Pallavi Pallerla

Evan Speice

Independent Study Mentorship

20 October 2017

**Interview Assessment #1**

**Name of Professional:** Nilesh Doke

**Profession/Title:** Engineering Manager

**Business/Company name:** Texas Instruments

**Date of Interview:** 19 October 2017

My first interview was conducted with Mr. Nilesh Doke, the Engineering Manager at Texas Instruments who has been working in that field for his entire career. He had so much information to share with me in the 30 minutes we had a chance to sit down and speak. For the majority of the interview, we talked about his daily work and his passion for chemical engineering and the company he works for. I am extremely grateful for the time he had set aside for me and I had learned so much from a primary source on what one aspect of chemical engineering is about.

The interview started off with what his main role is at Texas Instruments (TI) and how it impacts the world as a whole. He informed me how he makes semiconductors which a group of people and make it work with various devices. I was actually quite surprised when he mentioned various devices. Normally, when someone refers to Texas Instruments, they usually refer to the calculators. Mr. Doke explained to me how it is very sad that they only get recognition for making calculators, however, calculators are only a small percentage of the things they actually make. Texas Instruments actually make specialized microelectronics which they are not allowed to announce for the specific company they make it for due to contract binding. He said, “Because the calculators are what students see branded on a daily basis, they think that calculators the only thing they do as a company.” The things I normally think of when I think of semiconductors is physics and engineering, not chemistry. I was curious on how it is considered to be chemical engineering and he gladly discussed the connection how he works as a team in his factory and implements plasma into the semiconductors which were previously given to them from a different field in the company. It was fascinating to see how close his work seem to appear as electrical engineering but actually not be. It reminded me of one of my research papers I have done and it helped me understand was he was talking about.

With the information he told me about his career and how he approaches his work, I noticed how his personality matched with what he does so I asked him what made him so passionate about chemical engineering. He told me that he knew for sure that he wanted to make an impact in the world and want to have a new challenge every day when he came to work. He ended up choosing chemical engineering over computer science because everyone else was doing computer science during his college years. He said his personality “...fits in very well” with what he does and likes working with new groups to complete an assignment. This made me excited because one of the main reasons I wanted to study chemical engineering is because they work in groups. All this information sparked this new interest within me and made me start thinking about college. I asked what courses would be beneficial for me to take and Mr. Doke told me that if I plan on pursuing chemical engineering. It would be useful to take the chemical engineering pathway because even though each company is required to train the newly hired, it helps understand the material being coached.

Mr. Doke and I also talked about other things on how his company functions in addition to his field. This allowed me to gain a new perspective on chemical engineering. In the end, I learned so much about this topic and quite excited to conduct more interviews to take a step forward in my ISM journey.