Statement of Purpose

In determining my academic path, what has been of particular importance for me is the wide variety of pollutants that can affect human health and the fact that there are also a lot of new pollutants that are emerging as a consequence of changes that have been taking place in the modes of production and overall within the industry. Being exposed to various types of pollutants daily and furthering my knowledge regarding this issue has given me invaluable insight into the scope of this major. The more I studied this area, the more I understood the real significance of the research in this area. All of this resulted in the growth of my interest in this specific area of my major, the interplay of forces in the environment and the energy sector. As a result, I am considering projecting my focus on research in this particular area for my future studies.

The roots of my deep concern for environmental issues can be traced back to my undergraduate studies in chemical engineering. Gaining more knowledge about my major as I passed numerous courses, paired with my enthusiasm for expanding my knowledge in it, paved the path for me to narrow my areas of focus down. Consequently, as my interest grew gradually, I became keener on going beyond the curricula and discovering where my interests lay. Having developed this mindset toward my major, I started to see the bigger picture of environmental issues. It was then that I realized the existing water crisis in my home country is just a jigsaw in a bigger puzzle. Also, doing my apprenticeship in a refinery was a critical stage in my studies since it provided me with valuable insight into the breadth and depth of environmental issues. Seeing how there was little control on optimizing energy usage and dealing with waste from petroleum production was truly worrying. It was precisely then that I realized issues such as Global warming and waste management are just examples of the environmental crisis on a global scale, and contemplating such problems prompted me to pursue my studies for a master's degree in environmental engineering to take the first step in trying to contribute to the ongoing research in order to devise solutions for such problems in today's world. I must add that the undergraduate life was absolutely precious for me as I got to improve my talents in plenty of domains, including problem-solving, working independently and with teams, becoming sociable, and most importantly, being innovative.

With the commencement of my studies for a master's degree, I delved deeper into studying courses such as analyzing energy systems, energy and environment, recycling systems, and identifying pollutants from the food industry. My major focus from the very beginning of my studies for my master's was my thesis. The reason was that the most crucial part of a master's degree was doing a thesis, and for that end, I had to select a topic that aligned well with my interests. All this led me to work on biogas. The prime reason for choosing this topic was that fossil fuels are taking their toll on the environment worldwide. We can see the grave ramifications in many areas ranging from climate change to various food and water crises. As a result, we must start using renewable energies to supplant fossil fuels completely. Considering that biogas is produced from natural resources, it offers a practical alternative to fossil fuels. Working on topics in the environment sphere is both intriguing and rewarding. Consequently, I have done another research project in which petroleum waste is treated using membranes to further my work in this area. Working on this topic has laid the ground for my future research since I believe that the scope of my thesis topic is not limited to a master's thesis but can be extended to research at the Ph.D. level as well. Accordingly, I am convinced that this fantastic

discipline has a lot to offer me in my future, and since I am highly motivated to pursue my studies, I am confident that I will achieve my essential long-term objectives through the continuation of my education. I am confident my promising background, diligent personality, and motivation will facilitate the process of my prosperity and put me on the path of fulfilling my dreams.

Alongside my academic endeavors, I have worked as an engineer in a company's R&D department, undertaking the responsibility of conducting research to increase efficiency. This experience allowed me to familiarize myself more with the ins and outs of the industry and put theory into use. Last but not least, all my experience both in academia and the workplace has prompted me to aim for more ambitious goals in my field and pursue my research in Ph.D. so that not only will I be able to improve my knowledge further and reach the highest peaks but also I will be able to work on international level projects to address the topics of vital importance in today's world, namely, those related to environmental issues.