STATEMENT OF PURPOSE

My name is **Raeid Basit Mukadam**, and I am writing this statement of purpose to express my sincere interest in pursuing a **Master's degree in Mechanical Engineering: Sustainable Energy Systems & CSP and Circular Process Engineering** at one of the leading German Universities namely the **Ruhr University Bochum**. I can say that this program is in tandem with my academic course requirements as well as meets my need to contribute towards the new ideas that will lead to sustainability of the future.

I completed my Class 10^{th} and 12^{th} under the Central Board of Secondary Education, New Delhi, India in 2020 with an Aggregate percentage of 90.8% and 96.16%. I am currently enrolled in the BTech Mechanical Engineering Course at Manipal Institute of Technology, Manipal, Karnataka. Throughout my study in this university, I have gained a paradigm view of my core area of specialization, which is mechanical engineering. The courses include mechanics of solids, fluid mechanics, heat transfer, finite element methods, CAD-CAM. I am fully competent in the English language since I have spent 16 years learning in English medium school and I recently did my IELTS and got an overall band of 8.

Working under the internship program in the Council of Scientific & Industrial Research, National Aerospace Laboratories, Bengaluru, India under the provisions of Northern Clay High School Uganda from 12th December 2022 to 20th January 2023 I benefited from conducting tests on Mode I fracture toughness of unidirectional carbon fiber composites. Apart from providing me excellent practical experience in using different software, I was able to strengthen my interest in the subject as well as in sustainable materials and their usage in diverse branches of engineering.

I have also taken part in various activities outside the classroom learning since I was in school Besides my academic activities, I have been involved in extra co-curricular activities. I have published papers in Thrust MIT: The technology bulletin of MIT, an annual magazine organized by the MIT Manipal for two consecutive editions 2022-2023 and 2021- 2022. Other than that, I have the privilege to receive the Diamond Jubilee Award which holds the view of selecting toppers in the second year, and I have also claimed recognition for being an Advisory Board member of the Photography Club at Manipal for putting up a hardworking performance.

During my undergraduate level, I developed and enhanced my skills in a few programming languages and software tools such as Python, SolidWorks, Fusion 360, ANSYS, CATIA and MATLAB, CFD etc. These technical skills have equipped me to solve different engineering challenges and have prepared me for future tasks in the sphere of sustainable energy systems and circular process engineering.

This Master's program in Mechanical Engineering: Sustainable Energy Systems and Circular Process Engineering is perfectly aligned with my academic and professional profiles. Firstly, I am driven by the prospect of exploring innovative technologies and studies in the field of renewable energy, energy efficiency and resource-sparing techniques. These areas of concern are well covered in the program, and I have a keen interest in sustainability and protection of the environment. Secondly, the diverse nature of the curriculum: mechanical engineering with emphasis on sustainability practices will enable me to know how to address various problems in the energy and manufacturing industries adequately. In addition, I am looking forward to applying my knowledge of simulation software, modeling and optimization procedures for constructing and analyzing energy systems and circular economy processes. Technical expertise will be highly useful in creating new technologies and ensuring that industries remain environmentally sustainable.

Germany has the best standards when it comes to the education of engineering students and their dedication to the sustainability of the environment. Due to the research technologies and facilities the country has in the area of sustainable energy systems and circular process engineering, it is a perfect place for me to achieve my academic and career goals.

The Ruhr-Universität Bochum has a very good reputation and impressive research activities in the areas I am interested in to continue my education. The Master's program in Mechanical Engineering: Sustainable Energy Systems and Circular Process Engineering is very much aligned with my interest in sustainability as well as the opportunity to make a positive impact in the design of a more sustainable world.

After completing the Master's program in Mechanical Engineering: On the major of Sustainable Energy Systems and Circular Process Engineering, I envision a position in either a large reputed company like Siemens Energy, Schneider Electric, or Vestas Wind Systems as a Sustainability Engineer or an Energy Systems Analyst in the near future. In each of these positions, I aim to bring my knowledge in sustainable energy and circular process engineering toward creating incremental innovations with a focus on accomplishing the specific goals of minimizing resource wastage and advancing the practice of sustainable work in the industry.

In conclusion, I am confident that my academic background, technical skills, practical experience, and unwavering commitment to sustainability make me an ideal candidate for the Master's program in Mechanical Engineering: Energy Efficiency and Resource Management –Ruhr-Universität Bochum Discipline, Sustainable Engineering: Focus Area, Sustainable Energy Systems and Circular Process Engineering. Here is the textual description: I am ready to start this inspiring process and do my best and bring my knowledge and passion for the necessary changes.

Thank you for considering my application.