



Prof. Raja Kumar, R. V.
Director

Interview with the Director

1. **Sir, you have an extensive administrative profile and under your eminent leadership the pedagogical system has undergone noticeable changes. Could you briefly share with us some of the aspects of the same and holistic learning?**

The method of teaching in classrooms should be of more student-centric than teacher-centric effectiveness. Learning-by-doing and/or Experiential learning and/or Learning by problem solving by students would immensely increase their understanding of concepts and assimilation of knowledge than by merely listening to the lectures. Such are the learning paradigms that we want to adopt at this institute. The lectures and assignments should be accordingly and properly designed to target deep learning and associated skill development including creativity and augment students' interests in the subject concerned. Unless creative skills are nurtured, they do not become part of behavior of students. The members of Faculty play a key role in this task. The success factor greatly depends on how every member of the Faculty understands, accepts and implements it. Thus, education needs to be made participatory, focused on imparting adequate knowledge to the students and inculcate capability to solve problems in a creative and innovative way. Teachers may avail and use the ample resources and technological tools which are readily available.

At IIT Bhubaneswar, we recognize that education has a broader meaning. We are committed to ensure that the learning is holistic, and provide ample opportunities to students to excel in various walks of life while making the education in a chosen field of science and technology, sound. One way, I try to implement this from my end, is to impress upon the faculty by sharing my experiences and by providing guidance directly through my interactions with them; and the other is by involving senior visiting faculty to address the issues in their interactions with our faculty.

2. Changes and achievements are a part of big dreams. Could you share with us your exclusive vision for IIT, Bhubaneswar?

Thank you for this question. Personally, I would like IIT Bhubaneswar to be amongst the cream of world-class institutes in terms of generating brilliant students, making research contributions and participation in solving nation's problems. There is no short cut for this and it doesn't come free. What matters is the quality and accountability of faculty, the academic research and governance culture, and facilities

In simple terms, you need to create global class standards for everything in the institute. In my first address itself, I called upon our Faculty and Staff to stop thinking that we are a new IIT in functioning and in spirit; thus they are motivated to aim for achieving high standards.

Soon after my joining, I realized that while there were some strengths, there were also many gaps in the institute's culture and standards. Though it is not easy and also not always appreciated, I personally engaged myself in fixing these gaps, particularly those in the culture, and quickly set the standards and implemented them. A significant part of the work has already been done with fairly good success for the last three years and the process will continue. High standards are being adopted in recruiting faculty, the most important of the resource which should be nothing short of global class when the aim is to make the institute one among the global class. This is not easy, yet we are going across the globe in search of adequate numbers of faculty. This would be sustainable only when the institutional standards including ambiance is of global class.

The above apart, preparation of a prospective plan for the growth of the institute was taken on to my own shoulders, created a detailed one, including planning of the academic programmes, put it up for discussion among the faculty for fine tuning. Thanks to the central government that for each of the IITs started in 2008, a grant of around Rs. 1200 Crores was sanctioned in 2016 for the next three years, for the institutes to grow. Here, I got an opportunity to build the institute as per the standards I could set in consultation with the faculty and the Board. I am confident that we would be able to make the institute grow as per the ambitious standard levels envisioned.

3. It's been over 3 years now since the torch has been passed on to you. Do share with us about the notable accomplishments IIT Bhubaneswar has been credited under your Directorship since 22 April 2015.

When I took over, IIT was operating from multiple transit campuses, with some academic programmes running with a total student strength of 970. Unfortunately, the contractor of the Mega project rescinded, and infrastructure creation in the permanent campus was stalled since Oct 2014. As a result, the academic buildings were standing with partially built structural frames. Getting the infrastructure creation re-started, completing the phase-1 infrastructure, shifting to the permanent campus phase-wise to full by now, redoing the master plan, getting Rs 850 Crore for phase-2 constructions started and getting the same to 50% completion stage could be done over since May 2015. Today the institute is fully established in its permanent campus with strong processes in place and with the student strength of 1765.

Vision of the institute is to be amongst the global class. In short, we need to establish it in commensurate standards and there is no short cut for the same. If you have money and the will power, and if you are hard-working, it is not difficult to build the physical infrastructure. It is very important, however, to set new standards and rising the existing standards including raising of quality faculty, the most important of the resources, academics, research output, creation of infrastructure in commensurate ambiance and running of the institutional operations. Improving upon the existing standards is far more challenging than initiating new standards. New standards could be established and the institute is made to undergo the transformation with fairly good success, through several innovations. In the process, the institute operates by modern standards better than some of the senior IITs, as of now. The biggest challenge has been to raise faculty of high standards to adequate numbers which is being attempted through a global search.

We could take innovative initiatives like recruiting faculty of foreign origin to teach at IIT Bhubaneswar over long terms to offer education with international flavor and to achieve high success. There have been other initiatives too. The institute made a future plan for its growth for over the next 10-12 years to shape itself to become an Institution of Eminence of global repute. To accomplish the same, necessary actions are being taken over the coming two years including for a steady growth of the current strength of the students to more than 3000 students by 2022.

4. As a director you are keen on recruiting foreign faculty at IIT Bhubaneswar. Please tell us your strategy behind adding them to your work force.

Providing education, the primary objective of an academic institute, with international flavor can be a means for internationalization, though very challenging. I personally feel that it is feasible. We could innovate and get as many as five faculty of foreign origin for a tenure of more than a semester as visiting faculty on Indian salaries, though after putting in spirited efforts. Four of the faculty expressed that teaching at IIT Bhubaneswar has been a rewarding experience. The students too expressed happiness about the variety and flavor of teaching. This first successes proved that it is feasible and we are putting in more efforts to have faculty of foreign origin teaching in every school, a regular feature.

This apart, we launched a global search for regular faculty. Through this process we intend to reach out to NRI PhD's and Postdocs and attract selected of them back to India in the role of faculty of IIT Bhubaneswar. We have been vigorously reaching our advertisement for faculty positions across the globe. Though some IITs have done it earlier, we are going global one-step ahead with several innovations.

5. As a leader could you share with us the methods you follow to encourage and support the young members of the Faculty of IIT Bhubaneswar to engage in teaching and research?

For the head of an institution, to direct or guide particularly the young faculty, nothing can be as effective as serving as a role model. I personally feel that the best way to promote traits like transparency, ethical standards, accountability, and commitment is to put them in practice and showing the path by setting an example. I believe that to be successful in this endeavor, you need to have these qualities, inherently within you. The contentment and the positive energy these practices give to an individual can be experienced very well and one may tend to adopt the same, permanently too.

I respect individuals irrespective of age and class. I try my best to recognize, appreciate and encourage merit, hard work, performance, responsibility and good service. I do not hesitate to point out weaknesses and am non-compromising where I should not and do not hesitate to criticize with positive intentions. Criticism is part of training.

I personally encourage and promote quality than quantity in research, and appreciate participation in projects that help in nation building. I have personally designed a central on-line teaching feedback from students, got it discussed and got implemented effectively at IIT Bhubaneswar in the first few months of my joining. Outstanding teachers as per student feedback are rewarded for their best teaching practices.

6. What is the philosophy that you live by?

Whatever life has given you, explore it to the fullest extent, live up to what it offers and return as much as you can to the nation by performing at your best. The director's position, particularly in a new IIT, is a grand opportunity to create or shape up it in such a way to realize the dream and vision which it envisages. If not done well, it would be a missed opportunity and a lot may be at stake. On the other hand, when you create a great institution, it would be a great service to the nation, very satisfying and gives you a sense of fulfilment. It calls for setting up a vision, mission and goals, plan properly, realize it and contribute to the fullest giving your best; moreover, be prepared to struggle if necessary. Honesty, integrity, vision and hardwork are pre-requisites for a genuine and sustainable contribution. When you are straight forward and serve honestly to fulfill a noble objective, you need not fear anything. Finally, what can be more rewarding than self-satisfaction? Though it sounds like a moral lesson, it is the intrinsic truth.

7. What is your advice to aspirants of IIT?

True education including subject knowledge and developing associated cognitive skills is more important than training on blind procedures aimed at succeeding in the entrance test as a short-cut; else, your education will be defective and it may make you lose your appetite for education. There is no short-cut for true education, and it can also get you into top most institutes like IITs in the right way. Examination success may get you into an IIT, but it is your true education which matters throughout your career and life. Lastly, at this juncture the country needs your performance excellence, at least on par, if not more, and that would greatly benefit you, your family, and the nation.

- R. Guduru