## **COVER LETTER**

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Date: 26 August 2025

Respected Sir,

I am writing to express my interest in pursuing a research internship within the Physics, Chemistry, and Mathematics (PCM) stream, with a particular focus on quantum mechanics and computational sciences. As a Computer Engineering student with a deep passion for research, I aspire to contribute meaningfully to scientific advancement while continuing to expand my academic foundation.

During my engineering studies, I undertook multiple projects, the most notable being Airsential—an advanced IoT-based device integrating air quality detection, smoke and gas leak monitoring, fire management, and emergency response systems. This project not only strengthened my technical skills in IoT and embedded systems but also reflected my commitment to developing practical, impactful solutions that enhance environmental safety. Additionally, I have explored areas such as game development and smart devices, always guided by the principle of creating technology that improves lives.

My academic journey has been shaped by a strong interest in Physics and Mathematics. Having cleared JEE Mains, I have maintained my focus on the PCM stream and plan to pursue M.Tech and eventually a PhD in related fields. I am currently preparing for the GATE examination to take the next step in my academic career. My enthusiasm for subjects like quantum mechanics, data structures, theoretical computer science, mechanics, and thermodynamics drives my motivation to engage in research and contribute to the scientific community.

I believe that an internship with [Company/Institute Name] will provide me with the perfect platform to deepen my knowledge, apply my technical background to real-world problems, and work alongside experienced researchers. I am particularly excited about the opportunity to contribute to [specific research area/project of the institute if known], and I am confident that my blend of technical expertise, problem-solving mindset, and passion for discovery would make me a strong addition to your team.

Thank you for considering my application. I would be honored to contribute to your research initiatives and further develop my skills under your guidance. I look forward to the opportunity to discuss how I can support your ongoing projects.

Sincerely,

Sagarika Srivastava