

## Crisis in the university system

Three issues relating to the university system in India have been the subject of intense debate among academics recently. These are the international rankings of our higher education institutions, institutes of eminence and graded autonomy to some Universities. Much of the debate focuses on recent history but, sadly, overlooks the impact of implementation of the recommendations of the Mandal Commission that came into effect in 1992. The implementation has been a spectacular success in terms of providing access to students from such social backgrounds who never hoped or dreamt of it. Independent of social background, students can now take access for granted, thereby transforming the higher education landscape. A manifestation being that it is common to see Ph D students whose parents are daily wage earners or casual labourers, or from families that did not have this kind of access. This has been accompanied by an increase in the number of universities in the country. A situation peculiar to India is the proliferation of colleges with almost no mechanism to regulate their quality. It has long been realized that mere affiliation to a university and following the syllabus laid down by it does not ensure quality. The quality of students is, of course, strongly dependent on the quality of teachers available which is in turn dependent on parameters such as qualifica-

tion, selection procedure, salary, etc. The infrastructure in these colleges can, at best, be described as pathetic in most cases. The situation is exacerbated by the fact that universities offering postgraduate (PG) education are at the downstream end of this quality chain. It appears that the previous generation of academic leaders were unprepared for the change in demographics of students accessing higher education over the last 25 years, and did not foresee the situation that exists now. The need to resolve conflict between academic and social correctness is a case in point. The current academic leaders have, as a result, inherited systems whose relevance in the present set of circumstances is debatable. One example is the large number of litigations about faculty recruitments which has led to majority of vacancies being unfilled in most State and Central Universities, with the spectre of departmental closure looming large in some cases. This must also be seen in the context of expectations of resource generation, depleting financial support for public-funded institutions and impact on the quality of education being provided thereof.

As an alumnus of the Indian Institute of Science (IISc), Bengaluru, I am proud of its achievements and international ranking. However, it is difficult to fathom how, IISc or a handful of such institutions can carry the burden of mak-

ing the entire higher education ecosystem world class. A fact that is often forgotten is that majority of the top-ranked universities of the world have strong undergraduate, PG and Ph D programmes in social science, humanities and creative/fine arts, in addition to science, engineering and medicine. Another fact is that the best-ranked institutions in India are science and technology (S&T) based, which makes the national rankings questionable, since they compare apples and oranges. A third fact is that these S&T institutions are at the downstream end of those very low-ranked universities, as their own students rarely continue for PG and Ph D programmes.

Clearly, the university system is in a crisis and the morale of the stakeholders is fairly low. While it is necessary to make the system more accountable, this cannot be achieved by starving universities of funds leading to sub-standard infrastructure, resulting in below-par education. The need is to strengthen the university system without which the downstream institutions might collapse under the weight of upstream mediocrity.

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## CSIR institutions in SIR 2019

The SCImago Institutions Rankings (SIR) cover research-focused institutions in the Government sector globally. The 2019 version of the report has appeared online recently<sup>1</sup>. SIR uses a composite indicator set on a scale of 0 to 100 that combines three different sets of indicators based on research performance (50% of the total weight, using primary bibliometric data from SCOPUS), innovation outputs (30% of the total weight, based on PATSTAT) and societal impact measured by their web visibility (20% of the total weight).

For several years now we have reported in these pages the progress of Council of Scientific and Industrial Research (CSIR) institutions within India and globally<sup>2-6</sup>. 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 2019 are based on results from the five-year period 2013–2017. The web indicators are calculated based on the last year. Institutions must have published at least 100 papers in the SCOPUS database dur-

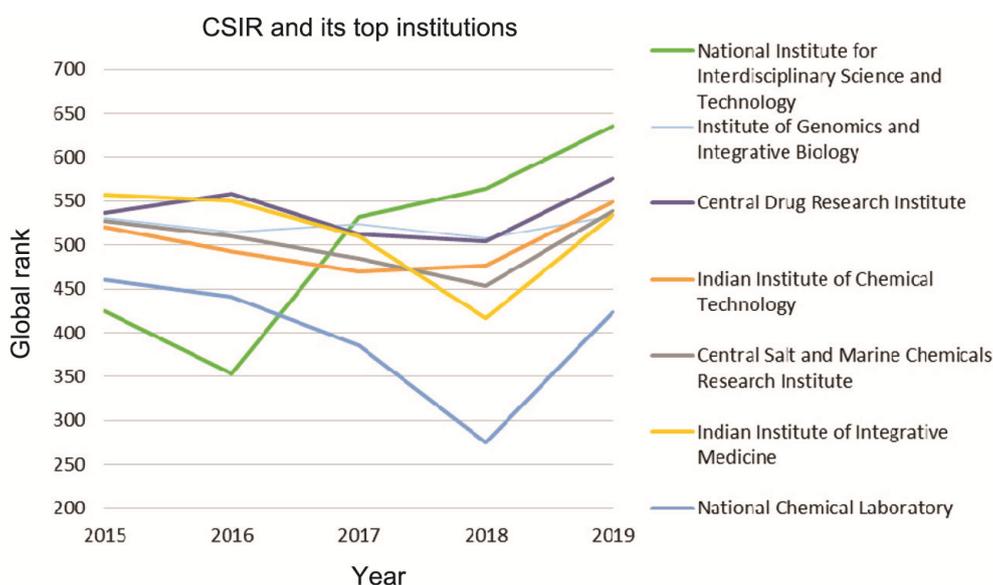
ing the last year of the selected time period. Here we track rankings of leading CSIR institutions from 2015 to 2019. In the 2019 report, 6459 institutions are ranked globally, of which 297 are from India (i.e. 4.6%). The government sector in India accounts for 69 institutions (up from 62 last year)<sup>6</sup>. Among these, 29 are constituent laboratories of CSIR.

Table 1 shows how the global rankings of CSIR and its top institutions have changed in recent years because of global competition. Except for the Centre for Cellular and Molecular Biology,

## CORRESPONDENCE

**Table 1.** National and global rankings of CSIR and its top constituent institutions from 2015 to 2019

Indian rank 2019	CSIR and its institutions	Global rank				
		2015	2016	2017	2018	2019
1	Council of Scientific and Industrial Research, New Delhi	105	99	75	132	138
2	National Chemical Laboratory, Pune	460	441	385	275	423
3	Institute of Genomics and Integrative Biology, New Delhi	531	514	524	508	533
4	Indian Institute of Integrative Medicine, Jammu	557	550	510	417	534
5	Central Salt and Marine Chemicals Research Institute, Bhavnagar	527	510	485	453	539
6	Indian Institute of Chemical Technology, Hyderabad	520	493	470	477	549
8	Central Drug Research Institute, Lucknow	537	558	512	504	576
9	Centre for Cellular and Molecular Biology, Hyderabad	565	552	613	628	584
10	Institute of Microbial Technology, Chandigarh	617	644	521	545	588
11	Institute of Himalayan Bioresource Technology, Palampur			553	511	598
14	North East Institute of Science and Technology, Jorhat		638	556	619	627
15	Central Institute of Medicinal and Aromatic Plants, Lucknow	610	611	591	564	634
16	National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram	425	353	532	564	636



**Figure 1.** CSIR institutions shown losing ground in the global rankings, especially the National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram.

Hyderabad, all other institutions have lost ground. Figure 1 shows that among the top CSIR institutions which have been losing ground in the global rankings, the most striking is the case of the National Institute for Interdisciplinary Science and Technology at Thiruvananthapuram. It was briefly ranked as the best research institution in the government sector in India and

among CSIR institutions (2015–2016) going by SIR rankings for those years.

1. <http://www.scimagoir.com/index.php> (accessed on 9 May 2019).
2. Prathap, G., *Curr. Sci.*, 2014, **107**, 1121–1122.
3. Prathap, G., *Curr. Sci.*, 2016, **110**, 288–289.
4. Prathap, G., *Curr. Sci.*, 2016, **111**, 962–964.

5. Prathap, G., *Curr. Sci.*, 2018, **114**, 9–11.
6. Prathap, G., *Curr. Sci.*, 2018, **115**, 1018–1019.

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