

Food Science Personal Statement

"Gastronomy is the joy of all conditions and all ages. It adds wit to beauty". People can hardly refuse temptation of delicious food. But more important, food is an essential element for the survival of human being - according to Dr. Maslow's "Hierarchy of Needs", the basic need is "physiological needs" which contains air, water, food etc. That's why Professor Yuan Longping, "Father of Hybrid Rice" is so important to China as well as the whole world; he resolved the biggest problem face to Chinese, avoid thousands of people from famine.

Ever since my infancy, I was captivated by the colorful sweets and amazing shapes of chocolates. And I know these beautiful candies would spoilage if I don't have them in time. I was fuelled by strong curiosity: why food will go bad? Why we could recover from minor illnesses by simply taking food? These questions are all beyond my knowledge and they initially sparked my interest in Food industry. And I think I found out the way to solve these problems when I have my first class of Biochemistry in high school. The course gave me valuable insight into biology and confirmed my aptitude for the subject. I therefore choose Food Science and Engineering as my undergraduate major in Shanghai Normal University (SHNU). I want answers to the questions grew with me all along.

Flirting with "food" has created wonders. My obsession with the subject encouraged me to work and learn hard. During past three years, I take courses such as "Food Chemistry, Food Microorganisms, Food Analysis, Nutriology, Dietetics, Food Engineering, etc"; those courses built a sense of the entire picture of the subject, and fully explore many of the ideas I have only touched the surface of it in high school. My academic performance is excellent: my average GPA is 84.7/100, I have also been nominated as Model Student and awarded 2nd scholarships of SHNU every year.

Furthermore, because of my outstanding performance in study, I was also appointed as class monitor by my classmates in sophomore. It is a job with responsibility more than honor and I strive to dedicate myself to the school career. Some activities were hold successfully under my servicing. Such as fellowship with other colleague students, class outing, quiz, marketing/sales contest etc. If deal with microorganism is learnt from class, then the art of dealing with "people" is learnt from these activities. Thereafter, working successfully with others continues to be a key feature of my university community.

My tutor always oblige us to work independently and resourcefully. This concept is with me during the university time and it develop my imagination, my creativity potential and strengthen my hands-on capability. From April 2009, I learned from and assisted teachers in conducting research. The research subject "Use of lipopolysaccharide on identification of *Vibrio parahaemolyticus* and other *Vibrio*" was applied successfully and get sponsorship from SHNU. The procedure is to choose 1-2 kinds of typical foodborne pathogens, optimize processing method of sample product and set up spectrum database of foodborne pathogens by using method of FTIR; then establish criteria on detection of foodborne pathogens from different food. The reason i choose LPS in *Vibrio parahaemolyticus* is because LPS is one of the characteristics of gram-negative bacteria; different LPS between different source and serotypes can be displayed roughly by SDS-PAGE. LPS infrared spectrum method has been proved more significant and accurately compare with cell infrared spectrum method in the area of classification and identification on microorganism. Establish the criteria base on LPS infrared spectrum method is not only an important complement to method of calibration, it is but greatly reduce the testing charges, includes use of reagents and consumables. I have been deeply committed to the project for almost one year and I derive great satisfaction from the process - I was rewarded in term of awards and skills. I understand that this industry constitutes an endless research, with endless observation and contemplation.

From Summer vocation of my junior, I began my internship at Microorganism Lab of Shanghai Institute of Quality Inspection and Technical Research (SQI) to test pathogenic microorganism in food and cosmetics. This is a rewarding and invaluable experience which allows me work from ideation to implementation. The work is trivial but meaningful. We are assigned to do the test by corporate before they launch new product; by court who want to obtain official report on the subject matter or by government institute who want to ensure the products is safe to public. And this year, as World EXPO 2010 is hold in Shanghai, we also serve for them during the period. The testing procedure contains inspection on total number of bacteria as well as mycotoxin; and for different product, we focus on specific bacteria inspection. My major work is to use a express method called ELISA to test aflatoxin in a product; establish a qualitative and quantitative analysis by absorbency of the final product. Through

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the internship, I have in-depth knowledge on the sample dealing; understand why our teachers always emphasis this process (sample pretreatment) is even more important than the test itself.

The team I am in is led by expert in the industry and with co-workers from various backgrounds. I learnt not only method of experiment but also how to work as a team. Their high standard, great enthusiasm on work spurred me. Except normal routine, they also taught me time management, task prioritization and self-control. My sense of responsibility is significantly improved as well.

And this internship opened a door for me. It draws my attention to a career which could benefit people by my own job. I know I don't merely want the answers to the questions confused me when I was a child, but I need to do more. It affirmed me in Food Science – a field where men can live better – become ever more beautiful. Given this career aspiration, I would like to continue my study in this field, which is the best way for me to pursue my knowledge, to seek out and get involved in things that inspire, challenge and stimulate me all the time. I believe the knowledge I learn and the training I accepted in undergraduate school prepared me amply for the courses ahead.

Outside of academia, I always relax myself in sports. I am good at swimming and badminton. Swim is the first thing taught me “perseverance”. From a little girl who was fear of water, I am now can be the swim coach of my baby niece. And watching Formula 1, however, is my primary passion. Because of my interest and basic knowledge on it, as well as my good English and organizing capacity, I was selected as few volunteers from 2008 to 2009 to provide service to the 10+ constructors for F1 Chinese GP hold in Shanghai. Their team-work, high efficiency impressed me a lot and inspired me in all aspects of my life.

To study overseas and broaden my horizon, a nation with long history and diversified culture will be my first priority. UK, is the undoubtedly choice to me. And provided my study enthusiasm, it is but natural that I select xx University which is at the forefront of research in the industry. I believe I could be guided toward these objects through the master program. And I am ready to work hard and strive to leave behind my own contribution on the industry afterwards.