

A

PROJECT WORK ON

“STUDY OF STRUCTURAL AND LUMINISCENCE PROPERTIES OF Dy^{3+} AND Ce^{3+} DOPED $Ca_2ZnSi_2O_7$ PHOSPHOR”

SUBMITTED TO

GOVT.V.Y.T. AUTO.PG.COLLEGE DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

MASTER OF SCIENCE IN PHYSICS

By

BHUMIKA BAGHEL

ROLL NO. – 210102

Under the guidance of

Dr. SITESHAWARI CHANDRAKER



SESSION: 2022-23

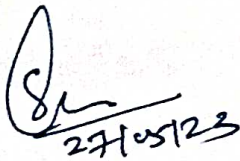
DEPARTMENT OF PHYSICS

GOVT. V.Y.T. PG. AUTONOMOUS COLLEGE, DURG [C.G.]


CERTIFICATE OF APPROVAL

This is to certify that the Project work entitled "STUDY ON STRUCTURAL AND THERMOLUMINISCENCE PROPERTIES OF Dy^{3+} and Ce^{3+} DOPED $Ca_2ZnSi_2O_7$ " is carried out by BHUMIKA BAGHEL a student of M.Sc. Physics at GOVT V.Y.T. PG.AUTONOUOUS COLLEGE DURG (C.G.) is hereby approved as a credible work in the discipline "Study On Structural And Thermo luminescence Properties Of Dy^{3+} And Ce^{3+} Doped $Ca_2ZnSi_2O_7$ " of for the award of degree of MASTERS IN PHYSICS during the session 2022-23.

Guide



Dr. Sitieshwari Chandrakar



Head of the Department
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Govt. V.Y.T.P.G, Autonomous
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CERTIFICATE OF THE GUIDE

This is to certify that the Project work entitled "STUDY ON STRUCTURAL AND THERMOLUMINICENCE PROPERTIES OF Dy³⁺ AND Ce³⁺ DOPED Ca₂ZnSi₂O₇" is carried out by Bhumika Baghel a student of M.Sc. (Physics) at GOVT V.Y.T. PG.AUTONOUOMOUS COLLEGE DURG (C.G.) is hereby approved as a credible work in the discipline for the award of degree in Masters of science in PHYSICS during the session 2022-23 from GOVT. V.Y.T. PG. COLLEGE, DURG (C.G.). It is also certified that this is original work carried out by herself.

I further declare that the work reported in this project has not been submitted either in part or in full for the award of any other degree or diploma in this institute or any other institute or university.

DATE- 27/05/23


27/05/23

GUIDED BY

DR. SITESHWARI CHANDRKER

A
PROJECT REPORT
ON

**“PHOTOLUMINESCENT ANALYSIS OF NEODYMIUM
DOPED CALCIUM ZIRCONATE (CaZrO₃:Nd³⁺) PHOSPHOR”**

SUBMITTED TO
GOVT. V. Y. T. PG. AUTONOMOUS COLLEGE DURG



IN THE PARTIAL FULFILMENT OF REQUIREMET FOR THE AWARD OF
DEGREE OF

MASTER OF SCIENCE IN PHYSICS

BY

**KHUSHBOO YADAV
ROLL NO. - 210111**

GUIDED BY

**DR. JAGJEET KAUR SALUJA
(PROFESSOR AND HEAD OF DEPARTMENT)**

**DR. VIKAS DUBEY
(PROFESSOR, BIT RAIPUR)**



SESSION 2022-23

DEPARTMENT OF PHYSICS

GOVT. V. Y. T. PG. AUTONOMOUS COLLEGE DURG(C.G.)

CERTIFICATE OF APPROVAL

This is to certify that the Project work entitled "PHOTOLUMINESCENT ANALYSIS OF Nd^{3+} DOPED CaZrO_3 PHOSPHOR" is carried out by Khushboo Yadav a student of Master of Science in Physics at GOVT. V.Y.T. PG. AUTONOUOUS COLLEGE DURG (C.G.) and is hereby approved as a credible work in the discipline for the award of degree in Master of Science in (Physics) during the session 2022-23.

Date

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(Professor, BIT Raipur)

J. K. Singh
Head of Department
Professor & Head
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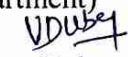
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Date


Guided by

Dr. Jagjeet Kaur Saluja
(Professor and Head of
Department)


Dr. Vikas Dubey
(Professor, BIT Raipur)

A
PROJECT REPORT
ON
"THERMOLUMINESCENC AND PHOTOLUMINESCENCE
STUDY OF DYSPROSIUM DOPED ZIRCONIUM DIOXIDE
($ZrO_2 : Dy^{3+}$) PHOSPHOR"

SUBMITTED TO
GOVT. V. Y. T. PG. AUTONOMOUS COLLEGE DURG



IN THE PARTIAL FULFILMENT OF REQUIREMET FOR THE AWARD OF
DEGREE OF

MASTER OF SCIENCE IN PHYSICS

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SESSION 2022-23

DEPARTMENT OF PHYSICS

GOVT. V. Y. T. PG. AUTONOMOUS COLLEGE DURG (C.G.)

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This is to certify that the Project work entitled “ THERMOLUMINESCENCE AND PHOTOLUMINESCENCE STUDY OF DYSPROSIUM DOPED ZIRCONIUM DIOXIDE ($ZrO_2: Dy^{3+}$) PHOSPHOR” is carried out by Prajjwal Tamrakar a student of Master of Science (Physics) at GOVT. V.Y.T. PG.AUTONOUOMOUS COLLEGE DURG (C.G.) and is hereby approved as a credible work in the discipline for the award of degree in Master of Science (Physics) during the session 2022-23.

Date

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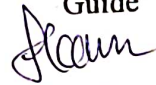
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I further declare that the work reported in this project has not been submitted either in part or in full for the award of any other degree or diploma in this institute or any other institute or university.

Date

Guide



Dr. Jagjeet Kaur Saluja
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Dr. Vikas Dubey
(Associate Professor & Head, BIT
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A
PROJECT REPORT
ON

**“THERMOLUMINESCENC AND PHOTOLUMINESCENCE
STUDY OF DYSPROSIUM DOPED ZIRCONIUM DIOXIDE
(ZrO₂ : Dy³⁺) PHOSPHOR”**

SUBMITTED TO
GOVT. V. Y. T. PG. AUTONOMOUS COLLEGE DURG



IN THE PARTIAL FULFILMENT OF REQUIREMET FOR THE AWARD OF
DEGREE OF

MASTER OF SCIENCE IN PHYSICS

BY

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SESSION 2022-23

DEPARTMENT OF PHYSICS

GOVT. V. Y. T. PG. AUTONOMOUS COLLEGE DURG (C.G.)

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