I me curious and passionate to work

Business, Industries

I always believe that there is asolution to every problem. To decipher a solution is something only few giftedand motivated individuals can do. It is interesting to acknowledge theadvancement in technology, and the methods used to diagnose and cure healthissues. My early curiosity in plantscience has inspired me to embrace the advanced knowledge of chemistry andbiology. The ancient world people used to rely on herbs and shrubs to cure anykind of health problems including removing toxins or poison from the body andto healing fracture of bones. I am mesmerized by the study of science and thedevelopment in the field of discovering new facts and designing and developingnew technologies. It is amazing how scientists study the molecular mechanismsof plant and animal products to design and develop drugs and different valuableproducts.

Moreover, the chemical reaction, use of nanoscience advancement forthe effective and efficient delivery of drugs is marvelous and has always mademe curious and passionate to work in the field of biochemistry and technology. Since my undergraduate program Iam passionate about drug discovery, design, research, and development. To extendmy laboratory skills, addressing new kinds of scientific question, and meetingnew scientists and to have hands on experience working as a researcher I hadapplied for a summer research internship and was accepted into NIH funded INBRE(IDeA Network of Biomedical Research Excellence) hosted by University ofOklahoma Health Science Center. I worked in the lab of Dr.

Mooers in thedepartment of Biochemistry and Molecular Biology. This lab is funded by the NIH and the works on the structuralbiology of a unique RNA editing system in trypanosomes and the human proteinJMJD4 that helps

regulate the termination of translation. I was able to makecontributions to both projects.

I learned to make mutant protein genes by PCR, DNA and protein gel electrophoresis, subcloning, heat shock transformation ofplasmid DNA into bacterial cells, protein over expression, centrifugation, column chromatography, dynamic light scattering, and crystallization trials. I learned how to troubleshoot problems in thelab and how to interpret the results of my experiments. This enrichening summerresearch experience strengthened my commitment to pursue a career in researchand development.

My formal advanced education inchemistry started with my undergraduate program in Chemistry at the NorthwesternOklahoma State University. The undergraduate program was as rewarding as it wasjoyous. Upon completing my undergraduate I followed my belief in paving a firmgroundwork in terms of acquiring more hands on experience by working as aprofessional in a chemical industry. Subsequent to my academic knowledge, Istarted my career as a chemical operator in an Iodine processing plant wherenot only I had an opportunity to apply my theoretical knowledge of physicalchemistry, analytical and instrumental chemistry, organic chemistry, calculus into solving real world problem but also to learnmany aspects which are not offered in undergraduate courses such as theengineering involved in designing plants, converting a waste brine water into asource of valuable product that can later be derived and used in verities of applicationranging from industries to daily household purposes. The journey of exploringthe

realm of knowledge and probing into real world situation is often strenuousand rewarding at the same time. My dedicated academic effort paid off very wellwhen I got an opportunity to apply my knowledge of chemistry, research and labexperiences to suggest and demonstrate the efficient way of recycling the chemicalsto reduce the waste and cut the expenses. Later I was offered to relocate in a headquarterof the company located in Kentucky to work as a Chemical Lab Technician where Ihad an immense opportunity to improve my bench skill as well as learninstrumentation and analytical lab skills by working with GC, HPLC, and wetchemistry. Working close with the plant engineers and operators offered anopportunity to understand the plant processes which delved deeper intofascinating world of chemical engineering.

My hard work, diligence, and mostimportant my passion to learn and challenge my aptitude has awarded me with anopportunity to work in a cutting edge pharmaceutical industry as a processdevelopment chemist. This opportunity has been a turning point in my career andmore than a chemist I am more allured in improving chemical technologies andcreate new products that can improve the quality of life. This field requires agreat deal of interdisciplinary abilities in order to be successful. Because ofmy inquisitives nature, admiring challenges and mysteries I have developedpersonal standards of how to conduct myself in life, disciplined and persistentin my pursuit and above all to work hard at everything that I do. Working as aprocess development chemist has not only improved my research skills but alsoenabled me to develop communication skill with advance leadership and interpersonalskills from working on projects as a technical lead and

presenting results tothe team leader, department members and customers as well, all of which provetremendously useful in your graduate program.

I am confident that my academicbackground, combined with my experiences outside of the classroom, gives me thematurity that you are expecting in a worthy candidate for your program. I am clearlyaware of the tremendous efforts I have to make in order to fulfill thisaspiration; however, I am determined to take up chemical engineering as mylifelong pursuit. I am confident your program will give me a unique range ofexperience and expertise which will give me enormous advantage in my career asthere are countless opportunities in the field of chemical engineering. I fgiven an opportunity to enter your school, I would be very interested to takecourses specializing in nano and micro biotechnology and chemical reactionengineering. After completing Master’s inChemical Engineering I expect to develop and inherit cutting edge skill andarmed with the tools I need to achieve considerable success and make a lastingimpact in the field of drug research, discovery, and manufacturing industry. Iam looking forward to embracing my dream career.