

## Why Sadhana?

The Indian Academy of Sciences has taken a historic decision in 1978 when it has approved the publication of *Academy Proceedings in Engineering Sciences*, now called *Sadhana*. As Professor Narasimha, the founding editor says in the editorial that *'this decision was celebrated by the community and that Sadhana will be a medium for publications of original theory papers or papers describing the technologies and techniques in special project, papers that appeal to engineers in general by the Indian scientific community. The reason for this initiative was the same as for starting the Pramana'*. As voiced by Professor S Ramaseshan in his editorial of *Pramana* vol.1, no 1, 1973 'the fashionable notion of it is more prestigious to publish in foreign journals and the consequent lowering of the quality of papers sent to Indian journals formed a vicious circle'. It is hoped that well-organized, highly cited Indian Journals in Engineering and Science is a fundamental prerequisite for creating an ecosystem for competitive research and also for creating top tier research institutions.

Lots of changes have occurred since the above times. We have large number of engineering colleges and universities added, more research awareness, digital libraries, more conferences by International Societies, easier access to content through mobiles, internet and other media, start up companies experimenting with new ideas and many more. Also, a large number of journals has been started by international associations in variety of specializations in each engineering discipline. Thus, the number of journals and publishers has proliferated and there is variety of avenues to air your views, publish scientific as well as technical papers. There are blogs, websites, magazines, conferences organized by societies and several others.

Then Why *Sadhana*? We are revisiting the question Why *Sadhana*, an Indian Journal. To me there are three types of answers of increasing complexity and importance to this question;

1. The first is a simple one: the academy would like to have its own journal, like one wants own his or her house, have their own family and children, their own company, their own association, etc. This will permit one to air their views, promote a particular engineering discipline in their own way, publish and circulate your own innovations, discoveries and achievements, etc.
2. The second one is more subtle and is like creating security systems, defence, satellites, communications systems developed and managed by you for your own use. The journal will publish important innovations of your origin with pride and no prejudice. It will promote your confidence and induce self-reliance.
3. The third and the most important one is that, in knowledge-based competitive environment, a selection of top tier journals in every field of importance is a must for a country to emerge as a competitive nation. If you want to be proud of yourself and your country, you need top-notch research contributions by your people, your own top tier journals and conferences addressing your own problems and many others. Thus, having top tier journals is also an important factor for a competitive research ecosystem which in turn determines the top rankings of Indian Universities and Institutions.

The point 3 made above has implications in terms of the economy and welfare of the country. *It is known that the percentage of global GDP a nation shares, is directly proportional to the number of top tier universities* (India has unfortunately two listed top tier universities). The toptierness of a university comes from publications, awards, the alumni and their positions in the world. These, as can be easily seen, depend on the ecosystem that promotes excellence: Industry, innovation environment, services such as health, education, housing, logistics and transportation and retail. Excellence is not and cannot be based on a single unit and the entire ecosystem is to

be built bottoms up. This is all the more important in today's highly connected world. You have easy access to material but very little voice in terms of content.

I have emphasized what the visionaries who started this journal *Sadhana*, given it a focus, a supportive environment and initial push. It is for the young scientists to be supportive and to take things forward with zeal and enthusiasm as authors, reviewers and members of the editorial board.

A few words about the status of *Sadhana* 2014. In my opinion we are doing well. The manuscript submissions are increasing exponentially: *Sadhana* received 414 submissions in 2012, 641 in 2013 and more than 400 till April 15, 2014. The acceptance rate is very low: It is less than 10% as in other international top journals. We have team of Associate Editors spending time on reviewing and decioning of submissions, and above all, younger researchers are coming forward to organize special issues and write review papers of hot topics of the day and morevoer, a supportive environment of the Indian Academy of Sciences in the company of several high impacted journals in other fields of science.

In all ways, *Sadhana* is like any international journal. But revisiting Prof Ramaseshan's 1973 appeal after four decades, Indian scientists need to work on Indian problems and publish their best papers in Indian Journals including *Sadhana* and create a virtuous cycle. I think we owe this to our founders as well as our future generations to fulfil our social or professional responsibility.

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N VISWANADHAM

*Editor of Sadhana*