Prof. Gurung, Ras

I grew up in a society where only 25% of women are literate. I am the first generation in our family to get a formal education. I faced all kinds of challenges and struggles while growing up. Despite all that, I never stopped going to school and learning. I have experienced the life of a chemistry teacher for more than two decades and I am always enthusiastic to learn new things. Till today I am the only woman who has ever earned a Ph.D. from my area, and this has given my family pride. I consider myself very lucky because I got the opportunity to go to school. Although my both parents were illiterate, they always encouraged me to get my education.

I received my Ph.D. in organic chemistry from Southern Illinois University (SIU) under the tutelage of Professor Yuqing Hou and my dissertation describes novel synthetic methodologies using hypervalent iodine reagents. My MS research at Western Illinois University (WIU) was also centered on hypervalent iodine chemistry, specifically developing an in situ generations of *o*iodoxybenzoic acid (IBX) and a catalytic protocol for oxidation of activated C-H bonds. Both at WIU as well as SIU I was regarded as an excellent teaching assistant with superior teaching and motivational skills. As a research chemist, I cherished opportunities to train undergraduate students in the art of chemical research.

My passion for science became apparent at an adolescent stage when I started watching detective serials on discovery channel. The puzzles, twists, and techniques involved, had always spawned intrigue and intense interest to dig out the science behind crime scenes. I have always had an inquisitive mind and pondered questions that crossed my mind every minute. Solving the mysteries in every episode came up as challenge for me, which I enjoyed the most. With the help of my teachers, I started learning about the techniques and tools employed by forensic experts in order to evaluate crime scene evidence. While getting insight into the very subject matter, I realized that most of the daily life activities revolve around chemistry, and it is fundamental to several vital processes in the world. My enthusiasm for science, especially chemistry, took root from there and continued to grow afterward. Its practical application and need for rational thinking appealed to me and gave me desire to study it at a higher level.

I worked very hard and pushed myself to think deeply and explore new ideas or solutions by reading journals like Nature, Angewandte Chemie and American Chemical Society publications. I enjoyed learning a vast amount of new material, honing my various skills, such as analytical and critical thinking skills, qualitative and quantitative reasoning, and nurturing problem-solving ability. Then, I applied all my acquired skills to achieve my career educational goal.

As an educator, I learned the human brain retains information better when taught the material in a practical way. All STEM courses are taught by providing a practical overview of commonsense ideas. I would like to advise all women to become successful in the rigorous courses in STEM programs. We need to put more effort to relate the basic concept of the subject material with its practical application because these common-sense ideas help us understand the material.