

1. Name-Dr.Preeti Pathak

2. Title/Position: HOD and Associate Professor

(Department of Physics)Mata Gujri Mahila

Mahavidyalaya Autonomous, Jabalpur



3. Contact Information:

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Phone-No.-9294643323, 9691774533

4. Qualifications: Ph.D in Physics (Nanotechnology)

“Photovoltaic Studies on CdTe Nanocrystalline Photoelectrodes in

Photoelectrochemical cell.” PG in Physics, B.Ed, M.Ed

5. Areas of Expertise: Solar cell, Nanotechnology, Electronics

6. Total Experience: (in Years)-**27(Regular college code)**

7. Research Projects:)-1Minor Research Project Complete Sponsored

by-UGC.(F.No.MS-209/106045/10-11/CRO) **“Synthesis and optical**

characterization of Nanocrystalline CdTe thin Film

photoelectrochemical solar cell and studies on alternative energy

source.”

8. Publications: Last Five Years Publications details **-06**

<u>2019</u>	<u>INTERNATIONAL</u>	<ol style="list-style-type: none"> 1. Paper Published in An International open access ,Peer-Refereed Journal IJRAR 190F015 International Journal of Research and Analytical Reviews (IJRAR) www.ijrar.org 93 Photoelectrochemical Solar Cells Using Nanocrystalline Copper Selenide Photo Electrode With Different Deposition Time© 2018 IJRAR October 2018, Volume 5, Issue 4 www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138) 2. Paper Published in An International open access ,Peer-Refereed Journal IJRAR190F011 International Journal Of Research And Analytical Reviews (Ijrar) Www.Ijrar.Org 72 Effect Of Luminol Concentration On Lyoluminescence Of Γ-Irradiated Sodium Halide Microcrystals© 2018 IJRAR October 2018, Volume 5, Issue 4 www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)
<u>2019-2020</u>	International conference Paper	<ol style="list-style-type: none"> 1. Paper “Repercussion of Temperature of precursor solution on performance of Nanocrystalline CdTe thin films deposited by chemical bath deposition techniques “published in International conference on Recent Trends in Renewable Energy and Sustainable Development 30th and 31st January 2020. 2.
<u>2022-2023</u>	International Publication	<ol style="list-style-type: none"> 2. Published a research paper in Swadeshi Research Foundation a Manthly Journal Of Multidisciplinary Research on the Topic “NANOCRYSTALLINE COPPER SELENIDE PHOTO ELECTRODE USED IN PHOTOELECTROCHEMICAL SOLAR CELLS “. ISSN-2394-3580, Volum-10 no.3 Jan-2023. 3. Published a research paper in Unnati International Journal of Multidisciplinary Scientific Research on the Topic Synthesis and Characterisation of Nanocrystalline CdTe thin film in Photoelectrochemical solar cell. ISSN:2581-8872, Vol 4Issue-12,Month-Jan,Year-2023. 4.

International conference :2022-23

1. **Presented research paper** in International conference on “Recent Advances in Research and Innovations in Life Sciences” entitled “Tracking Emerging technologies in energy Research in India- Toward A Roadmap For sustained Environment”, organized by MGMM & IQAC RDVV and NASI (National Academy of Science, Bhopal Chapter & The Society of Life Sciences (SLS).on 17-19 Nov.2022.

International Conference Publication-2023-24

- Published 2 research paper on 2nd International Conference on Multidisciplinary Research and Innovative Developments 8th-9th January 2024. Organized by Government college Manawar Dhar, M.P. **2 full length papers published in ISBN (978-93-91922-84-9) proceedings-**
 - 2nd International Conference on Multidisciplinary Research and Innovative Developments 8th-9th January 2024. Organized by Government college Manawar Dhar, M.P.
1. “Consequences of Temperature of precursor solution on Structural, Morphological, Optical properties and photovoltaic performance of nanocrystalline CdTe thin films Deposited by Chemical bath deposition Techniques.”
 2. “Consequences of Temperature of precursor solution on photovoltaic performance of nanocrystalline CdTe thin films.”

BOOK CHAPTER: (SPECIFY NO.)

Chapter(s) in Books -02(International Publication)

1 1	2018	Special volume on Recent Advances in photovoltaic under its Material Research Foundation series Form LLC International publishers in Science and Engineering USA, Millersville PA 17551.” Photovoltaic Response of Nanocrystalline Cadmium Telluride in Photoelectrochemical Cell”.
2 2 2 2	2018	Special volume on Recent Advances in photovoltaic under its Material Research Foundation series Form LLC International publishers in Science and Engineering USA, Millersville PA 17551.” Photoelectrochemical solar cells using nanocrystalline copper selenide photo electrode”.

BOOK PUBLICATION: (SPECIFY NO.)-06

2.Books (Published)

1. One Chapter in B.Sc I year Open Elective Book (Hindi Medium) Navbodh Publication according to NEP2021-22.
2. One Chapter in B.Sc I year Open Elective Book (English Medium) Navbodh Publication according to NEP2021-22.
3. B.Sc II year Physics Major Paper I and II Book (Hindi Medium) Navbodh Publication according to NEP. 2022. **ISBN :978-93-94549-07-4**
4. Practical Book published in B.Sc I year Physics I Book (English Medium) Navbodh Publication according to NEP2022-23.
5. Practical Book published in B.Sc II year Physics I II nd Paper Book (English Medium) Navbodh Publication according to NEP 2022-23.
6. Practical Book published in B.Sc III year Physics I Book (Hindi Medium) Navbodh Publication according to NEP2023-24.

Lab Manuals-15(For B.Sc Ist ,IInd and IIIrd Year Navbodh Publication)

9. Grants and Funding: NA

Another Acheivements-

- i) Head of the Department**-(14 years)
Handling Responsibility of HOD Physics Mata Gujri Women's college, since July 2007 to November 2019 and from Jan2021 to till now.-
- ii) Chairperson Board of Study Physics**
Chairperson Board of Study Physics Mata Gujri Women's college, since 2012 to 2020and from Jan 2021to till now.
- iii) Assistant Exam Controller**
From 15 February 2020 to Jan 2021.
- iv) Superintendent of Examination-**
Handling responsibility of superintendent of examination during examination of 2021-22 and 2022-23.
- v) Awards-**
 - National Award for Best Educationist on 5th May 2024. This award was given by Society for Technological Advance Materials of India (STAMI) at Raipur C.G.
- vi) E CONTENT Creator of Higher Education-**
 - 2021-22

Make E Content for Higher Education Department Madhyapradesh
(B.ScIst Year Paper Ist Thermodynamics and Statistical Physics Module
2.3 “Change in Entropy of universe in an irreversible system”)

- **2022-23**

Make E Content for Higher Education Department Madhyapradesh
(B.ScIInd Year Paper II Electricity magnetism and Electromagnetic theory
Physics Module 3.2 “Thevenins Theorem.

vii) Nodal Centre Coordinator of IIRS-ISRO-

- Coordinated more than 45 IIRS-ISRO online courses.

**iv) Nodal Centre Coordinator of Energy Audit committee,
Energy Club**

viii) Subject Expert-Board of Study Maharshi Mahesh Yogi University

Jabalpur. From 2022 to till date

ix) Interview Panel member of Army School.

x) Interview Panel Member of Khalsa School.

xi) Resource Person

Resource Person in One day online National webinar on “Green Energy: A tool for Sustainable Development.” On -22nd March 2024. **key note speakers** Topic-“India’s Green energy potential: A roadmap for sustainable Growth.”Organized by Dr.Suhanva Singh Netam Government College Malanjkhanda Dist.Balaghat M.P .Sponsored by-Madhyapradesh Higher Education Department and IQAC.

xii) Co-convenor of International conference

Co-convenor of the “**International Conference on Emerging Trends in Computer Science, Mathematics, Physics and Electronics.**” to be organized by the Department of Mathematics, Computer Science, Physics and Electronics,

Mata Gujri Mahila Mahavidyalaya (Autonomous), Jabalpur on 3-4 October 2018.

xiii) Convenor of National Webinar-

Convenor of national webinar on the topic “Extraordinary Achievements, Benefits and Opportunities in Exploration and Utilization of the Indian Space Programme”.

(“Achievements, Benefits and Opportunities in the Domain and Utility of the Indian Space Programme.”) **on 22nd August 2024**

xiv) International Conference (ICMRID-2024) Presentation-

Presented a research paper on “Consequences of Temperature of precursor solution on Structural, Morphological, Optical properties and photovoltaic performance of nanocrystalline CdTe thin films Deposited by Chemical bath deposition Techniques.”
2nd International Conference on Multidisciplinary Research and Innovative Developments 8th-9th January 2024.Organized by Government college Manawar Dhar,M.P.

xv) Take Remedial Classes in Government college-

- Dr.Preeti Pathak had taken the Remedial classes of B.Sc Ist year in Department of Physics Govt M.H college of Home Science and Science Jabalpur on 18th,to 21st February 2019.

xvi) MEMBERSHIP OF PROFESHSIONAL BODIES:-

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Name Of The Body	Status of membership life /annual
Mahakaushal Vigyan Parishad	Life/from 27 January 2009
Global Initiative of Academic Networks (GIAN) MHRD	Life/from January 2022
STAMI(International) (Society for Technologically Advanced Materials ,India) Registered under societies registration act XII of 1860 with no.MH/589/07	Life/from January 2022

