Hydrogen Storage On Transition Metal (Ti, Cu, Zn, Ni) Decorated Borazine: A DFT Study

(Physics Project PY 508)

Submitted in partial fulfillment of the requirements for the award of the degree

Of

MASTER OF SCIENCE

In

PHYSICS

Submitted by

Shweta Chauhan (2000102594)

Under the supervision of

Dr. Haroon

Assistant Professor

Department of Physics



Faculty of Science Integral University Lucknow-226026, U.P.(India)

MAY 2022

Declaration

This is to declare that the Physics Project (PY 508) on "Hydrogen Storage On Transition Metal (Ti, Cu, Zn, Ni) Decorated Borazine: A DFT Study " is submitted by me (Shweta Chauhan) for the partial fulfilment of the requirements for the award of the degree of Master of Science in Physics at the Department of Physics, Faculty of Science, Integral University, Lucknow, UP (India). This comprises original work carried out by me based on the study/survey of the research articles and other authentic resources from the web/books and due acknowledgement has been made in the text to the materials used. The Project report is solely written by me and is plagiarism free within acceptable $\liminf(<=10\%)$.

I, hereby, further declare that in case of any legal dispute in relation to my physics project such as the content, plagiarism, publication etc. I will be solely responsible. Also, any part of this work will not be presented or published anywhere without the consent of my project supervisor, **Dr. Haroon**, Assistant Professor, Department of Physics, Integral University, Lucknow.

Shweta Chauhan (2000102594)

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Certificate

This is to certify that the Physics Project (PY 508) on "Hydrogen Storage On Transition Metal (Ti, Cu, Zn, Ni) Decorated Borazine: A DFT Study " submitted by the candidate Shweta Chauhan (Enroll. No. 2000102594), in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics at the Department of Physics, Integral University, Lucknow, is a record of the candidate's work carried out by her under the supervision of Dr. Haroon (Assistant Professor). The dissertation was a compulsory part of her M.Sc. Physics degree. The matter embodied in this report is written by her based on the work she carried out, and due acknowledgement to any of the referenced article/book/resource have been made. Further, this work has not been submitted for the award of any other degree.

Place: Integral University, Lucknow

Date:

Supervisor

Dr. Haroon

Assistant Professor

Department of Physics

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Head of the department

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Shweta Chauhan (2000102594)