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GUEST EDITORIAL

A Scientist's Search for Identity

Vikram Dixit is a 35-year-old scientist, who returned from US two years ago, secured a fairly stable job in a well-funded national institute, and has now settled his laboratory with three Ph D students, one project assistant and one post-doctoral trainee. In every sense a comfortable situation for Vikram compared to many. Vikram is aware of some friends, who did post-doctoral work along with him, who are still struggling with a second one or decided upon an alternate career. Still Vikram is unhappy today from the morning! Why is it so? Let us probe the situation.

Vikram had an excellent academic record; masters from a Central University and a Ph D from a well-known laboratory. He scored reasonably good marks throughout his career and the Ph D tenure was uneventful, at least that's what he claims, although an outsider might call it glorious. Vikram never had any altercation with other fellow students and, just had one incident of concern with his guide. Vikram published four papers from his thesis and a review, out of which two were in a major international journal and the rest in Indian ones. One of the papers in an Indian journal was actually meant for a journal published from a European society. It received very probing comments from two reviewers and several suggestions to improve upon. Vikram was ready with his thesis, going abroad and getting married, all within three months time and was just not ready to spend more time on experiments. His guide refused to pass on the work to another student and, instead submitted it to an Indian journal where it was accepted with minor revisions. Vikram did not like it and that was the only incident when he felt that his guide did not treat him properly. In fact till today he never says that his Ph D period was enjoyable, it was simply OK, that is all.

Vikram does not remember his thesis work very well. It was, in fact, a case of self-promoting amnesia and while in US, during many discussions with his colleagues he used to pass very rude judgments about the standard of Ph D theses back home and almost unrecognizable Indian journals. If one asked Vikram the key contribution from his Ph D thesis in one or two sentences, he would fumble, give a very hazy answer, and immediately it would be apparent that the body of work was nondescript. At least that is what he thinks. If one is very close to Vikram, and

probed this attitude further, they will know the reason for unhappiness is not scientific; but the fact that he had to publish a major part of his thesis work in an Indian journal!

So, this is the story of Vikram Dixit so far. Although a reader will know that the same clone exists all around. A case study may bring out some very interesting lines of thought. First, the scientist himself does not know or understand fully well where the fault line is in his Ph D thesis work; rather its acceptability in a major international journal remains the sole criterion. On the other hand, he was not happy or proud about his thesis work, guide or the institution. Vikram remained apologetic for his thesis, and about everything associated with it without a clue as to how the work could have been improved upon with few critical experiments which reviewers after glancing through the manuscript for an hour were able to point out. Thus, after 4 years of hard work, Vikram lost the focus and thought emancipation lay on the other side of the ocean with a post-doctoral fellowship. However, a post-doctoral fellowship requires recommendation letters from a few of his teachers and Vikram faced no difficulties in that aspect. His guide, and a few other Professors of the department wrote strongly for him and within a few weeks he received an appointment letter with reasonable fellowship in a well-known University.

Vikram, however, decided to work on an area which was remotely connected with his Ph D thesis because he thought this was a 'hot' topic and thus worth pursuing. He never thought where this work would lead him or if there were questions exciting enough for answers. He was given a project and decided to work just as he did during his Ph D.

Within a month of landing into this laboratory, Vikram understood that the leader of the laboratory had very little time to talk with him and the project he was supposed to work on had been started much before in some other place in US, thousand miles away and he did not have the lead anyway. Still Vikram pursued, worked hard like never before in his life. All the fun and good times of graduate days vanished and worst of it all, he had nobody other than his wife to whom he could complain. He realized that this supervisor could give much less input to his

work in comparison to his Ph D guide; all he asked for was results and because of his loneliness and hard work Vikram could produce some good publications. At the end of it all he felt very satisfied and happy. Again he was not very proud of this work. That he worked firstly in a well-known university in the West and produced few papers in reputed journals were sufficient. It surely would make Vikram a recognizable scientist!

But never for a moment did Vikram care for the science underlying the project. The key concept behind the project on which he toiled for long years still looked distant to him. He often thought – was it possible to generate some new angles which can be pursued, but everything looked hazy. However, the period of the fellowship was coming to an end and thus it was the time to decide what next. Another post doc?

He could definitely write a grant for self-support but Vikram realized, a crude shock in a way, that whatever he decided to do had a substantial overlap with his current project. Narrow scientific focus, less contacts with colleagues, not attending departmental seminars, not reading anything, which was not connected with the present project finally asking for dividends. Vikram felt sorry. He started contacting other scientists around him, friends, who were in the same state of affairs as he was and thus, most of the suggestions from the peer group appeared bleak. No senior faculty of his department came to discuss with him career prospects as Vikram managed to make himself unnoticeable, in spite of a few good papers. However, a senior friend from his own country advised him to look for a job back home and also mentioned that the granting agency there may not be very stringent and that he could secure funds. He, thus, applied for a position in several laboratories around the country, went back home to deliver a few lectures and ultimately received an offer with ease. His supervisor was also very happy, at least he did not have to work to argue Vikram's case for immigration, took him and his wife for an expensive dinner, assured Vikram of all support across Atlantic although he did not forget to mention which were the areas on which Vikram should concentrate as he was not interested in them any more.

Vikram came back and established his laboratory here. He wrote a project for funding as planned, someone did mention that it was an extension of his post-doctoral work, but Vikram defended it vehemently using choicest adjectives, although he did not believe in them fully, and he was funded. Money reached him late but fortunately enough, Vikram received some start-up grants from the

place of work and he reached a comfort zone very quickly. We have mentioned all these before, but we need to find out why he is unhappy today.

Few months back, a piece of work which his graduate student carried out appeared very attractive to Vikram. In fact for the first time in his career as a scientist he felt proud of his work and decided to communicate it to an international journal although he knew he was in a hurry and a few of the experiments lacked proper control. Yet he wrote it up and communicated. Today, first thing in the morning he received a rejection letter with reviewer's comments so negative that he lost all his enthusiasm to redo some of the experiments and send it somewhere else. Vikram spent a whole day on it, discussed with his student and decided upon sending it to an Indian journal! This is, however, with no assurance that here it would be accepted, but there was a possibility. His student was upset like he was several years back but Vikram pacified this young man by telling him that a competitor, perhaps his former supervisor, had reviewed this paper and negated it due to conflict of interest. He claimed that by publishing in a home journal he would establish his priority, although all along he knew how hollow the claim was! All of a sudden Vikram felt how poor the work was which he thought was good before.

We will feel sorry for him now. Not once in this matured age of 35, was Vikram happy with his profession. However, he cannot be held responsible totally. The value system is such that a budding scientist is often evaluated on matters like journals he publishes, the institute or guide where the work has been incubated, but not on the originality and capability of the scientist to fully comprehend the work or design the experiment in search of scientific truth. Vikram on his part could have done better than a 'work horse'. He could have thought for himself, discussed with the guide and peers who attended his seminars, read extensively to develop his project and given it an identity of his own. Not once did Vikram think his intellectual output was worth noticing, no matter where it sees the light of the day.

While driving back home in the evening Vikram was in a state of depression. This was just one day in his life. It was not as bad as that of Ivan Denisovich! Yet 'Shukhov went to sleep fully content' on that eventful day. But Vikram needs to spend next 30 years this way only. The very thought is disgusting.

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