

STATEMENT OF PURPOSE

My name is **Harsh Bellam**, and am writing to express my sincere interest in pursuing the **MSc Physics** course at the **University of Regensburg**. The purpose of this letter is to outline my academic background, professional experiences, and extracurricular activities, and to explain why I am particularly drawn to this course, the opportunities in Germany, and why I believe that the University of Regensburg is the ideal institution for my further studies.

I am currently pursuing a **Bachelor of Science in Physics** at Sathyabama Institute of Science and Technology from August 2021, with a **CGPA of 8.73 (German Grade 1.76)** up to the 5th semester. Before this, I excelled in my Senior School Certificate Examination (12th Class) with a score of 93.8% (German Grade 1.28), completed in July 2021, and my All-India Secondary School Examination (10th Class) with a score of 89.6% (German Grade 1.47), completed in May 2019. Additionally, I recently undertook the **IELTS Test** on April 5, 2024, scoring an **overall 7.0** with a proficiency level equivalent to C1.

My academic journey includes a significant bachelor project from December 2023 to April 2024, titled "Growth, Characterization, and Analysis of Single In-Organic Crystals Exhibiting Non-Linear Optical Properties." This project involved the growth, synthesis, and characterization of Potassium tetra-borate crystals (K₂B₄O₇), which exhibit properties of a nonlinear optical crystal. This hands-on experience in research has improved my technical skills and deepened my understanding of material properties.

In addition to my academic pursuits, I undertook an internship at VEI TECHNOLOGIES PVT LTD from June 15, 2023, to June 28, 2023. In my role as an intern, I utilized sci.AI to understand and explain research papers, interlinking research findings in a semantic graph. This experience enhanced my analytical and technical skills, preparing me for advanced studies.

My **extracurricular activities** include participating in the **SMASH SHOWDOWN** event conducted by the Sports Club of Sathyabama Institute of Science and Technology on March 20, 2024, where I secured the second position in the **Ultimate Badminton Battle**. This involvement demonstrates my commitment to well-rounded personal development.

My motivation to pursue this course stems from a zeal to know the theoretical and experimental aspects of solid-state physics. I am particularly fascinated by the prospect of exploring modules such as Surface Physics, Infrared/Terahertz Physics, Laser Physics, Physics of Nanostructures, Computational Physics, and Nonlinearity in Classical and Quantum Physics. Moreover, I am keen to further develop my skills in Computational Physics and explore the applications of nonlinearity in classical and quantum physics. I believe that the knowledge and expertise gained from this course will enrich my understanding of the subject and open up diverse career prospects such as becoming a Research Scientist, Solid State Physicist, or a Quantum Computing Specialist.

Germany's reputation as a hub for scientific research and innovation is unparalleled. With over 427,000 international students, Germany is the fourth most popular destination among international students in the world. Furthermore, Germany's strong economy, world-class infrastructure, and robust focus on research and development, with over €100 billion invested annually, make it an attractive destination for pursuing higher education in physics.

The **University of Regensburg** stands out to me as a premier institution renowned for its excellence in physics education. According to the QS World University Rankings of 2024, it ranks within the top 750 globally and among the top 40 in Germany, further validating its reputation as a prestigious institution of higher learning. The university's specific ranking within the 301–350 range for MS programs in physics highlights its strength in this field.

I am confident that pursuing the MSc Physics course at the University of Regensburg will provide me with the necessary tools and opportunities to achieve my academic and professional goals. I am eager to contribute to the vibrant academic community at your esteemed institution and am committed to making meaningful contributions to the field of physics.

Thank you for considering my application. I look forward to the opportunity to further discuss my qualifications and aspirations with you.

Harsh Bellam