

## Statement of Purpose

I am Avinash K V, a passionate and driven Mechanical Engineering professional from Malappuram, India. With a strong academic background and diverse work experience, I am eager to further my education and contribute to the field of sustainable energy systems and circular processes. I am applying for the Master's program in Mechanical Engineering at Ruhr University Bochum, as it aligns perfectly with my career aspirations and passion for sustainability.

My journey in mechanical engineering began with my Bachelor's degree at Sree Chitra Thirunal College of Engineering, Thiruvananthapuram, where I graduated in November 2021. During my undergraduate studies, I developed a solid foundation in engineering principles and practices, and I was particularly drawn to the areas of energy efficiency and sustainable technologies. My final year project, titled "Life Cycle Assessment of LMV Engines," allowed me to delve into the environmental impact of automotive engines. Through this project, my team and I analyzed the energy consumption and emission standards of light motor vehicle engines, which not only honed my technical skills but also sparked my interest in sustainable engineering solutions.

Upon completing my degree, I joined Mullath Enterprises Private Limited as a Mechanical Engineering Technician. During my tenure, I gained hands-on experience in mechanical systems, problem-solving, and project management. I was involved in various projects that required meticulous planning, execution, and collaboration with cross-functional teams. This role enhanced my practical skills and reinforced the importance of sustainability in engineering practices.

In October 2023, I transitioned to the role of Enterprise Development Executive at the Department of Industries and Commerce, Malappuram. This position has given me the opportunity to work on initiatives aimed at promoting sustainable industrial practices and supporting local enterprises in adopting eco-friendly technologies. This experience has broadened my perspective on the intersection of industry and sustainability, and has further motivated me to pursue advanced studies in this field.

To enhance my technical expertise, I am currently undergoing training as an Embedded Engineer at Emertxe in Bangalore. This training is equipping me with advanced skills in embedded systems, which are crucial for developing innovative and sustainable engineering solutions. I believe that the integration of embedded systems with sustainable energy technologies can lead to significant advancements in energy efficiency and resource management.

In addition to my technical qualifications, I am proficient in multiple languages, including English (B2), German (A2), and Hindi (A2). My linguistic abilities, coupled with my cultural adaptability, will enable me to effectively collaborate in an international academic environment.

Ruhr University Bochum is renowned for its cutting-edge research and strong emphasis on sustainability. The Master's program in Mechanical Engineering, with its focus on Sustainable Energy Systems and Circular Processes, is the perfect platform for me to deepen my knowledge and contribute to meaningful advancements in this field. I am particularly interested in

exploring the development of renewable energy technologies, energy storage systems, and the implementation of circular economy principles in industrial processes.

My long-term goal is to become a leader in the field of sustainable engineering, driving innovations that reduce environmental impact and promote sustainable development. I am confident that the education and experiences I will gain at Ruhr University Bochum will be instrumental in achieving this goal. I am excited about the opportunity to learn from esteemed faculty, collaborate with like-minded peers, and contribute to groundbreaking research in sustainable energy systems.

Thank you for considering my application. I look forward to the possibility of contributing to and growing within the vibrant academic community at Ruhr University Bochum.

Sincerely,

Avinash K V