

Supporting Documents- Physical Sciences

- 1) **List of Students Undertaking Field Projects / Research Projects / Internship Program**
- 2) **Completion Certificates**
- 3) **Copy of Project Report**



I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY
Department of Physical Sciences

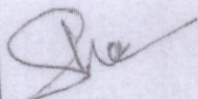
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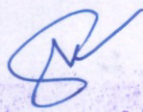

Date: 13.07.2020

Subject: List of students with name of Supervisors for M.Sc. Physical Sciences for Batch 2018-20.

Please find below the List of students with title of thesis & name of Supervisors for M.Sc. Physical Sciences for Batch 2018-20.

S. No.	Univ Regd No.	Name of Candidate	Title of thesis	Name of Supervisor
1	1833789	Manas Sharma	Structural and Electronic properties of WSe ₂ : A Density Functional Theory Investigation	Dr.Hitesh Sharma
2	1833790	Prashant Kumar	Investigation of structural and electronic Properties of CsGeI ₃ : Using Density Functional Theory	Dr.Hitesh Sharma
3	1833791	Rahul Kumar	Flavor Distribution in Chiral Quark Model	Dr.Neetika
4	1833792	Varsha	Structural and Electronic Properties of monolayer MoS ₂ : using Density Functional Theory	Dr.Hitesh Sharma
5	1834076	Dheeraj Kumar	A Structural Study of Double Perovskite Materials: Ba ₂ GdRuO ₆ & Sr ₂ GdRuO ₆	Dr.Hitesh Sharma


Dr. Hitesh Sharma
HOD,
Physical Sciences


Head
Department of Physical Sciences
I.K. Gujral Punjab Technical University
Main Campus 

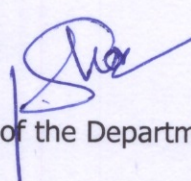
I.K.G Punjab Technical University, Kapurthala
Department of Physical Sciences (Main Campus)


Ref No. IKGPTU/PS/4252 -01

Date: 30/09/2020

This is to certify that Mr. Manas Sharma Student of M.Sc. Physics bearing Roll No. 1833789 has undergone a research project in the area of Condensed Matter Physics at the Department of Physical Sciences, I.K.G. PTU, Main Campus, Kapurthala in fourth semester of his master program. He has also submitted his report on Title: "Structural and Electronic properties of WSe_2 : A Density Functional Theory Investigation".

His performance during the research project was satisfactory. We wish him all the best for future endeavors.


Head of the Department


Head
Department of Physical Sciences
I.K. Gujral Punjab Technical University
Main Campus

I.K.G Punjab Technical University, Kapurthala

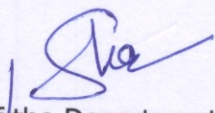
Department of Physical Sciences (Main Campus)


Ref No. IKGPTU/PS/4252-02

Date: 30/09/2020

This is to certify that Mr. Prashant Kumar Student of M.Sc. Physics bearing Roll No. 1833790 has undergone a research project in the area of Condensed Matter Physics at the Department of Physical Sciences, I.K.G. PTU, Main Campus, Kapurthala in fourth semester of his master program. He has also submitted his report on Title: "Investigation of structural and electronic Properties of CsGeI₃: Using Density Functional Theory".

His performance during the research project was satisfactory. We wish him all the best for future endeavors.


Head of the Department


Head
Department of Physical Sciences
I.K. Gujral Punjab Technical University
Main Campus

I.K.G Punjab Technical University, Kapurthala

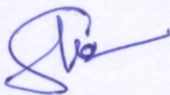
Department of Physical Sciences (Main Campus)



Ref No. IKGPTU/PS/4252/03

Date: 30/09/2020

This is to certify that Mr. Rahul Kumar Student of M.Sc. Physics bearing Roll No. 1833791 has undergone a research project in the area of Particle Physics at the Department of Physical Sciences, I.K.G. PTU, Main Campus, Kapurthala in fourth semester of his master program. He has also submitted his report on Title: "Flavor Distribution in Chiral Quark Model".

His performance during the research project was satisfactory. We wish him all the best for future endeavors.


Head of the Department


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Main Campus 

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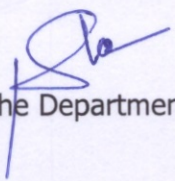
Department of Physical Sciences (Main Campus)


Ref No. IKGPTU/PS/14252-04

Date: 30/09/2020

This is to certify that Ms. Varsha Sharma Student of M.Sc. Physics bearing Roll No. 1833792 has undergone a research project in the area of at the Department of Physical Sciences, I.K.G. PTU, Main Campus, Kapurthala in fourth semester of her master program. She has also submitted his report on Title: "Structural and Electronic Properties of monolayer MoS₂: using Density Functional Theory".

Her performance during the research project was satisfactory. We wish her all the best for future endeavors.


Head of the Department


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I.K. Gujral Punjab Technical University
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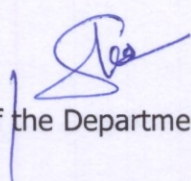
I.K.G Punjab Technical University, Kapurthala
Department of Physical Sciences (Main Campus)


Ref No. IKGPTU/PS /4252-05

Date: 30/09/2020

This is to certify that Mr. Dheeraj Kumar student of M.Sc. Physics bearing Roll No. 1834076 has undergone a research project in the area of Nuclear Physics at the Department of Physical Sciences, I.K.G. PTU, Main Campus, Kapurthala in fourth semester of his master program. He has also submitted his report on Title: "A Structural Study of Double Perovskite Materials: $\text{Ba}_2\text{GdRuO}_6$ & $\text{Sr}_2\text{GdRuO}_6$ ".

His performance during the research project was satisfactory. We wish him all the best for future endeavors.


Head of the Department


Head
Department of Physical Sciences
I.K. Gujral Punjab Technical University
Main Campus

STRUCTURAL AND ELECTRONIC PROPERTIES OF WSe_2 :-
A DENSITY FUNCTIONAL THEORY INVESTIGATION

DISSERTATION

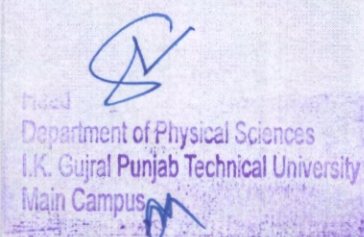
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF THE DEGREE OF

MASTER OF SCIENCE
PHYSICS

SUBMITTED BY

Manas Sharma

Univ. Roll No:-1833789



DEPARTMENT OF PHYSICAL SCIENCES
I K GUJRAL PUNJAB TECHNICAL UNIVERSITY
JALANDHAR, PUNJAB

July 2020

Investigation of structural and electronic Properties of CsGeI_3 : Using Density Functional Theory

DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF THE DEGREE OF

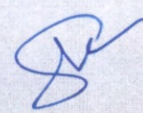
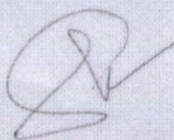
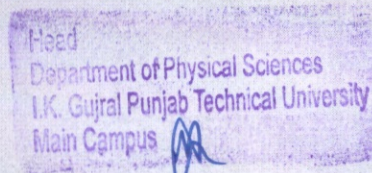
MASTER OF SCIENCE

PHYSICS

SUBMITTED BY

Prashant Kumar

Regd. No. - 1833790

Head
Department of Physical Sciences
I.K. Gujral Punjab Technical University
Main Campus

DEPARTMENT OF PHYSICAL SCIENCES

301

Investigation of structural and electronic Properties of monolayer MoS_2 : Using Density Functional

DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF THE DEGREE OF

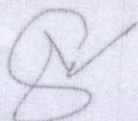
MASTER OF SCIENCE

PHYSICS


SUBMITTED BY

Varsha Sharma


Regd. No. - 1833792



DEPARTMENT OF PHYSICAL SCIENCES



Head
Department of Physical Sciences
I.K. Gujral Punjab Technical University
Main Campus



A STRUCTURAL STUDY OF DOUBLE PEROVSKITE MATERIALS :

$\text{Ba}_2\text{GdRuO}_6$ & $\text{Sr}_2\text{GdRuO}_6$

DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF THE DEGREE OF

MASTER OF SCIENCE
PHYSICS

SUBMITTED BY

Dheeraj Sharma

Regd. No. 1834076



Head
Department of Physical Sciences
I.K. Gujral Punjab Technical University
Main Campus

DEPARTMENT OF PHYSICAL SCIENCES
I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY
JALANDHAR, PUNJAB

July 2020

STUDY OF QUARK STRUCTURE OF BARYON USING CHIRAL QUARK MODEL

DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF THE DEGREE OF

MASTER OF SCIENCE
PHYSICS

SUBMITTED BY

Rahul Kumar

Regd. No. 1833791



DEPARTMENT OF PHYSICAL SCIENCES

I K GUJRAL PUNJAB TECHNICAL UNIVERSITY

JALANDHAR, PUNJAB

July 2020

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[Signature]
Head
Department of Physical Sciences
I.K. Gujral Punjab Technical University
Main Campus *[Signature]*