

A  
Project report

On

**"Synthesis and Characterization of Some Pyrazole Containing  
Chalcones"**

M.Sc. Project carried out as a part of curriculum for degree of "Master of Science" in Organic  
Chemistry at S.S.G.M. College, Kopergaon

Submitted By

**Mr. JANGAM HARSHAL KAILAS**

M.Sc. II (Organic Chemistry)

2017-2018

Guided By

**Prof. Dr. Randhavan P.V.**

Submitted To



**P. G. and Research,**

**Department of Chemistry**

**S.S.G.M. College, Kopergaon, [423601]**

**Dist.-Ahmednagar [MS], India.**

A  
Project report

On

**"Synthesis and Characterization of Some Pyrazole Containing  
Chalcones"**

M.Sc. Project carried out as part of curriculum for degree of "Master of Science" in Organic  
Chemistry at S.S.G.M. College, Kopergaon

Submitted By

**Mr. JANGAM HARSHAL KAILAS**

M.Sc. II (Organic Chemistry)

**2017-2018**

Guided By

**Prof. Dr. Randhavang P.V.**

Submitted To



P.G. and Research,

Department of Chemistry

S.S.G.M. College, Kopergaon, [423601]

Dist.-Ahmednagar [MS], India.

Rayat Shikshan Sanstha's

SHRI SADGURU GANGAGHER MAHARAJ SCIENCE GADTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR

# CERTIFICATE



This is to certify that the work incorporated in this project report entitled  
"Synthesis and Characterization of Some Pyrazole Containing  
Chalcones" being submitted to the Head, Department of Chemistry S.S.G.M. College  
Kopergaon and Savitribai Phule Pune University, Pune by Mr. JANGAM HARSHAL  
KAILAS was carried out by him under my supervision at S.S.G.M. College Kopergaon,  
Dist- Ahmednagar. Such material obtained from other source has duly acknowledged in this  
project report.

Date: 1/3/2018

  
Dr. Randhavane P.V.

Project Guide,

Department of Chemistry,

S.S.G.M. College Kopergaon

HO Principal  
S.S.G.M. College  
Kopergaon

Dr. Nikumbh A.B.

Head of P.G and Research

Department of Chemistry,

S.S.G.M. College Kopergaon

  
Principal  
S.S.G.M. College  
Kopergaon

A  
Project report on

**"SYNTHESIS AND CHARACTERIZATION OF SOME  
IMPORTANT PYRAZOLINE DERIVATIVES"**

M.Sc. Project carried out as part of curriculum for degree of  
"Master of Science" in Analytical Chemistry

Submitted by

**Mr. SABANE PRASAD BALASAHEB**

M.Sc. II (Analytical Chemistry)

(2017-2018)

Under the Guidance of

**Dr. CHAVHAN N.M.**

Submitted to



P.G. and Research

Department of Chemistry,

S. S. G. M. College, Kopergaon [423601]

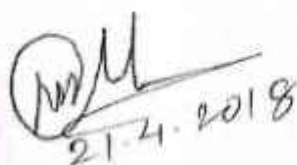
Dist. - Ahmednagar [MS] India.

## Certificate



This is to certify that the work incorporated in this project report entitled "SYNTHESIS AND CHARACTERIZATION OF SOME IMPORTANT PYRAZOLINE DERIVATIVES" being submitted to the Head, Department of Chemistry, S. S. G. M. College, Kopergaon and Savitribai Phule Pune University, Pune by **Mr. SABANE PRASAD BALASAHEB**, was carried out by him under my supervision at S.S.G.M. College, Kopergaon, Dist- A.nagar. Such material obtained from other source has duly acknowledged in this project report.

Date: / /2018.



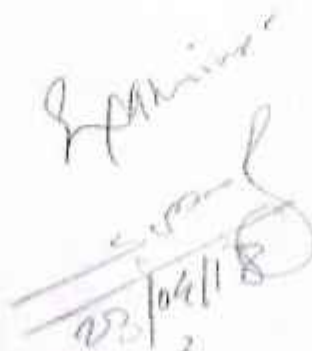
21.4.2018

Dr. N.M. CHAVHAN  
Project Guide,  
Department of Chemistry,  
S. S. G. M. College,  
Kopergaon.




23/4/18

Dr. A. B. Nikumbh  
Head, P. G. and Research,  
Department of Chemistry,  
S. S. G. M. College,  
Kopergaon.



23/04/18



I/C Principal  
S.S.G.M.College  
Kopergaon



Principal  
S.S.G.M.College  
Kopergaon



A

Project report

On

**"SYNTHESIS AND CHARACTERISATION OF FLUORINATED  
BENZOXAZOLES"**

M.Sc. Project carried out as part of curriculum for degree of "Master of Science" in  
Analytical Chemistry at S.S.G.M. College, Kopergaon

Submitted By

**Miss. GHODAKE SHASHWATI DILIP**

M.Sc. II (Analytical Chemistry)

2017-2018

Guided By

Prof. Dr. Jadhav R.K.

Submitted To



P.G. and Research,

Department of Chemistry

S.S.G.M. College, Kopergaon

Dist.-Ahmednagar, [423601] [MS], India.

Rajal Shiksha Samiti

SHRI SADGURU GANGAGEERI MAHARAJ SCIENCE, GAUTAMI ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR

CERTIFICATE



This is to certify that the work incorporated in this project report entitled "SYNTHESIS AND CHARACTERISATION OF FLUORINATED BENZOXAZOLES" being submitted to the Head, Department of Chemistry S.S.G.M. College Kopergaon and Savitribai Phule Pune University, Pune by Miss. GHODAKE SHASHIWATI DILIP was carried out by her under my supervision at S.S.G.M. College Kopergaon, Dist- Ahmednagar. The reference taken from other source has duly acknowledged in this project report.

Date: 21/4/2018

Dr. Jadhav R. K.

Project Guide,

Department of Chemistry,

S.S.G.M. College Kopergaon

Dr. Nikumbh A. B.

Head, P.G. and Research

Department of Chemistry,

S.S.G.M. College Kopergaon

H/O Principal  
S.S.G.M. College  
Kopergaon

Principal  
S.S.G.M. College  
Kopergaon

"Education through  
Self-Help is Our Motto"



A  
PROJECT REPORT  
ON

"To Determine the Magnetic Susceptibility by Gouy's Method"

SUBMITTED TO

Savitribai Phule Pune University, Pune.

*For the Partial fulfillment of*

*(Subject - Physics)*

Bachelor of Science

SUBMITTED BY

Miss. Jadhav Amruta Ramesh

UNDER THE GUIDANCE OF

Prof. Mr. B. N. Chaudhari

*Through*

Rayat Shikshan Sanstha, Satara's,

S. S. G. M. College, Kopergaon  
2017-18

  
Principal  
S.S.G.M. College  
Kopergaon



Roll No: - 8016

Exam Seat No: - 33142

"Education through Self-  
Help Is Our Motto"



**SHRI SADGURU GANGAGEER MAHARAJ  
SCIENCE GAUTAM ARTS & SANJIVANI  
COMMERCE COLLEGE, KOPARGAON**

## Certificate

*This is to certify that Miss Jadhav Amruta Ramesh of Bachelor of Science (Physics) has satisfactorily completed her project work as per rule Laid down by the Savitribai Phule Pune University entitled as "To Determine the Magnetic Susceptibility by Gouy's Method" during Academic year 2017-2018.*

*Prof. B.N. Chaudhari*  
Project Guide

*Re. Jha*  
26/3/18 26/3/18  
External Examiner

*S. T. Shete*  
Prof. S. T. Shete  
Head of Department

*[Signature]*  
Principal  
S.S.G.M. College  
Kopargaon

Rayat Shikshan Sanstha's

Shri Sadguru Gangageer Maharaj Science, Gautam Arts and Sanjivani  
Commerce College, Kopargaon, Dist: - Ahmednagar- 423601

Department of Physics

Internal Unit Test -I (2021-22)

Time Table M.Sc. I-II ( Sem-II and IV)

Sr. No.	Date and Time	Class	Subject
1	04/05/2022 11:00am to 12:30 pm	M.Sc. I	Electrodynamics
		M.Sc. II	Nuclear Physics
2	05/05/2022 11:00am to 12:30 pm	M.Sc. I	Atoms and molecules
		M.Sc. II	Experimental Tech. II
3	06/05/2022 11:00am to 12:30 pm	M.Sc. I	Quantum Mechanics
		M.Sc. II	Energy Studies II
4	07/05/2022 11:00am to 12:30 pm	M.Sc. I	Physics of Semiconductor Devices
		M.Sc. II	Physics of Thin Film



*Wakade*

Head

Department of Physics  
S.S.G.M. College, Kopargaon

*[Signature]*  
Principal  
S.S.G.M. College  
Kopargaon



A  
PROJECT REPORT  
ON

"DESIGN AND SYNTHESIS OF NOVEL 1,3,4-OXIDIAZOLE AND  
PYRAZOLE ANALOGUES"



Submitted by:

Mr. KADAM MAYUR ARUN

M.Sc. (Organic Chemistry)

Department Of Chemistry

S, S, G, M, College, Kopargaon.

Submitted to:

Department Of Chemistry

S, S, G, M, College, Kopargaon.

Under the guidance of:

Dr. J. M. GAJBHIYE

(Scientist)

Division of Organic Chemistry

CSIR-NATIONAL CHEMICAL LABORATORY

(2018-2019)



सीएसआईआर - राष्ट्रीय रासायनिक प्रयोगशाला

रासायनिक विभाग, औद्योगिक अनुसंधान विभाग  
डॉ. होमी भाभा मार्ग, पुणे - 411 008, भारत



CSIR - NATIONAL CHEMICAL LABORATORY

(Council of Scientific & Industrial Research)  
Dr. Homi Bhabha Road, Pune - 411 008, India

## CERTIFICATE

This is to certify that the work incorporated in this project entitled "**DESIGN AND SYNTHESIS OF NOVEL 1, 3, 4-OXIDIAZOLE AND PYRAZOLE ANALOGUES**" being submitted to Department of Chemistry, S.S.G.M. College, Kopergaon, Affiliated to Savitribai Phule Pune University, Pune by Mr. Kadam Mayur Arun was carried out under my supervision at the National Chemical Laboratory from 15<sup>th</sup> May-31<sup>st</sup> December 2018.

Dr. J. M. Gajbhiye

वैज्ञानिक / Scientist  
रासायनिक विभाग  
Division of Organic Chemistry,  
सीएसआईआर - राष्ट्रीय रासायनिक प्रयोगशाला  
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2

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COA's Office : +91-20-25902660  
SPD's Office : +91-20-25902664

WEBSITE  
www.ncl-india.org

Principal  
S.S.G.M. College  
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A



## PROJECT REPORT

**"SYNTHESIS AND CHARACTERIZATION OF PIPERAZINE  
CONTAINING 1, 3, 4-OXIDIAZOLES AND ITS DERIVATIVES"**



**Submitted by:**

**Mr. Krushikesh Dattatray Dhoke.**

**M.Sc. (Organic Chemistry)**

**Department of Chemistry**

**S.S.G.M. College, Kopergaon.**

**Submitted to:**

**Department Of Chemistry**

**S.S.G.M. College, Kopergaon.**

**Under the guidance of:**

**Dr. J. M. Gajbhiye.**

**(Scientist)**

**Division of Organic Chemistry**

**CSIR-NATIONAL CHEMICAL LABORATORY**

**(2018-19)**

  
**Principal**  
**S.S.G.M. College**  
**Kopergaon**





सीएसआईआर - राष्ट्रीय रासायनिक प्रयोगशाला

(संशोधन, विकास, अभियांत्रिकी, प्रशिक्षण)

डॉ. होमी भाभा मार्ग, पुणे - 411 008, भारत



CSIR - NATIONAL CHEMICAL LABORATORY

(Council of Scientific & Industrial Research)

Dr. Homi Bhabha Road, Pune - 411 008, India

## CERTIFICATE

This is to certify that the work incorporated in this project entitled "**SYNTHESIS AND CHARACTERIZATION OF PIPERAZINE CONTAINING 1,3,4-OXIDIAZOLES AND ITS DERIVATIVES**" being submitted to Department of Chemistry, S.S.G.M. College, Kopergaon, affiliated to Savitribai Phule Pune University, Pune by Mr. Dhoke Krushikesh Dattatray was carried out under my supervision at the National Chemical Laboratory from 15<sup>th</sup> May-31<sup>st</sup> December 2018.

**Dr. J. M. Gajbhiye.**

इशानिक / Scientist  
कार्बनिक रसायन प्रभाग  
Division of Organic Chemistry  
सीएसआईआर - राष्ट्रीय रासायनिक प्रयोगशाला  
CSIR - NATIONAL CHEMICAL LABORATORY  
पुणे / Pune - 411008

**Principal**  
**S.S.G.M. College**  
**Kopergaon**

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Channels

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COA's Office : +91-20-25902660  
SPO's Office : +91-20-25902664

WEBSITE

[www.ncl-india.org](http://www.ncl-india.org)

A  
Project report  
On  
"Synthesis and Characterization of Some Novel Pyrazoline  
Derivatives"

M.Sc. Project carried out as part of curriculum for degree of  
"Master of Science"  
in  
Organic Chemistry  
at  
S. S. G. M. College, Kopargaon.

Submitted By  
Mr. Jadhav Sanjay Raju  
M.Sc. II (Organic Chemistry)

2018-2019

Guided By  
Dr. Chavhan N. M.

Submitted To



P.G. and Research,  
Department of Chemistry,  
S.S.G.M. College, Kopargaon [423601]  
Dist- Ahmednagar[MS] India

  
Principal  
S.S.G.M. College  
Kopargaon

Rayat Shikshan Sanstha's

SHRI SADGURU GANGAGEER MATIARAI SCIENCE, GADTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR

## CERTIFICATE



This is to certify that the work incorporated in this project report entitled "SYNTHESIS AND CHARACTERIZATION OF SOME NOVEL PYRAZOLINE DERIVATIVES" being submitted to the Head, Department of Chemistry, S. S. G. M. College, Kopargaon and Savitribai Phule Pune university, Pune by Mr. Jadhav Sanjay Raju was carried out by him under my supervision at S. S. G. M. College, Kopargaon, Dist-Ahmednagar. Material obtained from other source has duly acknowledged in this project report.

Date: / / 2019

Dr. N. M. Chavhan

Project Guide,  
Department of Chemistry,  
S. S. G. M. College, Kopargaon



2

Dr. A. B. Nikumbh

Professor & Head,  
P. G. and Research  
Department of Chemistry,  
S. S. G. M. College, Kopargaon

Principal  
S.S.G.M.College  
Kopargaon

A  
Project report

On

**"Synthesis and Characterization of Some Fluorinated  
Triazoles"**

M.Sc. Project carried out as a part of curriculum for degree of "Master of  
Science" in Organic Chemistry at S.S.G.M. College, Kopargaon

Submitted by

**Mr. SHINDE GANESH DNYANESHWAR**

M.Sc. II (Organic Chemistry)

**2018-2019**

Guided By

**Dr. Mrs. Randhavan P. V.**

Submitted To



Department of Chemistry

**S.S.G.M. College, Kopargaon, [423601]**

**Dist.-Ahmednagar [MS], India.**

  
Principal

S.S.G.M. College  
Kopargaon



Rayat Shikshan Sanstha


SHRI SIDDHURU GANGAGEERI MAHARAJA SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR

# CERTIFICATE




This is to certify that the work incorporated in this project report entitled **"Synthesis and Characterization of Some Fluorinated Triazoles"** being submitted to the Head, Department of Chemistry S.S.G.M. College Kopargaon and Savitribai Phule Pune University, Pune by Mr. **SHINDE GANESH DNYANESHWAR** was carried out by him under my supervision at S.S.G.M. College Kopargaon, Dist- Ahmednagar. Information obtained from other source has duly acknowledged in this project report.

Date: 09/03/2019

  
**Dr. Randhavane P.V.**  
Project Guide,  
Department of Chemistry,  
S.S.G.M. College Kopargaon

  
Examiner  
20-4-2019

  
**Dr. Nikumbh A.B.**  
I/C Principal  
S.S.G.M. College Kopargaon

  
**Principal**  
**S.S.G.M. College**  
**Kopargaon**



A

"THE MOISTURE TESTER"



Submitted in a partial fulfilment for the award of the degree

BACHELOR OF SCIENCE IN PHYSICS

Savitribai Phule pune university,pune

Submitted by

MISS.AUTADE ACHAL MACHHINDRA

Under Guidance

PROF.J.E.YEWALE

DEPARTMENT OF PHYSICS

  
Principal  
S.S.G.M.College  
Kopergaon

S.S.G.M. COLLEGE, KOPARGAON

YEAR-2018-19

ROLL NO:8002

EXAM NUMBER:33877

"Education through Self Help Is Our Moto" KARMVEER

Rayat Shikshan Sanstha's

SHRI SADGURU GANGAGIRI MAHARAJSCIENCE, GAUTAM  
ARTS AND SANJIVANI COMMERCE COLLEGE KOPARGAON


DEPARTMENT OF PHYSICS

CERTIFICATE

This is certify that Miss. ~~Anshu Achai~~ Maehhindra of  
B.SC.Physics Has Successfully Completed The Project Work On "THE  
MOISTURE TESTER" As Prescribed By The Savitribai Phule Pune  
University In The Academic Year 2018-2019

  
11/3/19  
Guide,

Prof.J.E.Yewale

  
17/3/19  
Examiner

  
Head

Department of physics

Prof.S.T.SHETE



  
Principal  
S.S.G.M.College  
Kopergaon

A

PROJECT REPORT

ON

"TO STUDY THE POLARIZATION OF LIGHT & VERIFY MALUS LAW"



Submitted in a partial fulfillment for the award of degree

Master of Science

In

Physics

**Savitribai Phule Pune University, Pune**

Submitted By

**MR. JADHAV GAHININATH RAMAN**

M.Sc.II (PHYSICS)

Under Guidance of

**Prof. S. S. THORAT**

**DEPARTMENT OF PHYSICS,**

**S.S.G.M.College, Kopargaon.**

**Year 2018 -2019**

Roll No. :-8532

Exam Seat No. :- 206259

**"Education through self-help is our Motto" - KARMVEER**

Rayat Shikshan Sanstha's.

**SHRI SADGURU GANGAGEER MAHARAJ  
SCIENCE,  
GAUTAM ARTS AND SANJIVANI COMMERCE  
COLLEGE, KOPARGAON.**



**Savitribai Phule Pune University, Pune**

**DEPARTMENT OF PHYSICS**

**CERTIFICATE**

This is certify that Mr. JADHAV GAHININATH RAMAN of M.Sc.II (PHYSICS) has successfully completed his project work on "TO STUDY THE POLARIZATION OF LIGHT AND VERIFY MALUS LAW" as prescribed by the Savitribai Phule Pune University in the Academic year 2018-2019.

Project Guide  
PROF. S. S. THORAT

S.S.G.M. COLLEGE, KOPARGAON

Re / he  
26/4/19

Examiner



Head of Department

PROF. S. J. SHETE  
HEAD

Dept. of Phys'cs

S.S.G.M. College, Kopergaon

Principal  
S.S.G.M. College  
Kopergaon

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A

Project report

On

**"Characterization of Some Representative Synthesized Pyrazoline  
Derivatives"**

M.Sc. Project carried out as part of curriculum for degree of  
"Master of Science"

in

Organic Chemistry

at

S. S. G. M. College, Kopargaon.

Submitted By

Mr. Jadhav Vivek Dharmaraj

M.Sc. II (Organic Chemistry)

2019-2020

Guided By

Dr. Chavhan N. M.

Submitted To



P.G. and Research,  
Department of Chemistry,  
S.S.G.M. College, Kopargaon [423601]  
Dist- Ahmednagar.[MS], India

  
**Principal**  
**S.S.G.M. College**  
**Kopargaon**



Rayat Shikshan Samithi's  
SHRI SADGURU GANGAGEER MAHARAJ SCIENCE, GATAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON DIST-AHMEDNAGAR

## CERTIFICATE



This is to certify that the work incorporated in this project report entitled  
"CHARACTERIZATION OF SOME REPRESENTATIVE SYNTHESIZED  
PYRAZOLINE DERIVATIVES" being submitted to the Head, Department of Chemistry,  
S. S. G. M. College, Kopargaon and Savitribai Phule Pune university, Pune by , Mr.  
Jadhav Vivek Dharmaraj was carried out by him under my supervision at S. S. G. M.  
College, Kopargaon, Dist- Ahmednagar. Material obtained from other source has duly  
acknowledged in this project report.

Date: 1 / 12/2020

Dr. N. M. Chavhan

Project Guide,  
Department of Chemistry,  
S. S. G. M. College, Kopargaon

  
Principal

S. S. G. M. Science, Gautam Arts &  
Sanjivani Commerce College, Kopargaon

Prof. A. K. Deshmukh

Head, P. G. and Research  
Department of Chemistry  
S. S. G. M. College, Kopargaon

  
25/12/2020

21/12/2020  
25/12/2020  
Randhavar P.V.

Dr. N. M. Chavhan

  
25/12/2020  
Dr. N. M. Chavhan  
Principal  
S. S. G. M. College  
Kopargaon

A  
Project report  
On

**"SYNTHESIS OF 2-(3,5-BIS(TRIFLUOROMETHYL)PHENOXY)-  
N-BENZYLIDINE ACETOHYDRAZIDE"**

M.Sc. Project carried out as a part of curriculum for degree of "Master of Science"  
in Organic Chemistry at S.S.G.M. College, Kopergaon

**Submitted By**

**Miss. TUPKARI DHANASHRI RAVINDRA**

**M.Sc. II (Organic Chemistry)**

**2019-2020**

**Guided By**

**Dr. Mrs. Randhavane P.V.**

**Submitted To**



**P.G. and Research,**

**Department of Chemistry**

**S.S.G.M. College, Kopergaon, [423601]**

**Dist.-Ahmednagar [MS], India.**

  
Principal  
S.S.G.M. College  
Kopergaon

Ravi Shikshan Samithi's  
SHRI SADGURU GANGAGEER MAHARAJ SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR

# CERTIFICATE



This to certify that the work incorporated in this project report entitled "SYNTHESIS OF 2-(1,3-BIS(TRIFLUOROMETHYL)PHENOXY)-N-BENZYLIDINE ACETOHYDRAZIDE" being submitted to the Head, Department of Chemistry S.S.G.M. College Kopargaon and Savitribai Phule Pune University, Pune by Miss. TUPKARI DHANASHRI RAVINDRA was carried out by her under my supervision at S.S.G.M. College Kopargaon, Dist-Ahmednagar. Information obtained from other source has duly acknowledged in this project report.

Date: 23/9/2020

Dr. Randhavane P. V.  
Project Guide,  
Department of Chemistry,  
S.S.G.M. College Kopargaon

Dr. Thopate S. R.  
Principal  
S.S.G.M. College Kopargaon



23/9/2020  
Randhavane P.V.

Mr. D.N. Gaikwad

Principal

S.S.G.M. College  
Kopargaon

A  
Project report

On

**"ULTRASOUND AND MICROWAVE ASSISTED SYNTHESIS OF  
SCHIFF'S BASES"**

M.Sc. Project carried out as a part of curriculum for degree of "Master of  
Science" in Organic Chemistry at S.S.G.M. College, Kopargaon.

**Submitted By**

**Mr. PINGALE SHUBHAM ANAND**

M.Sc. II (Organic Chemistry)

**2019-2020**

**Guided By**

**Dr. Mrs. Randhavane P.V.**

**Submitted To**



**Department of Chemistry**

**S.S.G.M. College, Kopargaon, [423601]**

**Dist.-Ahmednagar [MS], India.**



Rayat Shikshan Sanstha's

SHRI SADGURU GANGAGEER MAHARAJ SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR.

# CERTIFICATE



This to certify that the work incorporated in this project report entitled "ULTRASOUND AND MICROWAVE ASSISTED SYNTHESIS OF SCHIFF'S BASES" being submitted to the Head, Department of Chemistry S.S.G.M. College Kopargaon and Savitribai Phule Pune University, Pune by Mr. PINGALE SHUBHAM ANAND was carried out by him under my supervision at S.S.G.M. College Kopargaon. Dist-Ahmednagar. Information obtained from other sources has duly acknowledged in this project report.

Date: 23/9/2020

*PP*  
*23/9/2020*  
Dr. Mrs. Randhavane P. V.  
Project Guide,  
Department of Chemistry,  
S.S.G.M. College, Kopargaon

*Dr. Thopate*  
Dr. Thopate S.R.  
Principal  
S.S.G.M. College, Kopargaon



*Dr. Randhavane*  
*23/9/2020*

*23/9/2020*  
Randhavane P.V.

*Dr. D.N. Gaikwad*  
*23/9/2020*  
Dr. D.N. Gaikwad

*Principal*  
Principal  
S.S.G.M. College  
Kopargaon



A Project Report On  
"Synthesis and Characterization of Bismuth Oxide ( $\text{BiVO}_4$ )"  
Submitted To



Rayat Shikshan Sanstha's  
S.S.G.M. COLLEGE KOPARGAON

*Submitted By*  
Mr. Bhagure Sachin Sopan  
M.Sc. (Physics)  
Academic Year: 2019-20  
Under The Guidance Of

Prof. S.P. Paradhi

Roll No: 8535

Exam Seat No:

Rayat Shikshan Sanstha's  
S. S. G. M. COLLEGE KOPARGAON  
DEPARTMENT OF PHYSICS



CERTIFICATE

This is to certify that Mr. Bhagure Sachin Sopan of M.Sc. (Physics) Semester IV has satisfactorily completed the project entitled "Synthesis and Characterization of Bismuth Oxide ( $\text{BiVO}_4$ )" under the guidance of Prof. S.P. Paradhi. He has satisfactorily completed the project work as per syllabus laid down by the Savitribai Phule Pune University during the Academic year 2019-2020.

Prof. S.P. Paradhi  
(Project Guide)

Prof. V. B. Galkwad  
(HOD of Physics)

  
Internal Examiner

  
External Examiner 

Date: April 2020

Place: Kopargaon

RAYAT SHIKSHAN S. S. G. M. COLLEGE KOPARGAON

2

  
Principal  
S.S.G.M.College  
Kopargaon

Project Report On  
"APPLICAION OF MICROSOFT EXCEL"



Submitted in a partial fulfillment of the requirement for the  
Bachelor of Science  
In  
Physics.

Savitribai Phule Pune University

Submitted By

**MISS. SONAWANE PRIYANKA BALASAHEB**

T.Y.B.Sc (Physics)

S. S. G. M. College, Kopargaon

Department of Physics,

2019-2020

  
Principal  
S.S.G.M. College  
Kopargaon

ROLL NO: 8020

EXAM SEAT NO:

"Education through self-help is our motto"-Karmaveer.

Rayat Shikshan Sanstha's,  
Shri SadguruGangageerMaharaj Science,  
Gautam Arts &Sanjivani Commerce College,  
Kopargaon,Dist:-Ahmednagar



Savitribai Phule Pune

University

## Certificate


This is to certify that submitted Miss. Sonawane Priyanka Balasaheb of class T.Y.B.Sc. (Physics), has satisfactory completed her project work as per rule laid down by the Savitribai Phule Pune University entitled as "Application of Microsoft Excel" during academic year 2019-2020.

  
Project Guide

Prof. V. B. Gaikawad  
Gaikwad

  
Examiner

 Head of department

  
Prof. V.B. Gaikawad

  
Principal  
S.S.G.M.College  
Kopargaon



A  
Project report

On

**"Synthesis of Silver nanoparticles using chemical reduction  
method from selective plant extract"**

M.Sc. Project carried out as part of curriculum for degree of  
"Master of Science"

in

Organic Chemistry

At

S. S. G. M. College, Kopargaon.

Submitted By

MISS. DIGHE SHUBHANGI ARJUN

M.Sc. II (Organic Chemistry)

2021-2022

Guided By

Prof. (Dr.) Chayhan N. M.

Submitted To



P.G. and Research,  
Department of Chemistry,  
S.S.G.M. College, Kopargaon [423601]  
Dist- Ahmednagar [MS] India

  
Principal  
S.S.G.M. College  
Kopargaon

Rayat Shikshan Sanstha's  
SHRI SADGURU GANGAGEER MAHARAJ SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR

## CERTIFICATE



This is to certify that the work incorporated in this project report entitled  
**"Synthesis of Silver nanoparticles using chemical reduction  
method from selective plant extract"** being submitted to the Head, Department  
of Chemistry, S. S. G. M. College, Kopargaon and Savitribai Phule Pune university, Pune by  
**Miss. DIGHE SHUBHANGI ARJUN** was carried out by her under my supervision at S. S.  
G. M. College, Kopargaon, Dist- Ahmednagar. Material obtained from other source has duly  
acknowledged in this project report.

Date: 18/ 5/ 2022.

Dr. N. M. Chavhan  
Project Guide,  
Department of Chemistry,  
S. S. G. M. College, Kopargaon

Examined  
25/05/22

Mr. A. K. Deshmukh  
Head, P. G. and Research  
Department of Chemistry,  
S. S. G. M. College, Kopargaon

Principal  
S. S. G. M. College  
Kopargaon

A  
Project report

On

**"Synthesis and Spectral analysis of some new pyrazole carboxylic acid derivatives"**

M.Sc. Project carried out as part of curriculum for degree of  
"Master of Science"

in

Organic Chemistry

at

S. S. G. M. College, Kopargaon.

Submitted By

MISS. DHAGE YOGESHWARI RAJENDRA

M.Sc. II (Organic Chemistry)

2021-2022

Guided By

Prof. (Dr.) Chavhan N. M.

Submitted To



P.G. and Research,  
Department of Chemistry,  
S.S.G.M. College, Kopargaon [423601]  
Dist- Ahmednagar [MS] India

  
**Principal**  
**S.S.G.M. College**  
**Kopargaon**

Rayat Shikshan Sanstha's

SHRI SADGURU GANGAGEER MAHARAJ SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR

## CERTIFICATE



This is to certify that the work incorporated in this project report entitled **"Synthesis and spectral analysis of some new pyrazole carboxylic acid derivatives"** being submitted to the Head, Department of Chemistry, S. S. G. M. College, Kopargaon and Savitribai Phule Pune university, Pune by Miss. Dhage Yogeshwari Rajendra was carried out by her under my supervision at S. S. G. M. College, Kopargaon, Dist- Ahmednagar. Material obtained from other source has duly acknowledged in this project report.

Date: 18/05/2022

Dr. N. M. Chavhan  
Project Guide,  
Department of Chemistry,  
S. S. G. M. College, Kopargaon



Examined  
Dhage  
25/05/22

Mr. A. K. Deshmukh  
Head, P. G. and Research  
Department of Chemistry,  
S. S. G. M. College, Kopargaon

Principal  
S.S.G.M. College  
Kopargaon



A  
Project Report

On

**"A PRACTICAL AND GREEN PROTOCOL FOR SYNTHESIS OF 2, 3-DIHYDROQUINAZOLIN-4(1H)-ONES USING IONIC LIQUID VIA ANTHRANILAMIDE"**

M.Sc. Project carried out as a part of curriculum for Degree of "Master of Science" in  
Organic Chemistry at S.S.G.M. College, Kopergaon

**Submitted By**

**Miss. PATIL MAYURI ANANDA**

M.Sc. II (Organic Chemistry)

**Guided By**

**Dr. D. M. Suryawanshi**  
(M.Sc., Ph.D., NET)

**Submitted To**



**P.G. & Research Department of Chemistry,**

**S.S.G.M. College, Kopergaon,**

**Dist.-Ahmednagar [MS], India-423601**

**(Academic Year: 2021-2022)**

  
**Principal**  
**S.S.G.M. College**  
**Kopergaon**

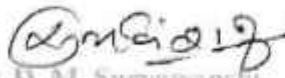
Rayat Shikshan Sanstha's  
SHRI SADGURU GANGAGEER MAHARAJ SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR.

# CERTIFICATE




This to certify that the work incorporated in this project report entitled "A PRACTICAL AND GREEN PROTOCOL FOR SYNTHESIS OF 2,3-DIHYDROQUINAZOLIN-4(1H)-ONES USING IONIC LIQUID VIA ANTHRANILAMIDE" being submitted to the Head, Department of Chemistry S.S.G.M. College Kopargaon affiliated to Savitribai Phule Pune University, Pune by Miss. PATIL MAYURI ANANDA was carried out by his under my supervision. Information obtained from other source has duly acknowledged in this project report.

Date: 22/5/2022

  
Dr. D. M. Suryawanshi  
Project Guide,  
Department of Chemistry



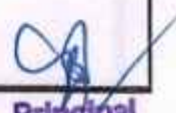
  
Prof. A. K. Deshmukh  
Head & Vice-Principal  
Department of Chemistry

Examined

  
23/05/2022

2 Examined

  
24/5/22

  
Principal  
S.S.G.M. College  
Kopargaon

A  
Project Report

On

**"A PRACTICAL AND GREEN PROTOCOL FOR SYNTHESIS OF 2, 3-DIHYDROQUINAZOLIN-4(1H)-ONES USING IONIC LIQUID VIA ISATOIC ANHYDRIDE"**

M.Sc. Project carried out as a part of curriculum for Degree of "Master of Science" in  
Organic Chemistry at S.S.G.M. College, Kopargaon

Submitted By

**Mr. JORE SAGAR BABASAHEB**

M.Sc. II (Organic Chemistry)

Guided By

**Dr. D. M. Suryavanshi**  
(M.Sc., Ph.D., NET)

Submitted To



**P.G. & Research Department of Chemistry,**

**S.S.G.M. College, Kopargaon,**

**Dist.-Ahmednagar [MS], India-423601**

**(Academic Year: 2021-2022)**

1

  
**Principal**  
**S.S.G.M. College**  
**Kopargaon**

Royal Shikshan Sanstha's  
SHRI SADGURI GANGAGEER MAHARAJ SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR


# CERTIFICATE




This to certify that the work incorporated in this project report entitled "A PRACTICAL AND GREEN PROTOCOL FOR SYNTHESIS OF 2,3-DIHYDROQUENAZOLIN-4(1H)-ONES USING IONIC LIQUID VIA ISATOIC ANHYDRIDE" being submitted to the Head, Department of Chemistry S.S.G.M. College Kopergaon affiliated to Savitribai Phule Pune University, Pune by Mr. JORE SAGAR BABASAHEB was carried out by his under my supervision. Information obtained from other source has duly acknowledged in this project report.

Date: 23/05/2022

Dr. D. M. Suryawanshi  
Project Guide,  
Department of Chemistry

  
Prof. A. K. Deshmukh  
Head & Vice-Principal  
Department of Chemistry

  
23/05/22  
Examined  
B. A. K. S.  
23/05/22



  
Principal  
S.S.G.M. College  
Kopergaon



A  
Project report  
on

**"SYNTHESIS AND STUDY OF SCHIFF'S BASE LIGAND"**

M.Sc. Project carried out as a part of curriculum for degree of "Master of Science" in Analytical Chemistry at S.S.G.M. College, Kopergaon.

**Submitted By**

Miss. Varsha Gorakshanath Shinde,

M.Sc. II (Analytical Chemistry)

**2021-2022**

**Guided by**

**Prof. KASHID P. D.**

**Submitted To**



**P.G. and Research,**

**Department of Chemistry**

**S.S.G.M. College, Kopergaon, [423601]**

**Principal**  
**S.S.G.M. College**  
**Kopergaon**

A  
Project report

On

**"SYNTHESIS AND STUDY OF SCHIFF'S BASE LIGAND"**

M.Sc. Project carried out as part of curriculum for degree of "Master of Science" in  
Analytical Chemistry at S.S.G.M. College, Kopergaon

Submitted By

Miss. Varsha Gorakshanath Shinde

M.Sc. II (Analytical Chemistry)

2021-2022

Guided By

Prof. KASHID P. D.

Submitted To



P.G. and Research,  
Department of Chemistry  
S.S.G.M. College, Kopergaon, [423601]  
Dist.-Ahmednagar [MS], India.

  
Principal  
S.S.G.M. College  
Kopergaon

Royal Shikshan Sanshodhan

SRI SAGGURU GANGADEVI MAHARAJA SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR.

# CERTIFICATE



This is to certify that the work incorporated in this project report entitled "SYNTHESIS AND STUDY OF SCHIFF'S BASE LIGAND" being submitted to the Head, Department of Chemistry S.S.G.M. College kopargaon and Savitribai Phule Pune University, Pune by Miss. Varsha Gorakshanath Shinde was carried out by him under my supervision at S.S.G.M. College Kopargaon, Dist- Ahmednagar from other source has duly acknowledged in this project report.

Date: 23/05/2022

*Prof. Kashid*  
23/5/2022  
Prof. Kashid P. D.  
Project Guide,  
Department of Chemistry,  
S.S.G.M. College, Kopargaon



*Prof. Deshmukh*  
Prof. Deshmukh A.K.  
Head, P.G. and Research  
Department of Chemistry,  
S.S.G.M. College, Kopargaon.

23/5/2022  
(Mr. Gokani A. B.)

(Ex: Exa.)

*Principal*  
Principal  
S.S.G.M. College  
Kopargaon

A  
Project report  
On

**" SYNTHESIS AND STUDY OF SCHIFF'S BASE LIGAND "**

M.Sc. Project carried out as part of curriculum for degree of "Master of Science" in  
Analytical Chemistry at S.S.G.M. College, Kopergaon

**Submitted By**

**Mr. Khillare Rushikesh Sampat**

M.Sc. II (Analytical Chemistry)

2021-2022

**Guided By**

**Prof. KASHID P. D.**  
**Submitted To**



P.G. and Research,  
Department of Chemistry  
S.S.G.M. College, Kopergaon, [423601]  
Dist.-Ahmednagar [MS], India.

  
**Principal**  
**S.S.G.M. College**  
**Kopergaon**



Rayat Shikshan Sansidha's

SRI SAI GURU GANGAGEERI MAHARAJ SCIENCE, GAUTAM ARTS  
AND SANJIVANI COMMERCE COLLEGE, KOPARGAON, DIST-AHMEDNAGAR.

# CERTIFICATE



This is to certify that the work incorporated in this project report entitled "SYNTHESIS AND STUDY OF SCHIFF'S BASE LIGAND" being submitted to the Head, Department of Chemistry S.S.G.M. College kopergaon and Savitribai Phule Pune University, Pune by Mr. Khillare Rushikesh Sampat was carried out by him under my supervision at S.S.G.M. College Kopergaon, Dist- Ahmednagar from other source has duly acknowledged in this project report.

Date: 23/05/2022

*Quoted*  
23/5/2022  
Prof. Kashid P. D.  
Project Guide,  
Department of Chemistry,  
S.S.G.M. College, Kopergaon



*[Signature]*  
Prof. Deshmukh A.K.  
Head, P.G. and Research  
Department of Chemistry,  
S.S.G.M. College, Kopergaon.

*[Signature]*  
25/5/2022  
(Mr. Gosavi A.B.)  
Ex: Exa

*[Signature]*  
Principal  
S.S.G.M. College  
Kopergaon

**A**  
**PROJECT REPORT**  
**ON**  
**"TO FIND DIELECTRIC CONSTANT OF DIFFERENT LIQUID'S"**



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

*Bachelor of Science*

*Physics*

**Savitribai Phule Pune University, Pune**

Submitted By

**Miss.GHAYTADKAR DIPALI SARJERAO**

**M.Sc.II (PHYSICS)**

Under Guidance of

**Miss. V.S.Barhate**

**DEPARTMENT OF PHYSICS,**

**S.S.G.M.College,Kopargaon**

**Year 2021 -2022**

Roll No. :-8534

Exam Seat No. :-

**"Education through self-help is our Motto" - KARMVEER**

Rayat Shikshan Sanstha's.

**SHRI SADGURU GANGAGEER MAHARAJSCIENCE,  
GAUTAM ARTS AND SANJIVANI COMMERCECOLLEGE,  
KOPARGAON.**



**Savitribai Phule Pune University, Pune**

**DEPARTMENT OF PHYSICS**

## **CERTIFICATE**

This is certify that Miss.GHAYTADKAR DIPALI SARJERAO of  
M.Sc.II (PHYSICS)has successfully completed his project work on  
"TO FIND DIELECTRIC CONSTANT OF DIFFERENT LIQUID'S"as  
prescribed by the Savitribai Phule Pune University in the Academic year  
2021-2022.

*Barhate*  
Project Guide

Miss. V.S.Barhate



*Dr. G.N. Kakde*  
Examiner

*Dr. G.N. Kakde*  
Head of Department

Prof.Dr.G.N.Kakde

*Dr. G.N. Kakde*  
Principal  
S.S.G.M.College  
Kopargaon



A  
Project Report  
On  
"To Determine the magnetic Susceptibility by Gouy's Method"



Submitted in a partial fulfillment of the requirement for the  
Bachelor of Science  
In  
Physics.

Savitribai Phule Pune University

Submitted By

Miss. THOMABRE ANHEWER TRAMOD

TY BSC (Physics)

S. S. G. M. College, Kopergaon

Department of Physics,

2021-2022

1 | Page

Principal  
S.S.G.M.College  
Kopergaon



ROLL NO: 8015

EXAM SEAT NO:

"Education through self-help is our motto"-Karmaveer.

Rayat Shikshan Sanstha's,

Shri Sadguru Gangageer Maharaj Science,

Gautam Arts & Sanjivani Commerce College,

Kopargaon, Dist:-Ahmednagar




Savitribai Phule Pune

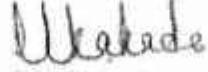
University


## Certificate

This is to certify that submitted Miss. Thombare Ashwini Pramod of class TY Bsc (Physics), has satisfactorily completed his project work as per rule laid down by the Savitribai Phule Pune University entitled as "To Determine the Magnetic Susceptibility-by Gouy's Method" during academic year 2021-2022.

  
28/5/22  
PROF. A.B. Autade  
Project Guide

  
26/5/22  
External Examiner

  
Dr. G.N. Kakade  
Head of Department



2 | Page

  
Principal  
S.S.G.M. College  
Kopargaon