



15.07.2024

INTERNSHIP COMPLETION CERTIFICATE

This is to certify that **Mr. Vipranch Ojha**, a student of **VIT Bhopal University**, has successfully completed his internship under my supervision as part of the SERB sponsored **CRG Research Project (CRG/20221002761)**.

The internship was carried out during the period **May 2024 – June 2024**. During this time, he contributed to the ongoing computational chemistry research work by developing a molecular visualization tool from scratch. This tool, MolSpectra, has the following features:

- A user-friendly interface built using PyQt.
- Seamless integrations with Open Babel, Gaussian, GAMESS, NWChem, and MOPAC.
- Advanced visualization capabilities using GLEW for rendering molecules dynamically.
- A streamlined workflow for molecular simulations, from structure creation to quantum chemistry calculations. engaging in project-related tasks, carrying out literature review, data analysis, and assisting in the preparation of technical reports.

His performance throughout the internship was found to be sincere, diligent, and satisfactory.

I wish him success in all his future academic and professional endeavors.

Dr. Sumit Mittal,

Sr. Assistant Professor

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