany | 137 | 12.73% |
| 3 | USA | 109 | 10.19% |
| 4 | UK | 105 | 9.75% |
| 5 | China | 101 | 9.38% |
| 6 | New South Wales | 97 | 9.01% |
| 7 | India | 92 | 8.55% |
| 8 | Korea | 88 | 8.17% |
| 9 | Indonesia | 74 | 6.87% |
| 10 | South Africa | 68 | 6.31% |
| 11 | Others | 63 | 5.85% |
| TOTAL | | 1076 | 100% |

Figure no. 5 Geographical distribution of contribution in International level.



(Source: Table No.5)

Table No. 5 & Fig No. 5 shows the geographical distributions of contributions at International level USA is Maximum percentage (13.19%), and minimum Percentage of Others is (5.85%).

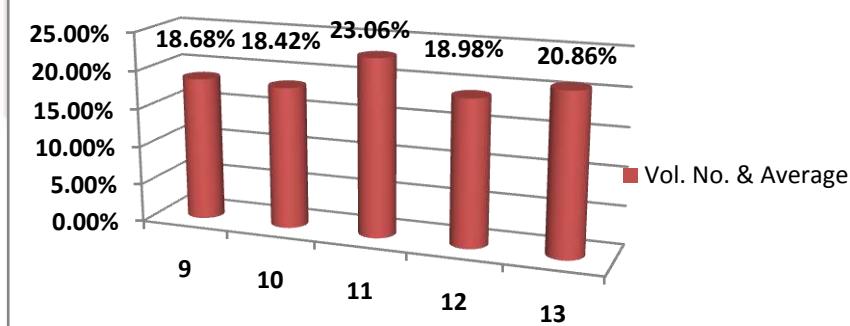
Average Citation per contribution in each volume

The average citation per contribution in each volume in showed in

Table No.6 Average Citation per contribution in each volume.

| Vol. No | No. of Contribution | No. of Citation | Average |
|--------------|---------------------|-----------------|-------------|
| 9 | 119 | 1429 | 18.68% |
| 10 | 128 | 1408 | 18.42% |
| 11 | 147 | 1764 | 23.06% |
| 12 | 121 | 1452 | 18.98% |
| 13 | 133 | 1596 | 20.86% |
| TOTAL | 648 | 7649 | 100% |

Figure no. 6 Average Citation per contribution in each volume.



(Source: Table No.6)

Table No. 6 & Fig No.6 it can be observed for average citation per contribution in each volume. Vol.No. 13 (20.86%) contributed 1596 citation, contributions of which highest numbers of citation appeared in vol. No.11 (23.06%) 1764 citation & contribution of which minimum number of citation appeared Vol.No.10 (18.42%) contributed 1408 citation.

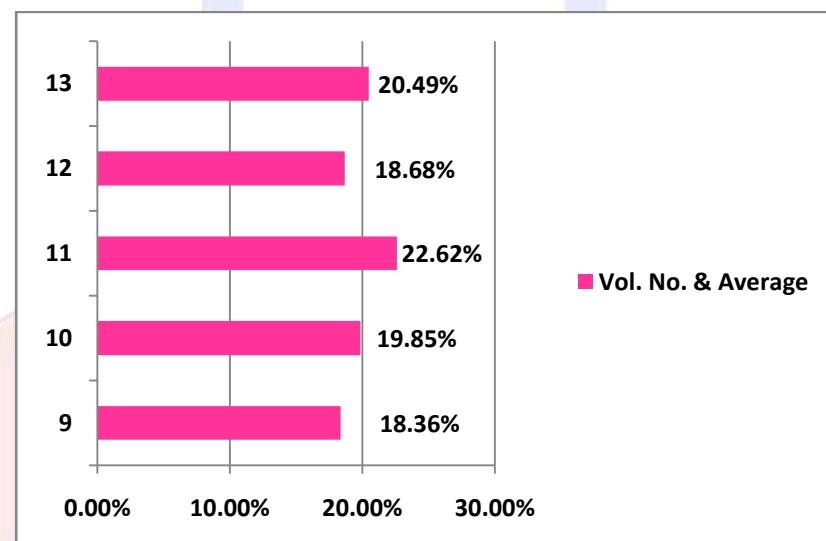
Average Page (Per volume and per contribution) contribution

Average Page (Per volume and per contribution) contribution in each volume in showed in

Table No.7 Average Page (per volume and per contribution) contribution.

| Vol. No | No. of Contribution | No. of Pages | Average |
|--------------|---------------------|--------------|-------------|
| 9 | 119 | 595 | 18.36% |
| 10 | 128 | 644 | 19.85% |
| 11 | 147 | 734 | 22.62% |
| 12 | 121 | 606 | 18.68% |
| 13 | 133 | 665 | 20.49% |
| Total | 648 | 3244 | 100% |

Figure no. 7 Average Page (per volume and per contribution) contribution.



(Source: Table No.7)

Table No. 7 & Fig No.7 it can be observed for average pages per contribution in each volume. Vol. No. 13 (20.49%) contributed 665 pages. contributions of which highest numbers of pages appeared in Vol. no.11 (22.62%) 734 & contribution of which minimum number of citation appeared in Vol.no.9 (18.36%) 595.

Conclusion:

Bibliometrics is relatively new subject of information. It help to evaluate information centers by the quantitative analyzed information. It deals with the mathematical and statistical analysis. Journal of Electrical Engineering & Electronic Technology is by monthly published in the year. It was founded by Prof. Jason Bob 2006 in USA. ISSN: 1021-2312. The Present study is based on 5 Volumes, 60 issues of Journal of Electrical Engineering & Electronic Technology during 2014-2018. A Scientometric analysis is the technique these online downloaded journals are presented in a manner corresponding to objectives of the study.

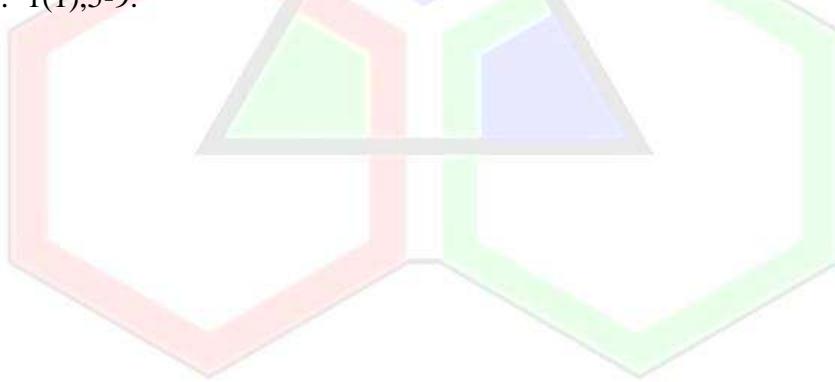
Suggestions:-

The research scholars citing the work of other author should cite details of the journal volume numbers, issue numbers, year of publication, authorship pattern, Geographical details, place of publication, Bibliographical details. Citation analysis of help the libraries to subscribe useful

journals, find out care journal and handle whole library with maintaining standard. It also help research scholars to selects the document which gives the current information of related subject of their studies.

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