

M.Sc. (Physics) 2021-2023

Research Project List

Roll No.	Name of Student	Research Project Title	Name of Research Supervisor
1940836	AYUSHI TIWARI	Synthesis and Characterization of AgI-SiO ₂ Solid State Ceramic Electrolyte	Dr. Shikha Shukla
1940843	ANJALI VERMA	Ionic Conductivity of Polymer ceramic electrolyte of all solid state super capacitor	Dr. Awanish Kumar Bajpeyi
1940858	SHREYA UMRAO	Synthesis and Characterization of Solid State Ceramic Electrolyte	Dr. Awanish Kumar Bajpeyi
1940862	JYOTI SINGH	Study of preparation and characterization of ceramic inorganic oxides	Dr. V K Kashyap
1940889	NAHID NISHA	Preparation and Characterization of transition metal carbides for fuel cell application	Dr. Anju dixit

Anju Dixit

Dr. Anju Dixit

Deputy Director

School of Basic Sciences

Synthesis and Characterization of AgI-SiO₂ Solid-State Ceramic Electrolyte

A Dissertation

Submitted

To



The Department of Physics,

School of Basic Sciences, CSJM University, Kanpur

In partial fulfillment of requirements for the award of the degree

Of

Master of Science

In

Physics

Submitted by

Ayushi Tiwari

(Roll no: 1940836)

Under the guidance of

Dr. SHIKHA SHUKLA

Assistant professor

Department of Physics

June 2023

IONIC CONDUCTIVITY OF POLYMER CERAMIC ELECTROLYTE OF ALL SOLID- STATE SUPERCAPACITOR

A dissertation submitted in partial fulfilment of requirements
for the award of degree
of

Master of Science

in

Physics

Submitted by

Anjali Verma

(Roll no: 1940843)

Department of Physics



DEPARTMENT OF PHYSICS,
SCHOOL OF BASIC SCIENCES,
CHHATRAPATI SHAHJI MAHARAJ UNIVERSITY,
KANPUR-208024,
UTTAR PRADESH
INDIA

Under the guidance of
Dr. AWANISH KUMAR BAJPEYI
Assistant Professor
Department of Physics

2023

Synthesis and Characterization of Solid-State Ceramic Electrolyte

**A Dissertation submitted in partial fulfilment of
requirements for the award of the degree
of**

Master of Science

in

Physics

Submitted by

Shreya Umrao

(Roll no:1940858)

Department of Physics



**DEPARTMENT OF PHYSICS, SCHOOL OF BASIC
SCIENCES,
CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY,
KANPUR-208024, UTTAR PRADESH,
INDIA**

**Under the guidance of
Dr. AWANISH KUMAR BAJPEYI
Assistant Professor
Department of Physics**

2023

**Study of preparation and characterization of ceramic
inorganic oxides**



**Dissertation submitted in the partial fulfillment of the
requirements for the degree of**

Master of Science

In

Physics

Submitted by

Jyoti Singh

(Roll no. 1940862)

Department of physics

School of basic sciences

**Chhatrapati Shahu Ji Maharaj University, Kanpur-
208024, Uttar Pradesh,**

India

Under the guidance of

Dr. V.K.Kashyap

Assistant professor

Department of physics

June 2023

**PREPERATION AND CHARACTERIZATION OF TRANSITION
METAL CARBIDES FOR FUEL CELL APPLICATION**



**Dessertation Submitted in partial fulfillment of the requirements for
the award of the degree of
Master of science**

**In
physics**

Submitted by

NAHID NISHA

(Roll no. 1940889)

DEPARTMENT OF PHYSICS

School of basic sciences

**Chhatrapati Shahu Ji Maharaj University,
Kanpur-208024, Uttar Pradesh, India**

Under the guidance of

Dr. Anju Dixit

Assistant professor

Department of physics

June 2023

M.Sc. (Physics) 2022-2024

Research Project List

Roll No.	Name of Student	Research Project Title	Name of Research Supervisor
22186000001	ARUN SINGH	Transmittance of electromagnetic wave in periodic structure containing lossy media.	Dr. Prabal Pratap Singh
22186000002	KESHAV BHASIN	Removal of Dye from water and water waste using adsorption method	Dr. Awanish Kumar Bajpeyi
22186000003	MANJULA DEVI	Study of Semiconductor devices	Dr. Anju dixit
22186000004	PALAK	Study of Ferroelectric Material	Dr. Anju dixit
22186000005	PREETI YADAV	Purification of waste water by metal oxide nanoparticles	Dr. Awanish Kumar Bajpeyi
22186000006	PRIYANK MISHRA	Study of Metal-Semiconductor Junctions: Enhancing Electronic Devices for Next-Generation Technologies	Dr. Anju dixit
22186000007	SANDEEP BHARAT YADAV	Neutrino properties and it's influence on solar neutrino and atmospheric neutrino problems	Dr. Saswati Sarkar
22186000008	SHIVAM NARAYAN SHUKLA	Preparation and Characterization Techniques of Chalcogenide Materials	Dr. Shikha Shukla
22186000010	TUSHAR SHARMA	Study of Ferromagnetic Material	Dr. Anju dixit

Anju Dixit

Dr. Anju Dixit

Coordinator, Department of Physics

**CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY
KANPUR-208024 (U.P), INDIA**



**Transmission characteristics of electromagnetic wave
in
Periodic Structure Containing Lossy Media**

Synopsis Submitted for M. Sc. Research project

Submitted by:

Arun Singh

Under Supervision of:

Dr. Prabal P. Singh

**DEPARTMENT OF PHYSICS
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KANPUR-208024 (U.P), INDIA**

Regt. No.: CSJMA22000000551

**CHHATRAPATI SHAH JI MAHARAJ UNIVERSITY,
Kanpur**



**REMOVAL OF DYE FROM WATER AND
WATERWASTE USING ADSORPTION METHOD**

SYNOPSIS SUBMITTED FOR M.Sc RESEARCH PROJECT

SUBMITTED BY:
KESHAV BHASIN

SUPERVISED BY:
Dr. AWANISH
KUMAR

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SCHOOL OF BASIC SCIENCES, C.S.J.M. UNIVERSITY,
KANPUR-208024

Regt. No.- CSJMA22000031537

Chhatrapati Shahu Ji Maharaj University Kanpur



TO STUDY OF SEMICONDUCTOR DEVICES

SYNOPSIS SUMMITTED FOR M.SC RESEARCH PROJECT

SUBMITTED BY:

Manjula Devi

M.sc Physics

1yr year/ 2nd Sem

SUPERVISED BY:

Dr. Anju Dixit

Deputy director

School of basic sciences

DEPARTMENT OF PHYSICS,

SCHOOL OF BASIC SCIENCES, C.S.J.M. UNIVERSITY

KANPUR

Enrollment no. CSJMA22000034285

**CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY,
Kanpur**



Study and preparation of ferroelectric material.

SYNOPSIS SUBMITTED FOR M.Sc RESEARCH PROJECT

SUBMITTED BY:

Palak

SUPERVISED BY:

Dr. Anju Dixit Dobal

DEPARTMENT OF PHYSICS,

SCHOOL OF BASIC SCIENCES, C.S.J.M. UNIVERSITY,

KANPUR-208024

Regt. No.- CSJMA22000031544

PURIFICATION OF WASTE WATER BY METAL OXIDE NANOPARTICLES

**PREETI YADAV
M.SC (PHYSICS)
SEMESTER FIRST**

Synopsis Of

**Study of Metal-Semiconductor Junctions: Enhancing Electronic
Devices for Next-Generation Technologies**

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

Master of Science
by

PRIYANK MISHRA

Roll No. 2218600006

Enrollment Number – CSJMA 22000033778

Under Supervision of

Dr. Anju Dixit Ma'am



Discipline of M.Sc. Physics
DEPARTMENT OF PHYSICS
CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY
KANPUR

**CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY,
Kanpur**



Neutrino properties and its influence on solar neutrino and atmospheric neutrino problems

SYNOPSIS SUBMITTED FOR M.Sc RESEARCH PROJECT

SUBMITTED BY:

Sandeep Yadav

SUPERVISED BY:

Dr. Saswati Sarkar

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**DEPARTMENT OF PHYSICS,
SCHOOL OF BASIC SCIENCES,
CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY,
KANPUR**



**SYNOPSIS SUBMITTED FOR
M.Sc. RESEARCH PROJECT IN PHYSICS**

On The Topic-

**Preparation and Characterization Techniques of
Chalcogenide Materials**

**SUBMITTED
BY-
Shivam Narayan Shukla
(Reg. No.: CSJMA22000034292)**

SUPERVISED BY-

Dr. Shikha Shukla
Department of Physics
S.B.S., C.S.J. M. University, Kanpur.

CO-SUPERVISED BY-

Dr. Anjani Kumar
Department of Physics,
BSH, M.P.G.I, Kanpur.

**CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY,
Kanpur**



Study and preparation of ferromagnetic material.

SYNOPSIS SUBMITTED FOR M.Sc RESEARCH PROJECT

SUBMITTED BY:

Tushar Sharma

SUPERVISED BY

Dr. Anju Dixit Dabal

DEPARTMENT OF PHYSICS,

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KANPUR-208024

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