Hong Ting (Samuel) Chiu
Personal Statement

Many of us can just turn on the tap to get a cup of water when we are thirsty. We drink that cup of water without worrying any possible health problems. However, that is not the ordinary case around the globe. According to the UNICEF, there are about 1.1 billion people do not have access to safe drinking water; and many of whom are in the undeveloped or developing countries. To improve conditions of these countries, the Millennium Development Goal 7 plans to halve the proportion of people that without sustainable access to safe drinking water by 2015; however, some countries are lagging behind to reach this goal.

While there are many kinds of contaminant in the drinking water, arsenic is one of the common concerns for the groundwater. The excessive intake of arsenic-contaminated water can lead to arsenic poisoning, which ultimately lead to gangrene and/or cancer. Bangladesh's mass poisoning in 1993 was one of the infamous large-scale outbreaks. Therefore, it is crucial to develop an affordable and economical solution to remove arsenic and treat the drinking water to standard.

Participating in the USF-IHE IRES program would give me the opportunity to work with some of the finest researchers in the field and develop skills on researching. I would have the chance to work in the laboratory and widen my eyes. It also enables me to obtain foreign ideas and technologies of water treatment; hence, develop a different perspective. Furthermore, I strongly believe that this program has enhanced my interest in environmental engineering and its related research topics. All these experiences are invaluable to my career.

As a third-year undergraduate student in Department of Civil and Environmental Engineering, I am currently working toward the B.S.C.E. and being an undergraduate research assistant with Dr. Maya Trotz. I was involved in a competition hosted by American Society of Civil Engineers (ASCE). My team and I were researching on the use of metallic oxides as an alternative arsenic removal method. The involvement in this research competition has taught me to think innovatively and approach the problem differently than what I have learnt from the book. I will continue my education and pursue the M.S. and Ph.D degrees upon the B.S. degree. I have also planned to be certified as a professional engineer and LEED accredited professional. After that, I would like to take role in full-time research work.