

Interviews and me

K.S. Gandhi

The season for interviews will be on sooner than later and I thought that I will share a few of my experiences with you.

I was born in an era where interviews were not required to admit a child into Play School. It was very fortunate for me. So, I was admitted to school and sailed all the way through graduation without being interviewed. My first interview was for admission into MTech in IIT Kharagpur. In those days, that was THE destination for all Bachelors degree holders in chemical engineering aspiring to study more. I suspect that there was a serious academic consideration behind this: the duration of the course was one year while in other places it was two. Who says that *all* things change? Any how, I went in for being interviewed and there was a big panel of professors. You don't realize (or do you?) now, but I was then a very confident *young* man. I wont admit it even now, but I think the sole basis for the confidence was not what I did know, but what I thought others did not know. My interview began in the usual way of making the candidate comfortable and let me tell you it was totally ineffective! Then the *real* questions were fired. I was asked what were the typical velocities employed in heat exchangers using liquids. I casually asked: "Double pipe or shell and tube?" They said: "You choose." I had a smattering knowledge of optimization. So I said that really one does not have to specify, that velocities fall out of optimal design. To be truthful now, I knew at that time that there was a figure, but I was not certain whether it was 40 or 4 or 0.4, though I knew the units: ft/sec. Besides, I was seeking to show off my knowledge. Any how, the panel did not bite this. They said that heat exchangers have been designed for a long time, and there must be some number. I was however not willing to give up, so I said that those are antiquated methods. The panel also was not willing to give up, so they said, OK, but what is the ball park figure. Then I made the fatal error. I said that one can look up in a book. The panel was very prompt in their reply. They said go home and DO look up. As I just stepped out of the room, I heard lots of guffaws. I wont give any thing for guessing the outcome of the interview!

The second interview I faced, for obvious reasons, was for a job. I must say that it was a sweet interview since when I went in, they asked me to show my degree certificate, and that was it! Always choose companies in a hurry to hire. That is how I successfully ended up in a paper mill.

As it turned out, I will have to write separately about it, I decided to try once again higher studies. So I applied to IIT Kanpur for the position of Senior Technical Assistant. As I learnt much later, those staff are affec-

tionately referred to as senior tech asses. My interview started badly. I was asked if I knew any chemical technology. I of course had to say Yes! Then I was asked if I knew any plastics. Remember, this was well before the days of the movie Graduate. Any how, I confidently replied: Bingham plastics. The questioner was aghast at my reply. But a surprising thing happened at that time, a rheologist was there, and his eyes lit up. For a while, my interview went off as a song. Then it happened. It always happens when your interview is nicely humming! Others got restless and suggested that I may be asked some thing else. So, some one asked me if I knew what second law of thermodynamics was all about. I felt like I was hit by a bomb. You might wonder 'Who would not?' The answer is: 'Interviewers'. Any how, I had to face it. I said that the second law states that entropy of the universe always increases. This kind of answers have several draw backs. One should know a few more intelligent lines and not just that one. So, I got stuck when one of them asked: 'Have you heard about isentropic processes?' I was struggling. I would have looked more foolish if I said that I have not heard the word isentropic process, since they would have asked me to guess meaning of the word, which was obvious. Some times luck smiles on those being interviewed also. And, some body noticed that too much time was taken on me, and that they should call the next one. As I was leaving the room, I heard some protests, and IIT Kharagpur began looming large on my mind. Fortunately, I was selected, and my life took a firm turn for the better.

My luck held on for long and I did not have to face an interview till I was to join PhD program. It was not really an interview since I was already selected, but it was to advise me about my course work. I was asked what was my favorite subject and I replied fluid mechanics. I was asked a few basic questions, and then came this question. One of them said that he had two identical hoses out of which water was coming out at exactly the same speed. He said that he will align the hoses perfectly so that the jets of the fluid will flow toward each other. What would happen then? Really I did not know. I said that gravity is there, and he was very helpful and asked me to neglect it. I tried to dissuade him by saying that water might spill all over him. But that did not work. I could not manage to tell that a sheet of water will form. You know what: I had to take several courses on fluid mechanics, though a few friends do say that all of it had the same effect on me as that of water flowing over a duck's back.

My luck held on for long and I did not have to face an interview till I was at the end of my PhD programme. I wanted to join IIT Kanpur, and had applied there. I knew one good thing about them: they could offer jobs in absentia. However, I was not sure of the result, and so I thought I should look for another job (does it sound familiar?). I went for an interview

with a company. I was working on molecular theory of viscosity of polymer solutions but the interviewer was familiar with continuum rheology. It always happens like that! So he asked me if I was dealing with the second normal stress difference and so on. I imperiously said that basics about viscosity should be first understood from a molecular view point before going onto such “secondary” things. I then explained to him what I was doing. It looked like he was listening intently. He said that Mike (my PhD adviser: Prof Mike Williams) and I were awfully smart, all I talked was very impressive though it sort of went over his head, but he will get back to me later. I smiled benignly and came away. Later on I was told that it is the American way of saying that I did not get the job. Fortunately I was asked to join IIT Kanpur.

The most interesting thing happened when I joined IIT Kanpur. As it happens, the junior most faculty get the onerous responsibilities. (Beware junior faculty! Be prepared to become president of CEA.) I was made in charge of advising students about placement! But by this time, I was secure and was prepared to follow the dictum of Bernard Shaw: Those who can, DO; those who cant, TEACH. I thought about the process and understood that the interview is all about communication. To understand what the other wants to find out, tell others what skills you have, and get them to see your strengths but manage to give a glimpse, but only a glimpse, of your weaknesses. And of course keep your cool. Once in a while you get stumped too. But here cricket has a lesson for all. Imagine a tear away fast bowler hurling the red cherry at you. You put a confident foot forward, the ball swings late, and just misses grazing your bat. The fast bowler is glaring at you, muttering 'You lucky so and so', and making you feel that you should walk away in shame. But, you hang on and who knows you may hit the next ball for a straight six, the ultimate ignominy to any quickie!

This was published in CEA magazine 2009