

## Indexing of Indian Journals in SCImago Citation Database: A Decadal Study (2005-2014)

Shivendra Singh\* and Ramesh Pandita\*\*

*\*Baba Farid University of Health Sciences, Faridkot, Punjab - 151 203  
E-mail: shiv.mail@gmail.com*

*\*\*BGSB University, Rajouri, Jammu & Kashmir, India - 185 131  
E-mail: rameshpandita90@gmail.com*

### ABSTRACT

The present study seeks to examine the growth of Indian research journals indexed by SCImago Journal and Country Ranking, based on SCOPUS data sources. The study covers the period 2005-2014. Some of the key aspects projected in the study includes, the distribution of Indian research journals indexed by SCOPUS during the last decade, annual corresponding growth of journals indexed, subject wise distribution of Indian journals indexed, India's share percentage of journals indexed by SCOPUS both at the continental and the global level. The study also examines the distribution of journals and their growth at the subject level. From the analysis, it emerged that India is the 6<sup>th</sup> largest country to have maximum (452) journals indexed by the SCImago citation index. Of the total journals indexed by SCOPUS 1.97% are from India. The overall indexing of Indian journals during the decade has recorded a growth of 131.79%, but the number is very abysmal, when compared to the number of journals indexed from other smaller European countries. At the continental level (Asia), 16.95% journals indexed are from India.

**Keywords:** Research journals, indexing, citation index, SCOPUS, SCImago, India

### 1. INTRODUCTION

India is one of the fastest growing economies in the world<sup>1</sup>. Post 1990 India has seen expansion in almost all the spheres of human activity and research is one of the areas, which received flip, following some liberal funding earmarked for the research all across the country by the government of India during each successive financial year. India's contribution to the global research output gets assessed from the fact that a total of 20625 research articles were published by the Indian researchers in the SCImago indexed research journals during the year 1996, which constituted 1.91% of the total global research output of 1996 and in terms of research output the country was placed as the 13<sup>th</sup> largest research country in the world. Of the total 2984578 research articles published in the SCImago indexed journals during the year 2014, India contributed as many as 114449 research articles, which constitutes 3.83% of the total global research output, resulted India to become the 6<sup>th</sup> largest research country in the world. If we look at the gross research contribution of India to the global research output during the last 16 years, then, of the total 36837345 research articles published all across the globe in SCImago indexed journals, Indian researchers have contributed as many as 998544 research articles, which constitutes meager 0.29% of the total global research output, making Indian as the 9<sup>th</sup> largest contributor of the global research output. During the last 16 years Indian has recorded 116% growth in its

research ranking, however, given its overall contribution, the country is ranked at 9<sup>th</sup> place<sup>2</sup>.

The present study is an attempt to undertake the assessment of Indian research journals indexed by the SCOPUS citation index. SCOPUS is one of most popular citation indexes among the academic, research & the scientific community across the world. The database as on date has more than 22000 journals indexed with it<sup>3</sup>, while as its nearest rival Web of Science has around 13000 journals in its index<sup>4</sup>. The SCOPUS database titles include, book series, conference proceedings and journal titles.

### 2. REVIEW OF LITERATURE

Periodicals or Journals are the age old, but the most effective mechanism which validates the research results and are crucial for the growth of disciplines<sup>5</sup>. There is a considerable difference in the quality of research journals published these days across India, to that of the journals published a decade or so earlier. Indian journals suffered in their quality for decades, especially when the comparison is drawn between the research journals published from India to that of journals published from other European countries<sup>6</sup>. But, the way, the Indian IT industry has made its presence felt on the global scene, the Indian publishers have started switching over to the contemporary methods of publishing.

Indexing of journals with the leading citation indexes has somewhere become imperative to increase the visibility

of both the journals and the research results published in these journals. The research growth in the field of chemistry at global level witnessed a sharp surge in the introduction of new journals from 1967-76<sup>7</sup>. While studying the indexing of Indian Science and technology journals in the SCI for the period 1975-88. Sen & Lakshmi<sup>8</sup>, found the coverage quite discouraging. The researchers found that the scientific journals published from India are not generally covered as they do not fulfill the basic criteria for inclusion in the indexing service. The researchers were also of the view that a slight improvement in the publishing quality of these journals can definitely help them find a place in the indexing service.

Medicine is one of the leading research subjects in India, as more than half the medical literature produced in the third world countries come from India alone, Sahni *et al.*,<sup>9</sup> but out of 113 journals published in the field of Medicine only 22 were indexed with Index Medicus. The researchers found that, of the total literature produced in the field of medical science by the medicos of India more than 98% articles probably go unnoticed by the international medical community. The study highlighted the need for undertaking quality research and indexing of quality journals in the popular indexing services for greater visibility.

The Indexing state of Indian social science periodicals with the social science indexing services is also not that encouraging. Parvathaama<sup>10</sup> while studying the databases like Socfile, EconLIT, LISA and PsyLit found that of the total journals published in the subject fields of Sociology, Economics, Library and Information Science and Psychology only 9.2% were indexed with these databases. Satish<sup>11</sup>, the coverage of Indian literature by the sociological and international political science abstracting services produced in the periodicals of social sciences published across India was not also that encouraging. To study the impact factor of journals Solari & Magri<sup>12</sup> undertook the analysis of 4779 journals, indexed by the Institute for Scientific Information (ISI). Open access journals are increasingly becoming popular among the scientific community. More than 4200 open access journals are indexed with the SCOPUS database<sup>13</sup>.

### 3. OBJECTIVES

1. Assess the growth of research journals indexed by SCOPUS citation index during the last decade viz., for the period 2005-14.
2. Reflect the percentage share of Indian journals indexed by SCOPUS, both at continental and the global level.
3. Assess the subject wise distribution, growth and share percentage of Indian journals indexed by SCOPUS.

### 4. METHODOLOGY

To undertake the present study, data were retrieved

from the official website of SCImago Journal and Country Ranking on March 31, 2016 at 1459 hrs IST. The data can be viewed, downloaded or cross checked at ([http://www.scimagojr.com/countryrank.php?area=0&category=0&region=all&year=all&order=it&min=0&min\\_type=it](http://www.scimagojr.com/countryrank.php?area=0&category=0&region=all&year=all&order=it&min=0&min_type=it)). Keeping in view the objectives of the study, the data was put to structuration, as the data upon retrieval was in semi-structured form. In Table 2 some subject fields have been merged together, like Psychology has been merged with Social Sciences. Similarly subject areas like, Dentistry, Health Profession, Immunology & Microbiology, Neuroscience, Nursing, Pharmacology, Toxicology & Pharmaceuticals have been merged with Medicine. Also, Biochemistry, Genetics and Molecular Biology have been merged with Agriculture and Biological sciences.

### 4.1 Limitations

The titles indexed by the SCOPUS database comprises of the book series, conference proceedings and journal titles. But, since more than 96% indexed titles are journals as such, the analysis at all the places, under all the tables has been undertaken by presuming all the titles as journals, and hence in the entire paper discussion lasts around journals. Compared to 452 journals reflected in Table-1 and Table-2, 641 journal titles stand reflected as 189 titles have been repeated under different subject fields for being multidisciplinary in nature. Besides, it was practically impossible to work out the repeated titles; even so it was further difficult to put them under a particular subject field. So to avoid all such confusions the analysis has been undertaken on the figures as they were retrieved against each individual subject field.

## 5. INTERPRETATION, ANALYSIS AND RESULTS

The analysis at most of the places has been undertaken up to two decimal places; however, in the Table-1 at few places the analysis has been taken up to three decimal places. The figures have not been rounded off, hence may show slight variation while computing figures for 100%.

### 5.1 ACG-Annual Corresponding Growth Percentage

During the last decade, the Indian journals indexed by the SCOPUS citation index have increased from 195 journals to 452 journals, which constitutes a growth of 131.79%. The average Annual Corresponding Growth (ACG) of these journals during the period of study remained 8.96%. A maximum of 21.66% annual corresponding growth in the indexing of journals was observed during the year 2010 as the number of indexed journals increased from 277 to 337. While as, the minimum ACG of 0.22% was observed in the year 2014, when only 01 journal was added to existing lot of indexed journals from India. From the year 2005 to 2010 a study and continuous growth can be observed in the Indian journals indexed by the SCOPUS citation index. However, after 2010 a steady decline can be observed in the indexing of journals. From

**Table 1. Year wise distribution of indian journals indexed by SCImago**

S. No.	Year	Journals indexed from India (ACG%)	Journals indexed at global level (ACG %)	Journals indexed from Asia (ACG %)	India's share at the global level (Per cent)	India's share at the continental level (Asia) (Per cent)
1.	2005	195 (-)	16559 (-)	1511 (-)	1.17	12.90
2.	2006	209 (7.17)	17110 (3.26)	1585 (4.89)	1.22	13.18
3.	2007	225 (7.65)	17670 (3.27)	1650 (4.10)	1.27	13.84
4.	2008	244 (8.44)	18140 (2.65)	1743 (5.63)	1.34	13.99
5.	2009	277 (13.52)	19007 (4.77)	1934 (11.47)	1.45	14.25
6.	2010	337 (21.66)	20200 (6.27)	2175 (11.94)	1.66	15.49
7.	2011	384 (13.94)	21198 (4.94)	2364 (8.68)	1.81	16.24
8.	2012	437 (13.80)	22263 (5.02)	2563 (8.41)	1.92	17.05
9.	2013	451 (3.20)	22668 (1.81)	2634 (2.77)	1.98	17.12
10.	2014	452 (0.22)	22878 (0.92)	2666 (1.21)	1.97	16.96
Avg.		(8.96)	(3.29)	(5.91)	1.58	15.10

the analysis, it emerges that in the 2010 a saturation level was observed in the indexing of journals.

While drawing comparisons between the journals indexed by SCOPUS from India with that of journals indexed from the Asia and the rest of the World during the same period, it emerges that compared to overall 131.79% growth of Indian journals indexed by SCOPUS, only 76.43% growth was recorded from the Asia and 33.03% from the rest of the world during the same period. However, on average, 38.16% growth was recorded at the global level in the indexing of journals during the period of study. Compared to 8.96% average annual corresponding growth of journals indexed by SCOPUS from India, 5.91% average ACG was recorded from Asia and 2.90% of average ACG was recorded for the rest of the world. While as, on average, 3.29% average ACG was recorded at the global level.

India's share percentage at the continental level increased from 12.90% in 2005 to 17.12% in 2013 with an average annual share of 15.10% at the continental level. Similarly, the share percentage of Indian journals at the global level increased from 1.17% in 2005 to 1.97% by the end of 2014. The average annual share percentage of Indian journals indexed by SCOPUS during the last decade remained 1.58%.

After Europe and North America, Asia is the third largest continent to have a maximum number of journals (10.41%) indexed with the database. In 2010, a maximum number of journals were indexed by the database at all levels, hence recorded with the highest ACG. The ACG of journals indexed in 2010 remained 21.66% for India, 11.94% for Asia and 5.31% for the rest of the world. Accordingly, at the global level, in the year 2010 a maximum of 6.27% ACG was recorded. As per the 2014 figures of the database, India's share of the journals indexed by the database at the continental level is 16.95%, while as the share percentage of India at the global level is 1.97%.

Due to various multidisciplinary journals, 189 journals stand repeated under different subject fields, taking the overall number of journals under various subject fields to 641 titles. Medicine (249), Agriculture and biological sciences, Biochemistry, Genetics and Molecular Biology (104) and social sciences (41) are the three leading subject fields from India, which have the maximum number of journals indexed by SCOPUS. The overall average annual corresponding growth of Indian journals indexed by SCOPUS during the period of study remained 8.96%, while as the subject field like Economics, Econometrics & Finance, Computer & Decision Science and Business Management and Accounting the three leading subject fields, recorded the maximum 46.85%, 22.14% & 20.39% average annual corresponding growth at the subject level respectively. Subject fields like, Multidisciplinary subject, Engineering and Physics & Astronomy recorded the minimum 3.66%, 4.06% & 5.24% average ACG respectively.

At the national level, of the total indexed journals, Medicine has the maximum 38.84% share percentage, followed by Agriculture and biological sciences, Biochemistry, Genetics and Molecular Biology 16.22% and Engineering 7.2%. Accordingly, Energy (1.11%), Economics, Econometrics and Finance (1.17%) and Veterinary Sciences (1.29%) are the three subject fields, which have the minimum share of journals indexed by SCOPUS from India.

Subject fields like Business, Management & Accounting, Computer Science, Mathematics, Physics & Astronomy and Social Science are some of the key disciplines from India, which have shown some considerable improvement in the indexing of their journals during the last decade. Energy has the minimum (06) journal indexed with the database.

## 6. DISCUSSIONS AND CONCLUSIONS

India is one of the fastest growing research countries in the world. The research journals published from India

Table 2. Subject wise distribution Indexing growth of india's research journals at the subject level

Subject		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Agriculture and biological sciences, biochemistry, genetics and molecular biology</b>	Journals	46	50	53	60	76	87	93	101	104	104
	ACG%	-	8.69	6.00	13.20	26.66	14.47	6.89	8.60	2.97	0
	SNL%	16.78	17.00	16.71	16.85	18.35	17.46	16.63	16.21	16.27	16.22
	SCL%	2.09	2.16	2.00	2.34	2.64	2.69	2.65	2.68	2.68	2.65
	SGL%	0.17	0.18	0.19	0.20	0.25	0.27	0.27	0.28	0.28	0.28
<b>Arts and humanities</b>	Journals	5	5	6	8	8	12	12	14	14	14
	ACG%	-	0	20.00	33.33	0	50.00	0	16.66	0	0
	SNL%	1.82	1.70	1.89	2.25	1.93	2.40	2.14	2.24	2.19	2.18
	SCL%	0.22	0.21	0.24	0.31	0.27	0.37	0.34	0.37	0.36	0.35
	SGL%	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
<b>Business, management and accounting</b>	Journals	3	3	5	6	8	13	14	15	15	16
	ACG%	-	0	66.66	20.00	33.33	62.50	7.69	7.14	0	6.66
	SNL%	1.09	1.02	1.57	1.68	1.93	2.61	2.50	2.40	2.34	2.49
	SCL%	0.13	0.12	0.20	0.23	0.27	0.40	0.40	0.39	0.38	0.40
	SGL%	0.01	0.01	0.01	0.02	0.02	0.04	0.04	0.04	0.04	0.04
<b>Chemical engineering</b>	Journals	7	7	7	8	10	11	11	12	12	12
	ACG%	-	0	0	14.28	25.00	10.00	0	9.09	0	0
	SNL%	2.55	2.38	2.20	2.24	2.41	2.20	1.96	1.92	1.87	1.84
	SCL%	0.31	0.30	0.29	0.31	0.34	0.34	0.31	0.31	0.30	0.30
	SGL%	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
<b>Chemistry</b>	Journals	11	11	12	15	18	19	19	20	20	20
	ACG%	-	0	9.09	25.00	20.00	5.55	0	5.26	0	0
	SNL%	4.01	3.74	3.78	4.21	4.34	3.81	3.39	3.21	3.12	3.12
	SCL%	0.50	0.47	0.49	0.58	0.62	0.58	0.54	0.53	0.51	0.51
	SGL%	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05
<b>Computer science &amp; decision science</b>	Journals	3	4	5	5	5	12	12	13	14	15
	ACG%	-	33.33	25.00	0	0		0	8.33	7.69	7.14
	SNL%	1.09	1.36	1.57	1.40	1.20	2.40	2.14	2.08	2.19	2.34
	SCL%	0.13	0.17	0.20	0.19	0.17	0.37	0.34	0.34	0.36	0.38
	SGL%	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.03	0.04
<b>Earth and planetary science</b>	Journals	11	12	13	17	20	19	20	21	21	21
	ACG%	-	9.09	8.33	30.76	17.64	-5.00	5.26	5.00	0	0
	SNL%	4.01	4.08	4.10	4.77	4.83	3.81	3.57	3.37	3.28	3.27
	SCL%	0.50	0.51	0.53	0.66	0.69	0.58	0.57	0.55	0.54	0.53
	SGL%	0.04	0.04	0.04	0.05	0.06	0.05	0.05	0.05	0.05	0.05
<b>Economics, econometrics, finance</b>	Journals	1	1	1	5	7	9	9	9	9	9
	ACG%	-	0	0	400.00	40.00	28.57	0	0	0	0
	SNL%	0.36	0.34	0.31	1.40	1.69	1.80	1.61	1.44	1.40	1.40
	SCL%	0.04	0.04	0.04	0.19	0.24	0.27	0.25	0.23	0.23	0.22
	SGL%	0.003	0.003	0.003	0.01	0.02	0.02	0.02	0.02	0.02	0.02
<b>Energy</b>	Journals	4	4	3	4	5	6	6	6	6	6
	ACG%	-	0	-25.00	33.33	25	20.00	0	0	0	0
	SNL%	1.46	1.36	0.94	1.12	1.20	1.20	1.07	0.96	0.93	0.93
	SCL%	0.18	0.17	0.12	0.15	0.17	0.18	0.17	0.15	0.15	0.15
	SGL%	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

	Journals	25	27	27	29	29	33	35	37	36	36
	ACG%	-	8.00	0	7.40	0	13.79	6.06	5.71	-270	0
<b>Engineering</b>	SNL%	9.12	9.18	8.51	8.14	7.00	6.62	6.26	5.93	5.63	5.61
	SCL%	1.13	1.16	1.12	1.13	1.01	1.02	1.00	0.98	0.92	0.91
	SGL%	0.09	0.10	0.09	0.10	0.09	0.10	0.10	0.10	0.10	0.09
	Journals	16	17	18	21	24	29	30	32	32	31
	ACG%	-	6.25	5.88	16.66	14.28	20.83	3.44	6.66	0	-3.12
<b>Environmental sciences</b>	SNL%	5.84	5.78	5.67	5.89	5.79	5.82	5.36	5.13	5.00	4.83
	SCL%	0.72	0.73	0.74	0.82	0.83	0.89	0.85	0.84	0.82	0.79
	SGL%	0.06	0.06	0.06	0.07	0.07	0.09	0.08	0.09	0.08	0.08
	Journals	11	11	11	11	12	13	16	16	17	17
	ACG%	-	0	0	0	9.09	8.33	33.33	0	6.25	0
<b>Material sciences</b>	SNL%	4.01	3.74	3.47	3.08	2.89	2.61	2.86	2.56	2.66	2.65
	SCL%	0.50	0.47	0.45	0.43	0.41	0.40	0.45	0.42	0.43	0.43
	SGL%	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
	Journals	5	6	6	6	10	14	18	20	21	22
	ACG%	-	20.00	0	0	66.66	40.00	28.57	11.11	5.00	4.76
<b>Mathematics</b>	SNL%	1.82	2.04	1.89	1.68	2.41	2.81	3.22	3.21	3.28	3.43
	SCL%	0.22	0.25	0.24	0.23	0.34	0.43	0.51	0.53	0.54	0.56
	SGL%	0.01	0.02	0.02	0.02	0.03	0.04	0.05	0.05	0.05	0.06
	Journals	95	103	115	118	131	161	202	241	250	249
	ACG%	-	8.42	11.65	2.60	11.01	22.90	25.46	19.30	3.73	-0.40
<b>Medicine</b>	SNL%	34.67	35.03	36.27	33.14	31.64	32.32	36.13	38.68	39.12	38.84
	SCL%	4.32	4.46	4.77	4.61	4.56	4.98	5.77	6.39	6.45	6.36
	SGL%	0.36	0.38	0.41	0.41	0.43	0.50	0.59	0.68	0.69	0.68
	Journals	5	5	5	6	6	7	7	7	7	7
	ACG%	-	0	0	20.00	0	16.66	0	0	0	0
<b>Multidisciplinary</b>	SNL%	1.82	1.70	1.57	1.68	1.44	1.40	1.25	1.12	1.09	1.09
	SCL%	0.22	0.21	0.20	0.23	0.20	0.21	0.20	0.18	0.18	0.17
	SGL%	0.01	0.01	0.01	0.02	0.01	0.02	0.02	0.01	0.01	0.01
	Journals	8	10	10	11	12	12	13	13	13	13
	ACG%	-	25.00	0	10.00	9.09	0	8.33	0	0	0
<b>Physics &amp; astronomy</b>	SNL%	2.92	3.40	3.15	3.08	2.89	2.40	2.32	2.08	2.03	2.02
	SCL%	0.36	0.43	0.41	0.43	0.41	0.37	0.37	0.34	0.33	0.33
	SGL%	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Journals	15	15	17	22	25	33	34	38	40	41
	ACG%	-	0	13.33	29.41	13.63	32.00	3.03	11.76	5.26	2.50
<b>Social science</b>	SNL%	5.47	5.10	5.36	6.17	6.03	6.62	6.08	6.09	6.25	6.39
	SCL%	0.68	0.64	0.70	0.86	0.87	1.02	0.97	1.00	1.03	1.04
	SGL%	0.05	0.05	0.06	0.07	0.08	0.10	0.10	0.10	0.11	0.11
	Journals	3	3	3	4	8	8	8	8	8	8
	ACG%	-	0	0	33.33	100	0	0	0	0	0
<b>Veterinary sciences</b>	SNL%	1.09	1.02	0.94	1.12	1.93	1.60	1.43	1.28	1.25	1.24
	SCL%	0.13	0.12	0.12	0.15	0.27	0.24	0.22	0.21	0.20	0.20
	SGL%	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
	India	274	294	317	356	414	498	559	623	639	641
<b>All subjects</b>	Asia	2196	2309	2408	2558	2870	3228	3497	3768	3872	3915
	World	25786	26735	27735	28673	30182	32128	33685	35317	36000	36346

are being increasingly preferred by the researchers all across the globe to publish their research results. Addition of nearly 9% journals annually with the SCOPUS citation index somewhere pushes for the greater need to improve the quality of research journals published across India.

The subject fields like, Dentistry, Decision Science, Economics, Econometrics & Finance, Energy, Health Profession, Multidisciplinary, Neuroscience, Nursing, Psychology and Veterinary Sciences have less than ten journals indexed with the database. There is a far greater need for these subject fields to work hard on improving the quality of research journals to increase their number. A good number of journals from all these subject fields can find a place in the leading citation indexes provided they frame a rigorous policy towards reviewing the research articles for quality research publishing.

As per 2014 figures of the SCImago, India is the third largest country to have indexed a maximum number of journals from Asia. Only 96 journals were indexed from India with the database in 1996, which increased to 452 by the end of 2014, whereby, India jumped to become the 3<sup>rd</sup> largest country at the continental level and 6<sup>th</sup> largest country at the global level.

Arunachalam & Markanday<sup>14</sup> discussed about the island effect, whereby the coverage & scope of the journal is generally seen limited to the local interests. This in fact is one of the prime reasons; where by journals fail to make it to leading indexing services. Indexing of journals with leading databases like the Web of Science or SCOPUS, etc., has to fulfill some quality parameters to be the part of the global scientific community.

By and large, the position of India at the continental level remained same since 1996. India was the third largest research contributor from Asia in 1996 and it still enjoys the same place, after China and Japan. During all these years, it is China which has replaced Japan from the top place. In terms of research contribution, of the total documents published across the Asiatic region in 1996, 12.28% were from India, while as the India's share percentage of total publication in 2014 remained 12.80%, which is just a marginal gain in terms of percentage. However, the number of documents has increased from 20625 research articles in 1996 to 114449 articles in 2014.

Indian publisher need to focus on indexing their research journals with the leading citation indexes and this is something, which they cannot achieve without publishing quality research articles in their research journals. The editors somewhere have to follow a rigorous peer review policy and include the research article for publication only if it satisfies all the different laid down parameters. It is these parameters, which the editors of the research journals have to meet before sending a request to the leading citation indexing databases for including the name of their journal in the list of indexed journals. The Indian publishers have to forget about the

quantity of articles they publish in their research journal and should focus more on the quality of research articles they publish.

## REFERENCES

1. Worstall, Tim., *Forbes Magazine*, Feb 8, 2016. <http://www.forbes.com/sites/timworstall/2016/02/08/india-to-be-worlds-fastest-growing-economy-keeping-it-going-will-be-the-difficult-trick/#4394daa83d8d>. (accessed on April 2 2016).
2. SCImago., SJR-SCImago Journal & Country Rank. <http://www.scimagojr.com>. (accessed on March 31 2016).
3. Elsevier., Content., Journal title list. <https://www.elsevier.com/solutions/scopus/content> (accessed on April 19 2016).
4. Thomson and Reuters., Web of Science., fact sheets. <http://thomsonreuters.com/content/dam/openweb/documents/pdf/scholarly-scientific-research/fact-sheet/wos-next-gen-brochure.pdf> (accessed on April 19 2016).
5. Mesa Melgarejo, L. & Galindo Huertas, S. Characterization of periodical publications on nursing in Colombia, visible in the Internet. *Avances en Enfermería.*, 2011, **29**(1), 159-68.
6. Ramaseshan, S. Some thoughts on scientific journals in India. *Current Science.*, 1982, **51**(1), 6-12.
7. Singh, M. Studies of chemical literature and change in the ranking of periodicals by citation analysis of data for 1967-76. *Ann Lib Sci Doc.*, 1978, **25**, 55-61.
8. Sen, B. K., & Lakshmi, V. V. Indian periodicals in the science citation index. *Scientometrics.*, 1992, **23**(2), 291-318.
9. Sahni, P., *et al.*, *Indian Medical J.: The Lancet.*, 1992, **339**(8809), 1589-591.
10. Parvathamma, N. The coverage of indian literature in social science bibliographic databases on CD-Rom-Sociofile, Econlit, Lisa and Psychlit. *Malaysian J. of Lib. & Inf. Sci.*, 1970, **1**(1).
11. Satish, N. G. Reporting of the Indian social science periodical literature in international abstracting services. *Annals of Lib. Sci. and Doc.*, 1978, **25**, 117.
12. Solari, A., & Magri, M. H. A new approach to the SCI Journal Citation Reports, a system for evaluating scientific journals. *Scientometrics.*, 2000, **47**(3), 605-25.
13. SCOPUS. Content coverage guide. [https://www.elsevier.com/\\_\\_\\_data/assets/pdf\\_file/0007/69451/scopus\\_content\\_coverage\\_guide.pdf](https://www.elsevier.com/___data/assets/pdf_file/0007/69451/scopus_content_coverage_guide.pdf) (accessed on April 19 2016).
14. Arunachalam, S., & Markanday, S. Science in the middle-level countries: A bibliometric analysis of

scientific journals of Australia, Canada, India and Israel. *J. of Info. Sci.*, 1981, **3**(1), 13-26.

### Contributors

**Dr Shivendra Singh** is working with Baba Farid University of Health Sciences (BFUHS), Faridkot, Punjab as Assistant Librarian and Incharge of Library, University College of Nursing. Prior to his appointment at BFUHS, Singh served with National Institute of Pharmaceutical Education and Research (NIPER), Mohali. He has worked with Institute of Management Technology, Ghaziabad and Dainik Jagran, Noida as Assistant Librarian. He is the recipient of *UNESCO prize* in the category of National participant in appreciation of the commendable performance shown in the course assignments in UNESCO-DSIR-IIMK international workshop on GreenStone Digital

Library software in 2006. Singh has more than 30 research publications to his credit, which he has published in both national and international journals.

**Mr Ramesh Pandita** is working as Assistant Librarian at BGSB University, Rajouri, Jammu & Kashmir. Prior to this, he worked as College Librarian in Tagore College of Education. He has obtained MLIS, Masters in Sociology, and has MBA in International Business. He has more than 50 research papers and over 70 popular articles to his credit, published in various journals and conference proceedings at both national and international level and in popular newspapers. He is recipient of *ILA C.D. Sharma Award* (2011) for best paper written and presented.