



**Department of Chemistry**  
**Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)**  
**(A Central University Established by Central Universities Act**  
**2009 No. 25 of 2009)**

**CERTIFICATE**

This is to certify that **Parimal Sao** has carried out this project under my supervision in the Department of Chemistry, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) on the topic "**Cobaltide Catalyzed Synthesis of Benzothiazole**".

He has worked diligently, methodically and also collected the literature very sincerely and carefully. During this project work he has learnt about various organic syntheses related to the entitled topic.

To the best of our knowledge the work presented in this project is original and has not been submitted anywhere. I recommend the project report to be forwarded to the respective examiners for evaluation.

I wish every success in his career and life.

*Parimal*  
18109122

**SUBMITTED BY:**

**Parimal Sao**

M.Sc. Chemistry

Roll No. 20410034

Enroll No. GGV/17/7156

*Dr. Subhash*  
13/9/22

**SUPERVISED BY:**

**Dr. Subhash Banerjee**

Assistant Professor

Department of Chemistry

GGV Bilaspur (C.G.)