



ISSN 2565-5051
Vol. 7, Year 2023

NEW DIMENSION

A PEER-REVIEWED ANNUAL JOURNAL OF PHYSICS

St. Xavier's College
Kathmandu, Nepal

TABLE OF CONTENTS

Exploring Molecular Structure, Electronic Characteristics and Vibrational Analysis of Vinyl Chloride Using HF and DFT Method	5 - 16
First-principles Study of the Interaction of Nickel and Graphene-MoS ₂ Bilayer Heterostructure	17 - 21
First-principles Study of the Interaction of Nickel and Graphene-MoS ₂ Bilayer Heterostructure	22 - 32
Study of Geomagnetically Induced Current during Intense Geomagnetic Storms of 7 th October 2015 and 28 th May 2017	33 - 38
Wavelet Analysis on Horizontal Component of Earth Magnetic Field at High and Low latitudes (Cambridge Bay and Alibagh) during Geomagnetic Storms	39 - 48