

Catalysis Research (last five years) as seen from web of science data base

B.Viswanathan

National Centre for Catalysis Research

Indian Institute of Technology, Madras, Chennai 600 036

The data of the web of knowledge have been searched with the search terms catalysis and India for the past five years and the total number of entries under these search terms are 1305. The distribution of these 1305 documents is as follows:

Table 1 Distribution of the type of documents

S.No	Document type	Number
1	Article	1196
2	Reviews	67
3	Proceedings Paper	38
4	Correction	2
5	Editorial	2

The institution wise distribution of these documents is as follows:

No	Institution	Number of publications
1	Indian Institutes of Technology	188
2	Indian Institute of Chemical Technology	90
3	National Chemical Laboratory	67
4	Indian Institute of Science	58
5	Indian Association for the cultivation of Science	57
6	CSIR	33
7	Jadavpur University	31
8	University of Delhi	28
9	University of Hyderabad	28
10	Central Salt and Marine chemicals Research Institute	24
11	Karnatak University	24
12	University of Kalyani	23
13	University of Madras	22
14	Jawaharlal Nehru centre for advanced science and Research	21
15	University of Allahabad	19
16	Anna University	17
17	Bombay University	17
18	Kakatiya University	16
19	Bangalore University	15

The major contributors and their affiliations are given in Table 3

No	Author	Institution	Number
1	Singh A K	IIT, Delhi	29
2	Nandibewoor	Karnatak University	24

3	Kumar A	NCL, Pune	22
4	Yadav GD	ICT, Mumbai	22
5	Ranu B C	IACS, Kolkatta	19
6	Roy S	IIT, Kharagpur	19
7	Kumar S	BHU, Varanasi	17
8	Majumdar KC	Univ Kalyani	17
9	Bhaumik A	IACS, Kolkatta	16
10	Yadav J S	IICT, Hyderabad	16
11	Ghosh P	IIT, Mumbai	15
12	Kantam ML	IICT, Hyderabad	15
13	Reddy BVS	IICT, Hyderabad	15
14	Khan Z	King Abdulaziz Univ, Saudi Arabia	14
15	Singh S	Thapar Univ, Sch Chem & Biochem, Patiala	14
16	Banerjee S	Indian Inst Chem Biol, Dept Chem, Calcutta	13
17	Gupta R	Univ Delhi	13
18	Ramachary DB	Univ Hyderabad	13
19	Reddy CS	Kakatiya Univ	13
20	Sreedhar B	IICT, Hyderabad	13
21	Bajaj HC	CSMCRI,	11
22	Jana S	Jadavpur Univ	11
23	Shaikh MM	Indian Inst Technol, Natl Single Crystal Xray Diffract Facil, Bombay	11
24	Jasra R V	RIL, Vadodara	10

Many of the data generated are on the expected lines and even the key players and also most productive institutions are also on the expected lines. However, it should be noted that the national laboratories predominate over academic institutions, this could be due to the fact that this is an applied field and hence national laboratories may be more involved in this type of research. But the point to note is that for the same period china with the same search terms gave a total number of 4731 documents which clearly shows that china is ahead of India in terms of publication in this field with even simple search terms. The same search terms gave a figure of 6485 for USA

In the table we give the data for various countries generated with the same search terms during the same day as the analysis for India was done.

No	Country	Total number of publications in five year period
1	India	
	China	4731
	South Africa	99
	Brazil	392

	Germany	3007
	France	1802
	Hungary	156
	Poland	364
	England	1493
	USA	6485

It is hoped that these data will have enough message to convey.

The wild extrapolations include:

1. South bloc countries are behind the north bloc countries even in this field.
2. South bloc countries which have to be necessarily working in the applied areas for their development are far behind the north bloc countries.
3. Even in terms of per person or area basis in all parameters it appears the south bloc countries are behind the north bloc countries.
4. Leaving the south north divide, it should be noted that development index may be favouring certain countries for some reason or other.