change in the traditional outlook of the people. Ironically, the latest information technology is being used to also propagate anti-science beliefs[9]. Today, we have a large number of religious channels, but there is not a single Indian science channel. It does seem paradoxical, that even after putting in the best of our efforts to inculcate a rational outlook and scientific thinking among citizens for many years, we find ourselves where we began after independence. Rather, with the new regime in India, scientific temper has taken a back seat in planning and implementation of S&T in the country. During 2000, the University Grants Commission, New Delhi introduced Vedic astrology in universities, but this experiment failed miserably[10].

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CSIR in SIR 2016

The latest (2016) version of the SCImago Institutions Rankings (SIR) report[1] has been released on-line. SIR itself is a secondary evaluation exercise yielding a composite indicator that combines three different sets of indicators based on research performance (using primary bibliometric data from *SCOPUS*), innovation outputs (based on PATSTAT), and societal impact measured by their web visibility (Google and Ahrefs). Until now, as background data were also released, it was posssible with the help of indirect surrogate performance indicators[2,3] to see the time evolution of

Table 1. National and Global Rankings of CSIR and its 'daughter' institutions from 2009 to 2016

Indian rank		Global rank							
2016	Institution	2009	2010	2011	2012	2013	2014	2015	2016
1	Council of Scientific and Industrial Research	135	142	130	117	111	102	105	99
2	National Institute for Interdisciplinary Science and Technology (CSIRIN)	617	594	567	527	508	482	425	353
3	National Chemical Laboratory (CSIRIN)	497	532	528	520	505	498	460	441
4	Indian Institute of Chemical Technology (CSIRIN)	554	565	546	527	505	511	520	493
6	Central Salt and Marine Chemicals Research Institute (CSIRIN)	534	542	543	535	534	528	527	510
8	Institute of Genomics and Integrative Biology (CSIRIN)	579	588	586	567	553	544	531	514
9	National Physical Laboratory India (CSIRIN)	715	676	626	567	544	528	501	519
10	Central Food Technological Research Institute (CSIRIN)	547	549	522	513	503	505	501	531
12	Indian Institute of Integrative Medicine (CSIRIN)					548	558	557	550
13	Centre for Cellular and Molecular Biology (CSIRIN)	647	632	615	585	555	565	565	552
14	Central Drug Research Institute (CSIRIN)	657	647	625	605	575	544	537	558
17	Central Electrochemical Research Institute (CSIRIN)	638	637	621	602	612	601	588	567
19	National Environmental Engineering Research Institute (CSIRIN)	797	766	714	672	619	586		598
21	Indian Institute of Chemical Biology (CSIRIN)	670	670	655	614	573	566	566	602
23	Indian Institute of Toxicology Research (CSIRIN)	563	564	553	558	588	575	592	606
24	National Metallurgical Laboratory (CSIRIN)	704	704	688	659	632	621	621	608
26	Central Institute of Medicinal and Aromatic Plants (CSIRIN)				696		602	610	611
29	Institute of Minerals and Materials Technology (CSIRIN)			687	650	627	614	601	628
30	Central Leather Research Institute (CSIRIN)	688	695	672	654	626	603	605	633
34	National Botanical Research Institute (CSIRIN)	724	696	654	625	611	595	616	638
35	North East Institute of Science and Technology (CSIRIN)								638
38	Institute of Microbial Technology (CSIRIN)						587	617	644
39	Central Glass and Ceramic Research Institute (CSIRIN)		647	629	626	583	564	565	645
43	Central Mechanical Engineering Research Institute (CSIRIN)						639	647	647
46	National Institute of Oceanography (CSIRIN)	734	724	690	662	649	627	630	649
48	National Geophysical Research Institute (CSIRIN)	808	795	763	719	675	641	630	650
54	National Aerospace Laboratories (CSIRIN)					619	604	627	657
58	Central Electronics Engineering Research Institute (CSIRIN)					632	623	644	667

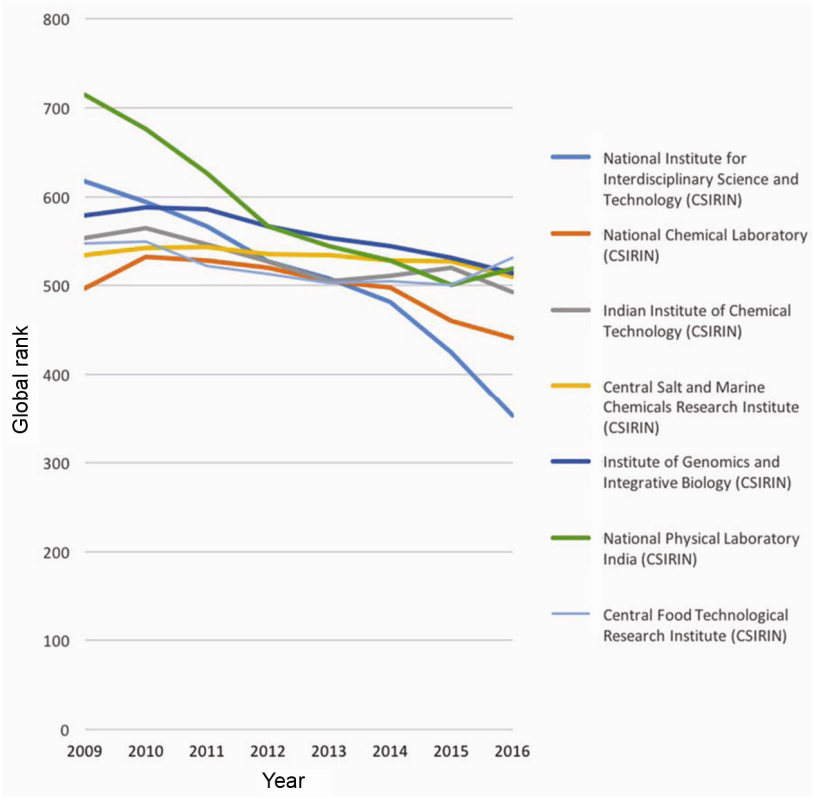

Figure 1. Progress of the top seven CSIR institutions in the list of the top ten institutions in the government sector in India.

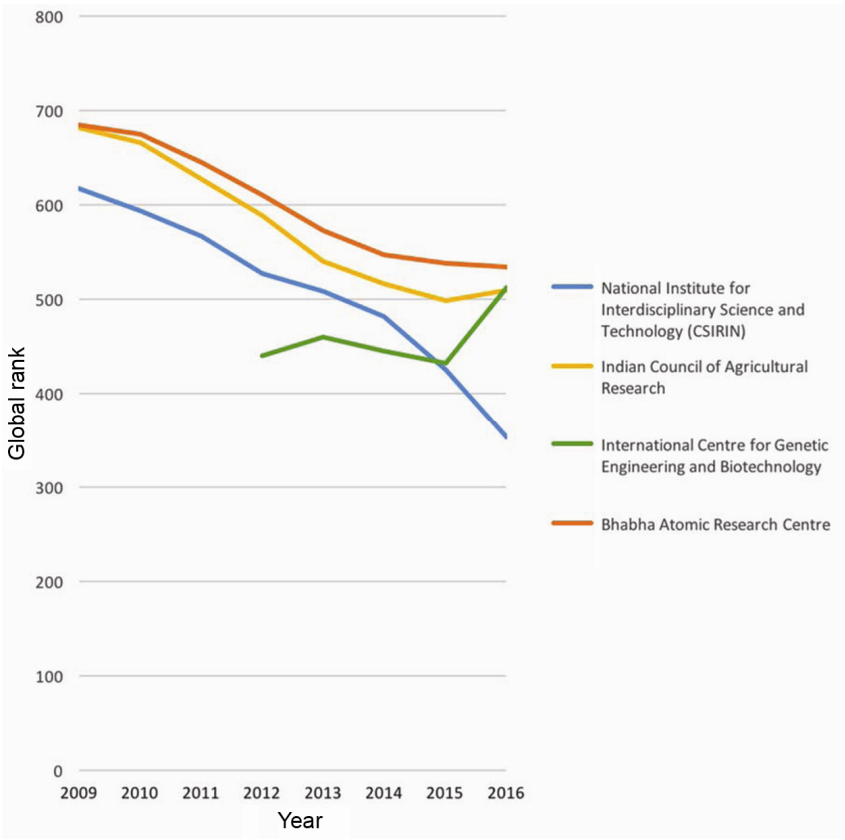

Figure 2. Progress of the top three non-CSIR institutions in the list of the top ten institutions in the government sector in India. The progress of CSIR-NIIST is shown for comparison.

progress of leading Council of Scientific and Industrial Research (CSIR) institutions over a reasonably long window (e.g. a seven-year window, 2009–2015 in ref. 2).

However, this year SIR reports only ranks, and unlike earlier years when we reported in these pages[2,3] the progress of CSIR institutions in terms of composite performance indicators, this year we can only show ranks within India and globally. The SIR rankings are based on the composite indicator that combines the three different sets of indicators based on research performance, innovation output and societal impact. Ranking is based on results generated each year from the data retrieved over a period of five years ending two years before the edition of the ranking. For instance, rankings for 2016 are based on results from the five-year period 2010–2014. The exception is the case of web indicators which have only been calculated for the last year. Institutions are included if they had published at least 100 works in the *SCOPUS* database during the last year of the selected time period. The latest release allows us to track rankings continuously from 2009 to 2016, with gaps appearing whenever institutions fall out of the net for not meeting the inclusion criterion. Altogether, 5147 institutions are ranked globally, of which 242 are from India (i.e. 4.7%). The classification used by SIR shows that the government sector accounts for 59 institutions, the health sector for 12, the higher education sector for 170; Tata Sons Ltd is the solitary presence in the private sector.

For comparative purposes, the value of the composite indicator has been set on a scale of 0 to 100. The line graphs and bar graphs always represent ranks (lower is better, so the highest values are the worst). In 2016, as in 2015, 27 out of the 38 constituent laboratories of the CSIR make this cut. CSIR as a whole is also counted as a 'parent' institution and the 27 'children' are listed separately.

Table 1 lists the evolution in the rankings on the 'parent' agency, CSIR and its 27 'daughter' institutions that made the cut in 2016. CSIR has been steadily rising in the ranks and so have many of its constituent laboratories. Some have been slow or stagnant, and a few have registered noticeable decline. Of the top 10 institutions in the government sector in India, CSIR contributes seven. Figure 1 shows the progress of these seven institutions. The progress of CSIR-National Institute of Interdisciplinary Science and Technology (CSIR-NIIST) has been impressive. To complete the picture, it helps to show how the top three non-CSIR institutions in the government sector compare with CSIR-NIIST (Figure 2).

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