

1.3.4

Supporting Documents- Physical Sciences

1. **List of Students Undertaking Field Projects / Research Projects / Internship Program**
2. **Completion Certificates**
3. **Permission Letters / Copy of Project Report**



I.K. Gujral Punjab Technical University, Kapurthala
Department of Physical Sciences

Ref.No:- IKGPTU/PS/292

Date:- 18/02/2022


Subject:- List of students with name of Supervisor for M.Sc. Physical Sciences for batch 2020-2022.

Please find below the list of students with title of thesis and name of Supervisor for M.Sc. Physics for the batch 2020-2022.

S.No.	Name	Roll No.	Topic	Supervisor Name
1	Gourav Sharma	2022808	Systematic Investigation of Literature to explore the fusion of neutron-rich nuclei.	Dr. Varinderjit Singh (Assistant Professor)
2	Gurmeet Kaur	2022809	Onset of fusion hindrance for Relatively asymmetric system in low mass regime ($A_{CN} < 100$)	Dr. Maninder Kaur (Assistant Professor)
3	Isha Parmar	2022810	To study the dynamics of fusion – fission reaction using fission fragment angular distribution as probe for $^{19}\text{F} + ^{196}\text{Pt}$.	Dr. Varinderjit Singh (Assistant Professor)
4	Nikita Thakur	2022811	Exploring the possibility of fusion hindrance for mass asymmetric channel for medium mass regime ($A_{CN} > 100$).	Dr. Maninder Kaur (Assistant Professor)


Head of Department
(Physical Sciences)

CC: All Faculty Members


Head of Department
Department of Physics
I.K.Gujral Punjab Technical University Jalandhar,
Kapurthala, Punjab-144603

EXPLORING THE POSSIBILITY OF FUSION
HINDRANCE FOR ASYMMETRIC CHANNEL FOR
MEDIUM MASS REGIME $A_{CN} > 100$

1.3.4

A DISSERTATION

SUBMITTED TO

I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY

KAPURTHALA, INDIA

IN FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN PHYSICS

SUPERVISED BY:

Dr. MANINDER KAUR

Assistant Professor

SUBMITTED BY:

NIKITA THAKUR

Univ.Regd.No.2022811



DEPARTMENT OF PHYSICAL SCIENCES

I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY

KAPURTHALA-144603, INDIA

2022

V.S.
HOD
Department of Physical Science
I.K. Gujral Punjab Technical
Kapurthala
CamScanner

**SYSTEMATIC INVESTIGATION OF LITERATURE TO
INVESTIGATE THE FUSION OF NEUTRON RICH NUCLEI**

A DISSERTATION

SUBMITTED TO

I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY

KAPURTHALA, INDIA

IN FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF

**MASTER OF SCIENCE
IN
PHYSICS**

SUPERVISED BY:

Dr. VARINDERJIT SINGH

ASSISTANT PROFESSOR

SUBMITTED BY:

GOURAV SHARMA

Univ.Regd.No.2022808




DEPARTMENT OF PHYSICAL SCIENCES

I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY

KAPURTHALA-144603, INDIA

2022

HOD 
Department of Physical Scier
I.K. Gujral Punjab Technical
Kapurthala
CS CamScanner

**ONSET OF FUSION HINDRANCE FOR RELATIVELY
ASYMMETRIC SYSTEM IN LOW MASS REGIME ($A_{CN} < 100$)**

A DISSERTATION

SUBMITTED TO

**I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY
KAPURTHALA (INDIA)**

**IN FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF
MASTER OF SCIENCE**

**IN
PHYSICS**

SUPERVISED BY:

Dr. MANINDER KAUR

Assistant professor

SUBMITTED BY:

GURMEET KAUR

Univ.Regd.No. 2022809



**DEPARTMENT OF PHYSICAL SCIENCES
I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY
KAPURTHALA-144603, INDIA**

2022

HOD
Department of Physical Scle
I.K. Gujral Punjab Technica:
Kapurthala

**TO STUDY THE DYNAMICS OF FUSION- FISSION REACTION USING
FISSION FRAGMENT ANGULAR DISTRIBUTION AS A PROBE FOR
(¹⁹F+¹⁹⁶Pt)**

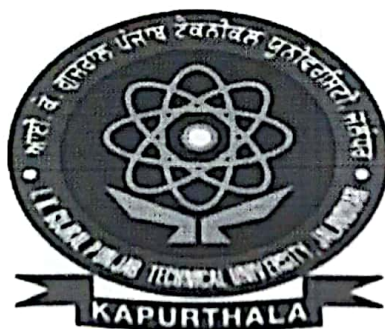
**A DISSERTATION
SUBMITTED TO
I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY
KAPURTHALA, (INDIA)
IN FULFILMENT OF REQUIREMENT OF DEGREE
OF
MASTER OF SCIENCE
IN
PHYSICS**

SUPERVISED BY:

**Dr. Varinderjit Singh
(Assistant Professor)**

SUBMITTED BY:

**Isha Parmar
Univ.Regd No. 2022810**



**DEPARTMENT OF PHYSICAL SCIENCES
I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY
KAPURTHALA – 144603, INDIA**

2022

HOD
Department of Physical Science
I.K. Gujral Punjab Technical University
Kapurthala

I.K. Gujral Punjab Technical University, Kapurthala
Department of Physical Sciences

Ref.No:- IKGPTU/PS/360A

Date:- 07/06/2022

This is to certify that **Gourav Sharma** student of M.Sc. Physics bearing Roll No. **2022808** has undergone a research project in the area of **Experimental Nuclear Physics** at the Department of Physical Sciences, IKGPTU, at Main Campus in 4th Semester of his master program. He has also submitted his report on Title: **"Systematic Investigation of Literature to explore the fusion of neutron-rich nuclei."**

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



Head of Department
Physical Sciences



Head of Department
Department of Physics
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Kapurthala, Punjab-144603

I.K. Gujral Punjab Technical University, Kapurthala
Department of Physical Sciences

Ref.No:- IKGPTU/PS/ 360B

Date:- 07/06/2022

This is to certify that **Gurmeet Kaur** student of M.Sc. Physics bearing Roll No. **2022809** have undergone a research project in the area of **Experimental Nuclear Physics** at the Department of Physical Sciences, IKGPTU, at Main Campus in 4th Semester of his master program. He has also submitted his report on Title: "**Onset of fusion hindrance for relatively asymmetric system in low mass regime ($A_{CN} < 100$)**".

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



Head of Department
Physical Sciences



Head of Department
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I.K.Gujral Punjab Technical University Jalandhar,
Kapurthala, Punjab-144603

I.K. Gujral Punjab Technical University, Kapurthala
Department of Physical Sciences

Ref.No:- IKGPTU/PS/360C

Date:- 07/06/22

This is to certify that **Isha Parmar** student of M.Sc. Physics bearing Roll No. **2022810** have undergone a research project in the area of **Experimental Nuclear Physics** at the Department of Physical Sciences, IKGPTU, at Main Campus in 4th Semester of his master program. He has also submitted his report on Title: "**To study the dynamics of fusion – fission reaction using fission fragment angular distribution as probe for $^{19}\text{F} + ^{196}\text{Pt}$.**"

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



Head of Department
Physical Sciences



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Kapurthala, Punjab-144605

I.K. Gujral Punjab Technical University, Kapurthala
Department of Physical Sciences

Ref.No:- IKGPTU/PS/360D

Date:- 07/06/2022

This is to certify that **Nikita Thakur** student of M.Sc. Physics bearing Roll No. **2022811** have undergone a research project in the area of **Experimental Nuclear Physics** at the Department of Physical Sciences, IKGPTU, at Main Campus in 4th Semester of his master program. He has also submitted his report on Title: "**Exploring the possibility of fusion hindrance for mass asymmetric channel for medium mass regime ($A_{CN} > 100$).**"

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



Head of Department
Physical Sciences



Head of Department
Department of Physics
I.K.Gujral Punjab Technical University Jalandhar,
Kapurthala, Punjab-144603