STATEMENT OF PURPOSE

My name is **Yuvaraj Chandra Shekar**, and am applying for the **Master of Science in Materials Science and Engineering** at **Karlsruhe Institute of Technology (KIT)**. The purpose of this letter is to express my intent and motivation for pursuing this course and to provide a detailed overview of my academic background, professional experiences, and extracurricular activities that have prepared me for this advanced study.

 graduated with a Bachelor of Technology in Mechanical Engineering from Reva University, Bengaluru, in June 2023, achieving a CGPA of 9.22, which corresponds to a German grade of 1.47. My academics with schooling have been equally impressive, with scores of 79% (German grade: 1.97) in my Pre-University Examination in April 2019 and a 9.4 CGPA (German grade: 1.30) in my Secondary School Examination in June 2017. Additionally, have proven my proficiency in English by achieving an overall band score of 7.0 (C1) in the IELTS examination in January 2024, with individual scores of 8.5 in Listening, 7.0 in Reading, and 6.5 in both Speaking and Writing. My language skills, including German include A1 and A2 certificates from Goethe, completed in August 2023 and April 2024, respectively.

My mechanical engineering education gave me a strong grasp of engineering principles. They fit well with the studies of the Materials Science and Engineering program at KIT. During my bachelor's degree, studied subjects such as Calculus and Applied Physics. also took classes on Strength of Materials and Heat Transfer. All of these subjects are directly relevant to material science.

In addition to my formal education, have also earned several technical certificates that have expanded my knowledge and skills. These include an NPTEL Online Certification in Introduction to Mechanical Micro Machining from IIT Kharagpur (January 2023-April 2023), NPTEL Online Certification in Automation in Manufacturing from IIT Guwahati (July 2022-October 2022) and MATLAB, Python, and Basic AutoCAD 2020.

 interned at Bharat Electronics Limited from August to September 2021. also interned at the Microwave Tube Research & Development Centre from July to August 2022. They were key to improving my practical skills. At Bharat Electronics, gained knowledge of manufacturing and the supply chain of radars and storage devices for ships. At the Microwave Tube Research & Development Centre, gained expertise in micromachining. It was from the Precision Machining Division where worked on various components for microwave tubes.

In terms of technical skills, am proficient in MATLAB, AutoCAD, and MS Office. presented an article called “Design and Fabrication of Two-Way Transmission in Hubless Cycle” at the 5th National Conference on Recent Trends in Mechanical Engineering at Reva University in May 2023.

Germany is famous for its advanced engineering and technology sectors. The country is home to some of the world's top research institutions and industrial giants. It offers unmatched chances for academic and professional growth. Germany is committed to innovation as it has 33.1% of the EU’s R&D budget. Its strong economy makes it an attractive destination for engineering students. The German education system emphasizes practical experience and collaboration with industry which believe is crucial for a field like materials science.

Because of its excellent global ranking and prestigious reputation in engineering and technology, KIT stands out as a top pick in my opinion. According to the QS World University Rankings for 2024, KIT is placed sixth in Germany and 119th overall. Its programme in Materials Science and Engineering is also well-regarded. The ARWU Subject Ranking 2022 places it second domestically and 76th out of 100 worldwide. KIT prioritises industrial cooperation and research. Because of this, it's the perfect venue for me to advance my research and technological expertise. Innovation and integrative learning are prioritised at the university. These qualities all perfectly match my academic and professional objectives.

The job opportunities in materials science and engineering are vast. They cover industries such as aerospace, automotive, and electronics. am very interested in roles like materials engineer, research scientist, and quality control manager. The program offers modules in Thermodynamics, Kinetics, Simulation, Material Analysis, Technical Deepening, and Material Science Deepening that will give me the advanced knowledge and skills needed to excel in these roles.

 am eager and ready to do the Master of Science in Materials Science and Engineering at KIT. have a strong academic record, relevant work experience, and good technical skills. These make me a good candidate for this program. am confident that KIT will provide the ideal place for my academic and professional growth. am eager to contribute and gain from the university’s esteemed community.

Thank you for considering my application.

Sincerely,

Yuvaraj Chandra Shekar