

RESUME

Kusumanjali Deshmukh

Ph.D., M.Sc (Physics)

Assistant Professor (Physics)

Govt. VYT PG Autonomous College,

Durg (Chhattisgarh), INDIA

email: kusumanjali.d25@gmail.com :

kd.physics@govtsciencecollegedurg.ac.in

<https://www.govtsciencecollegedurg.ac.in/FacultyProfile.aspx?fid=157>

Contacts: +91-788 – 4903779 (Res), +91-9424109836 (Mobile)



Presently working at Gov. VYT PG Autonomous College Durg; affiliated to Hemchand Yadav University, Durg , Under Dept of Higher Education CG, as an Assistant Prof (Physics). Experienced as Associate Professor, SSGI, SSTC, Bhilai, affiliated to CSVTU, Bhilai, CG with a demonstrated history of working in the field of higher education. Skilled in Educational Leadership, Lecturing, Teaching, E-Content Development. Technically Updated to Welcome **Challenges of NEP2020 in Higher Education**, and University Teaching. Strong professional with a Doctor of Philosophy focused on Research. Intended in Popularizing Physics and giving Society, Physics Loving Teachers and Professionals.

Academic Qualification:

- **Ph.D., Physics**
UTD PT Ravishankar Shukla University, Raipur, Chhattisgarh
Year of Award: Feb. 2012
Thesis Title: *Investigations on Electro- optical Properties of some chemically deposited nano and bulk rare earth doped Semiconducting films.*
- **M.Sc, Physics**
UTD PT Ravishankar Shukla University, Raipur, Chhattisgarh
Year of Passing: 1997
Project Title: *Photoconductivity Studies on some II-VI Semiconducting thin films.*
- **B.Sc., (Maths), Mathematics, Physics & Chemistry**
Year of Passing: 1995

Ph.D. Guided (/Dissertation): Awarded

1. Goverdhn Yadu. "Investigations On Semiconducting Properties Of Silver Sulphide Thin Films Synthesized By Chemical Route, CSVTU, Bhilai, CG (2013-2019), Awarded Nov'2019
2. Krishna Kumar Pathak, "Preparation And Characterization Of Chemically Deposited Rare Earth Doped Nanocrystalline CdSe Films", CSVTU, Bhilai, CG (2013-2020), Awarded Feb'2020

Ph.D. Guided (/Dissertation): Guiding Presently

4 Scholars : Enrolled Since 2021

Work Experience:

- **Assistant Professor (State Services)**(Nov. 2021- till date), Govt. VYT PG Autonomous College, Durg, Chhattisgarh.
- **Assistant Professor (State Services)**(Oct. 2018- Nov. 2021) Dr. Manrakhan Lal Sahu Shaskiya Mahavidyalaya, Jamul, Bhilai Chhattisgarh. 490020
- **Associate Professor** (Sept. 2013-Oct. 2018), Shri Shankaracharya Technical Campus, Bhilai, Chhattisgarh. 490020
- **Sr. Assistant Professor** (Mar. 2012-Sept. 2013), Shri Shankaracharya Technical Campus, Bhilai, Chhattisgarh. 490020
- **Assistant Professor** (June 2006-Mar. 2012), Shri Shankaracharya Technical Campus, Bhilai, Chhattisgarh. 490020
- **Lecturer** (Aug. 2001-Jun. 2002), Shri Shankaracharya Technical Campus, Bhilai, Chhattisgarh. 490020
- **Assistant Professor (Adhoc) (Sept 1997-April 2001)**, Kalyan PG Mahavidyalaya, Bhilai, Chhattisgarh, 490006

Research Area Interest:

- Luminescence in II-VI Semiconducting Thin films
- Chemically Deposited Thin Films
- Thin Films for Photovoltaic Applications
- Nanostructured thin films and Property Modifications
- Photoconductivity Enhanced newer materials

Membership to Professional Bodies:

- Life member of Indian Association of Physics Teachers.(L4782)
- Life Member of Luminescence Society of India.(36/LMLSI486)
- Life member of Indian Physics Association (GEN/LM/12448)

Software Skills:

- Working knowledge of MS Office, DOS, Origin Photoshop
- Diploma in computer programming and application
- Languages: Programming with C, C++, FORTRAN, COBOL and DBASE
- Other Software: Good command over MS Windows XP, MS Office 2007, DOS and Multimedia packages Corel Draw, Origin Photoshop.

Courses Taught:

- **Under Graduate:**
 - Applied Physics
 - Solid State Devices and Components
 - Electrical Engg. Materials
 - Quantum Physics
 - Wave Optics
 - Classical Physics
 - Solid State Physics and Devices

- **Post Graduate:**
 - Nuclear and Particle Physics
 - Statistical Physics
 - Electrodynamics
 - Quantum Mechanics
 - Atomic and Molecular Physics

Responsibilities Discharged:

State Level:

1. **Subject Expert, Physics**, Committee for Revision of Syllabus for FYUP, March 2024
2. **Member NEP Task Force**, Group-3, for draft of NEP Guidelines Implementation, March 2024
3. **Member PM-USHA Core Committee** September 2024
4. **Member, Core Committee** for Designing Modular Physics Laboratory for Govt. English Medium Atmananda Colleges of State, September-2022

Divisional Level:

1. **Member**, Committee for preparation of IDP, Durg Division, December 2022

University Level:

1. **Assistant Superintendent of Exam**, for Chhattisgarh Swami Vivekanand Technical University, Bhilai (CG) at the Institute (Nov. 2011- Oct. 2015).

Institute Level:

1. **SPOC-NPTEL**, Govt VYT PG Autonomous College, Durg, Since January 2025
2. **Ambassador NEP/ Member NEP-Cell** , Since July 2022, Govt VYT PG Autonomous College, Durg,

3. **Member**- Website Committee, EDRP, Online Admission, Automation of Fee Deposition etc. Since 2022, Govt VYT PG Autonomous College, Durg
4. **Member IQAC Since 2022**, Govt VYT PG Autonomous College, Durg
5. Member, Various college level committee, Govt VYT PG Autonomous College, Durg, Since January 2022 and Dr Manrakhanlal Sahu Shaskiya Mahavidyalaya, Jamul, Bhilai, CG
6. **Coordinator IQAC and NAAC, 2019-2021** Dr Manrakhanlal Sahu Shaskiya Mahavidyalaya, Jamul, Bhilai, CG
7. **Coordinator AISHE, 2019-2021** Dr Manrakhanlal Sahu Shaskiya Mahavidyalaya, Jamul, Bhilai, CG
8. **Nodal Officer Scholarship (Post Matric and NSP) 2019-2021**, Dr Manrakhanlal Sahu Shaskiya Mahavidyalaya, Jamul, Bhilai, CG
9. **Coordinator Admission Cell**, Shri Shankaracharya Group of Institutions, Shri Shankaracharya Technical Campus, Bhilai, July 2012-Oct. 2018
10. **Member** in various committee at institution level and Women's Security cell at AICTE, Shri Shankaracharya Group of Institutions, Shri Shankaracharya Technical Campus, Bhilai, July 2006-Oct. 2018
11. **Subject Coordinator, Department of Physics** at Shri Shankaracharya Group of Institutions, Shri Shankaracharya Technical Campus, Bhilai, 2006-Oct. 2018
12. **Coordinated NAAC** at Shri Shankaracharya Group of Institutions, Shri Shankaracharya Technical Campus, Bhilai, 2017-2018, in new Online Portal Format.
13. **Member**, Lab audit & Stock verification, Shri Shankaracharya Group of Institutions, Shri Shankaracharya Technical Campus, Bhilai, (May 2018)
14. **Coordinator Girls Hostel Flying Squad** at Shri Shankaracharya Group of Institutions, Shri Shankaracharya Technical Campus, Bhilai, July 2012-Oct. 2018
15. **Established / Designed/Upgraded new state of art physics laboratory** at the institution Shri Shankaracharya Group of Institutions, Shri Shankaracharya Technical Campus, Bhilai, July 2008-Oct. 2018
16. **Established and assembled experimental Setup for research purpose**, Shri Shankaracharya Group of Institutions, Shri Shankaracharya Technical Campus, Bhilai, July 2008-Oct. 2018.

Awards/Recognitions/Certifications:

- **Guru Vishista Award -2023** : A National Level Award for Excellence in Teaching by Dayanand Sagar Business School, Bengaluru, India
- **Chhattisgarh 5th Young Scientist Award, 2007**
- **Certificate of Appreciation** by Swayam for *Translating the lectures of course Solid State Physics* in Hindi, Nov-2024
- **Certificate of Appreciation** by Swayam for *Successful Mentorship of students in "Nuclear and Particle Physics"* July-Dec-2023
- **Certificate of Appreciation** by Swayam for *Translating the lectures of course Engineering Mechanics* in Hindi, 19 Jan. 2022

- Course under Centre for Continuing Education on *The Story of Photoelectric Effect* from July 15 to August 17, 2021 conducted by IIT, Kanpur
- **NPTEL On-line Course Certification**, on *Experimental Physics-II* in Jan.-April 2020 with **Elite Gold** certification.
- Course under Centre for Continuing Education on *Classical Mechanics – 1* from January 26 to April 25, 2021 conducted by IIT, Kanpur
- Course under Centre for Continuing Education on *Classical Electromagnetism - 1 (Electrostatics)* from August 15 to December 13, 2020 conducted by IIT, Kanpur
- **Certificate of Appreciation** by NPTEL for *Translating the files of course Experimental Physics-II* offered by IIT Kanpur in Hindi, 11 Sept 2020
- Course under Centre for Continuing Education on *Learning Physics Through Simple Experiments* from April 2 to June 10, 2020 conducted by IIT, Kanpur
- Course under Centre for Continuing Education on *Advanced Course on Special theory of Relativity* from January 26 to May 19, 2020 conducted by IIT, Kanpur
- Course under Centre for Continuing Education on *Basics of Special Theory of Relativity* from 18 Dec 2018 to 8 Mar 2019 conducted by IIT, Kanpur
- Course under Centre for Continuing Education on *Basics of Quantum Mechanics* from August 15 to November 18, 2019 conducted by IIT, Kanpur
- **SPOC NPTEL Local Chapter** at Shri Shankaracharya Technical Campus, SSGI, Bhilai since Feb 2017 institute ranked 20th position in Jan.-April 2017 awarded **AA certification**.

Extension Activities:

1. **As Reviewer , Elsevier Publication**
2. **Primary Evaluator** for contribution in 'Toyhacathon' 2021 conducted by AICTE in association with Ministry of Education Innovation Cell.
3. **Judge**, *Science for Sustainable living organized by Khalsa Public School, Durg under Office District Education Officer, Durg on 9th Sept. 2021*
4. **Actively involved in organization of District level Young Science Congress since 2016.**
5. **Coordinator**, *Rashtriya Mansik Swasthya Karyakram, 2017 in association with NCDCELL, Durg*

Invited Speech/Guest Lectures:

1. Resource Person, conducted a hands on Teachers Training on **“Organizing Your Files and Digital Life with Google Drive”**, at Naveen Govt College Jevratala, Rajnangaon on 8th January'2025
2. Resource Person, Teachers Training For Higher Secondary Teachers, DIET, Durg, **“Waves, Oscillations, Wave Optics : Seen and Unseen”** on 12th December 2024.
3. **Resource Person**, delivered a lecture at ATAL- FDP on **“Polytechnic Education in Context of National Education Policy 2020”** held from 11th November to 17th November 2024, organized by **SATI Polytechnic, Vidisha, MP** on *IoT & Smart Infrastructure Development and Security*
4. **Invited Talk**, *“Computational Material Modelling and Simulation”* in the International Conference on New and Emerging Dimension in Science, Technology & Management,

organized by Rajeev Gandhi Govt. Post Graduate College Ambikapur (C.G) on 12-13th March 2024.

5. **Resource Person** , “**Avishkar 2024**” a Technical And Scientific Model Presentation Cum Exhibition held on 23rd February 2024 at Sanjay Rungta Group of Institutions, Bhilai
6. **Session Chair**, International Conference on Recent Trends in Science and Engineering ICRTSE-2024 held during 8-10 Feb’2024, organized Jointly by IIT Bhilai and Govt VYT PG Autonomous College, CG.
7. **Subject Expert**, CGVYAPAM for Dawa Apatti Nirakaran PHEH 23 exam on 3rd Oct’23
8. **Plenary Speaker**, “Divisional Level Workshop on Holistic Assessment in the Light of NEP-2020” organized by Government Pt JLN Arts and Science PG College, Bemetara on 19th August 2023 on the topic, *Multidisciplinary Approach in HEI – NEP2020*.
9. **Panel Expert**, at One Day National Conference on Best Practices: Quality Enhancement in Higher Education Institutions” sponsored by NAAC Bengaluru, organized by Shri Gobindram Shadani Govt. Arts and Commerce Girls College, Devendra Nagar, Raipur, CG on 2nd August 2023 and **delivered a talk** on *Effective Implementation of OBE in HEI*.
10. **Resource Person**, delivered a lecture at FDP on “Indian Knowledge System” held from 20th September to 27th September 2023, organized by Govt VYT PG Autonomous College, Durg, CG on *Vedic Science: Science and Discoveries in Vedas*.
11. **Resource Person**, “Refresher course in physical education” held during 11.09.2023 to 29.9.2023 by MMTC, Pt. Ravishankar Shukla University, Raipur on *Outcome and Attainments*.
12. **Invited Lecture**, delivered a lecture series on *Quantum Mechanics* for PG Students of W. W Patankar Girl’s PG College, Durg under DBT star College Scheme, MoS&T, Govt of India, New Delhi from 27th to 29th March 2023.
13. **Subject Expert**, Sunder lal Sharma Open University from 21.02.2023 to 23.02.2023.
14. **Guest Lecture**, delivered an invited talk on *Analog and Digital circuits* for UG Students of W. W Patankar Girl’s PG College, Durg under DBT star College Scheme, MoS&T, Govt of India, New Delhi on 12th Aug’2022
15. **Guest Lecture**, delivered an invited talk on “*Boolean Algebra, De Morgan’s Theorem and Convertors*” for UG Students of W. W Patankar Girl’s PG College, Durg under DBT star College Scheme, MoS&T, Govt of India, New Delhi on 13th Aug’2022
16. **Session Chair**, National Conference on Luminescence and its application -2021 organized by Govt VYT PG Autonomous College & Luminescence Society of India (LSI) during 9-11 Dec- 2021
17. **Invited Lecture**, “Lecture series on Wave optics and Mechanics” on Interference of Light, organized by department of Physics, Indira Gandhi Govt. Arts and Commerce PG College, Vaishali Nagar, Bhilai on 19 April 2021
18. **Invited Lecture**, “Lecture series on Wave optics and Mechanics” on Diffraction of Light, organized by department of Physics, Indira Gandhi Govt. Arts and Commerce PG College, Vaishali Nagar, Bhilai on 26 April 2021
19. **Subject Expert**, CG PSC for resolution of challenges on 22.12.2020.
20. **Resource Person**, “Thin Films: Band Structure Modulation and Modification in Properties” at two days National Webinar on “Sustenance of Physics during Pandemic”, organized by Govt. Rajeev Lochan PG College Rajim, Chhattisgarh, 13th-14th Aug 2020.
21. **Subject Expert**, Judge for the Documentary Film Making Competition Sponsored by Chhattisgarh Council of Science and Technology, Raipur (CCOST), CG on 23rd February 2019

22. **Guest Lecture**, delivered an invited talk on “*Wave Optics : Phenomena and principle underlying*” for UG Students of Indira Gandhi Shaskiya Kala ewam Vanijy snaatakottar Mahavidyalaya, Bhiali, Durg, CG, on 6th Nov’2019
23. **Resource Person**, “National Workshop on Practical Application and Validation of Analytical Instruments, Organized by FPSc, Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh on 18th Feb 2016 and Delivered a talk and demonstration on CPS Particle Size Analyzer its usage and underlying principles.
24. Subject Expert to Judge State level Children Science Congress -2015
25. **Invited Talk**, on “*Recent Trends in Composite materials: A Review*” in the national seminar on “ Recent Trends in Electronic material & Physical Science” held at St. Thomas College, Bhilai on 15th -16th September 2006

Research Patent Published:

1. Mimi Akash Pateria, Goverdhan Yadu, Kusumanjali Deshmukh, Preparation of HO Doped Ag₂S Thin Films by CBD Method. INDIA 202221039470 A 29-07-2022

Research Projects:

Co -PI, 2010-2012 Preparation and Characterization of Nano crystals Smriti Agrawal, Sandhya Pillai, Kusumanjali Deshmukh

Conferences/Workshops/STTPs Organized:

1. **Coordinator**, “Awareness Workshop on NPTEL, at Shri Shankaracharya Technical Campus, Bhilai in association with IIT, Kharagpur, 17th Jan., 2017 for Principal/faculties of Engineering, Science, Humanities college across the state.

Book Chapter:

1. **Kusumanjali Deshmukh**, Naveen Goe, Quantifying Quality of Teaching-Learning in Higher Education: Soul and Substance of Outcome Based Education Best Practices : Quality Enhancement in Higher Education Institutions Edt : Dr Kavita Sharma , Shri Govindram shadani Govt. Art and Commerce Girls College, Raipur 2023 978-93-5917-557-7
2. **Kusumanjali Deshmukh**, Naveen Goel and Bhagwati Charan Patel (2020), “*Optical Sensors: Overview, Characteristics and Applications*”, Advances in Modern Sensors, Physics, Design, Simulation and Applications, pp.3-1 to 3-27, Nov. 2020, Ch-3, IOP Publishing Ltd, Bristol, United Kingdom, DOI.10.1088/978-0-7503-2707-7

3. Naveen Goel, **Kusumanjali Deshmukh**, Bhagwati Charan Patel and Saji Chacko (2020), "*Tools and Rubrics for Assessment of Learning Outcomes*", Assessment Tools for Mapping Learning Outcomes with Learning Objectives, A volume in the Advances in Educational Technologies and Instructional Design (AETID) Book Series, IGI Global Information Science Reference, Ch.13, pp. 211-254, 25 Sept. 2020. ISSN: 2326-8905, DOI: 10.4018/978-1-7998-4784-7.ch013
4. Bhagwati Charan Patel, Naveen Goel and **Kusumanjali Deshmukh** (2020), "*Traditional Teaching Pedagogy: Student vs Teacher Centric*" Assessment Tools for Mapping Learning Outcomes with Learning Objectives, A volume in the Advances in Educational Technologies and Instructional Design (AETID) Book Series, IGI Global Information Science Reference, Ch.4, pp. 42-57, 25 Sept. 2020. ISSN: 2326-8905, DOI: 10.4018/978-1-7998-4784-7.ch004

Journals Publications: **International & National**

1. Divya, **Kusumanjali Deshmukh**, Analysis Of Structural And Optical Properties Of Ni-Co Co-Doped CdSe Thin Film Prepared By CBD, IRJET, e-ISSN: 2395-0056 Volume: 12 Issue: 01 | Jan 2025 www.irjet.net p-ISSN: 2395-0072
2. Divya, **Kusumanjali Deshmukh**, Jagjeet Kaur Saluja, Mohan L. Verma, "Comparative Computational Study of CdSe Cubic And Hexagonal Structures", IJSAT Volume 16, Issue 1, January-March 2025. DOI 10.71097/IJSAT.v16.i1.1345
3. Divya, **Kusumanjali Deshmukh**, M.L.Verma, Mimi Akash Pateria, K.K.Pathak, First principles study on structural and electronic properties of hexagonal CdSe for improved efficiency of solar panel, ISSN: 2455-2631 December 2024 IJSDR Volume 9 Issue 12
4. Divya, **Kusumanjali Deshmukh**, Jagjeet Kaur Saluja, DFT study on structural and electronic properties of Zinc-Blend CdSe, International Research Journal of Management Science & Technology, Vol 15 Issue 6 [Year 2024] ISSN 2250 – 1959 (Online) 2348 – 9367 (Print)
5. K. K. Pathak, **Kusumanjali Deshmukh**, "On Some Properties of Nd Doped CdSe Thin Film through UV-Vis Spectroscopy Experiment" International research journal of commerce and science.2021 , 12(4), pp-131-138
6. G Yadu, MA Pateria, **K Deshmukh**, "Study of Ho doped AgS thin films prepared by CBD method", Materials Science-Poland, 2020, 38 (1), pp. 206-213
7. K. K. Pathak, Mimi Akash Pateria, **Kusumanjali Deshmukh** , "UV, PL Properties of Nd Doped CdSe Thin Film" , International research journal of commerce and science.2021 11(12) , 102-108
8. "K. K. Pathak, Mimi Akash Pateria, **Kusumanjali Deshmukh** , ""Analysis of Neodymium Doped CdSe Thin Film through Structural, Fourier Transform Infrared Spectroscopy (FTIR) and EDS Approach"" International Research Journal of Management Science & Technology, 11(8), pp-115-120"
9. KK Pathak, MA Pateria, **K Deshmukh**, P Jha, "Effect of Sm concentration on optical and electrical properties of CdSe nanocrystalline thin film", Mater Sci-Poland, 2019, 37 (1), 33-38
10. "Sumita Sengupta*, Mimi Akash Pateria, **Kusumanjali**, Pr doped copper indium sulphide thin films synthesized by chemical bath deposition method, International Journal of Luminescence and applications, Vol9 (1) February, 2019, pg.-575-578"

11. S . Sengupta, M. A Pateria, **K. Deshmukh**, "Holmium doped copper indium sulphide thin films with polytypism structure synthesized by chemical bath deposition method", *International Journal of Material Science*, 2019, 7 (1), pg.21-27
12. Sengupta, S., Pateria, M.A., **Deshmukh, K.**, "Structural and morphological studies of Sm doped and un-doped CuInS₂ nanocrystalline films with chalcopyrite-wurtzite polytypism structure", *OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS*, 2018, 12 (7-8), pg. 475-479
13. Pathak. K. K., Pateria. Mimi Akash, and **Deshmukh Kusumanjali**, "Comparative Study of optical and electrical properties of CdSe:Sm and CdSe:Nd nanocrystalline thin film", *Research Journal of Engineering and Technology*, 2018, 9 (1), pp. 67-69
14. G. YADU, M. A. PATERIA, **K. DESHMUKH**, "Structural and Optical Properties of Ho, Pr Doped Rare Earth Element in Ag₂S Thin Film Obtains by Chemical Bath Deposition Technique", *Chalcogenide Letters*, 2018, 15(2), pp. 63 – 73
15. GOVERDHAN YADU, M. A. PATERIA, **K. DESHMUKH**, "Studies on semiconducting properties of chemically deposited doped and undoped silver sulphide film", *Research Journal of Physical Sciences*, 2018, 6 (2), pp. 1-8
16. K. K. Pathak, Mimi Akash Pateria, and **Kusumanjali Deshmukh**, Comparative Study of Optical and Electrical Properties of CdSe:Sm and CdSe:Nd Nanocrystalline Thin Film', *Research Journal of Engineering and Technology*, 2018, 9 (1), pp. 67-69
17. "Sumita Sen Gupta*", Mimi Akash Pateria, **Kusumanjali Deshmukh**, Optical Properties of CuInS₂ Thin Film by Chemical Bath Deposition Method, *International Journal of Engineering Technology, Management and Applied Sciences* www.ijetmas.com July 2017, Volume 5, Issue 7 pg-"
18. Goverdhan Yadu , K. K. Pathak, Mimi Akash Pateria, **Kusumanjali Deshmukh**, "PHOTOCONDUCTIVITY STUDIES OF Ag₂S SEMICONDUCTING THIN FILM, , Volume- 2 Special Issue-1 (2015) NATIONAL CONFERENCE ON RECENT ADVANCES IN PHYSICS (NCRAP-2015), OCTOBER 28-29, 201514
19. **Kusumanjali Deshmukh**, Mimi Mukherjee, Shashi Bhushan and R C Agrawal, "Effect of thioglycerol capping on morphology and structure of chemically deposited CdS:NaF,La films", *Recent Research in Science and Technology*, 2012, 4 (8), pp. 55-57, (2012)
20. **K Deshmukh**, M Mukherjee, S Bhushan, "Structural and optical studies on La doped CdS nanocrystalline films", *Turkish Journal of Physics*, 2012, 36 (1), pp. 9-21
21. "**K Deshmukh**, S Bhushan, M Mukherjee, ""STUDIES ON NANO-CRYSTALLINE PROPERTIES OF CHEMICALLY DEPOSITED Pr DOPED CdS FILMS""", *Chalcogenide letters*, 2010, Vol. 7, No. 1, p. 11 - 19, "
22. S. Bhushan, S. Agrawal, and **K. Deshmukh**, "Photoconductivity and Photoluminescence Studies of some chemically deposited Cd(S-Se):CdCl₂, Gd films", *Recent Research in Science and Technology*, 2010, 2(4), pp. 17-23.
23. K. K. Pathak, Mimi Akash Pateria, **Kusumanjali Deshmukh** and Piyush Jha, Optical and Electrical Properties of Neodymium doped Cadmium Selenide Nanocrystalline Thin Film, published in 'International Journal for Research in Applied Science & Engineering Technology', Vol. 5, No. XI, pp. 795-798, Nov. 2017, UGC listed No. 45842 (ISSN 23219653).
24. S . Sengupta, M. A Pateria, **K. Deshmukh**, " Chemical bath deposited CuInS₂ thin films and their characterization" , *IJSRET*, 4,2018, ISSN: 2395 -1990

Conferences/ Seminars:

International & National:

1. S. SENGUPTA, M. A PATERIA, **K. DESHMUKH**, "Pr Doped Copper Indium Sulphide thin films Synthesized by chemical bath deposition method", International Conference on Luminescence , on 7 -10th Jan 2019 at SoS in Physics, Pt RSSU, Raipur
2. Goverdhan Yadu, M. A. Pateria, **K. Deshmukh**, "Structural and Optical Properties of Pr doped rare earth element in (Cd-Ag)S thin Films obtain by chemical bath deposition method", National Conference on Advancements & Globalization in (Cd-Ag)S thin films obtain by chemical bath deposition meth Chemical Sciences for Man, Material & Environment (AGCSMME - 2018) March 9-10, 2018 , Dr. C. V. Raman University Bilaspur Chhattisgarh, India.
3. K. K. Pathak,, Mimi Akash Pateria, **Kusumanjali Deshmukh** and Piyush Jha, Photoluminescence Study of Nd doped CdSe Nanocrystalline Thin Film Prepared by Chemical Bath Deposition Method, 'National conference BITCON-2017 on Research Challenges in Nano Science & Technology', held at Bhilai Institute of Technology, Durg on March 28, 2017.
4. K. K. Pathak, Mimi Akash Pateria, **Kusumanjali Deshmukh** and Piyush Jha, Photoluminescence Study of Sm doped CdSe Nanocrystalline Thin Film Prepared by Chemical Bath Deposition Method, 'National Conference on Signal Processing, Sustainable Energy Materials and Astronomy and Astrophysics (NSSEMA -2017)', held at SOS in Electronics & Photonics and SOS in Physics & Astrophysics Pt. Ravishankar Shukla University, Raipur on March 28-30, 2017.
5. K. K. Pathak, Goverdhan Yadu, Mimi Akash Pateria, **Kusumanjali Deshmukh**, and Piyush Jha, Comparative studies on optical properties of CdSe, CdSe:Ag and CdSe:Mn nanocrystalline thin film, 'National Seminar on Value and Importance of Mathematical Physics', held at Govt. Rajeev Lochan College, Rajim on Dec 5, 2015.
6. K. K. Pathak, Goverdhan Yadu, Mimi Akash Pateria, **Kusumanjali Deshmukh**, and Piyush Jha, Optical properties of CdSe nanocrystalline thin film, 'National Conference on Recent Advances in Physics (NCRAP-2015)', held at Sant Guru Ghasidas Government Post Graduate College Kurud Dist-Dhamtari (C.G.) October 28-29, 2015.
7. K. K. Pathak, Goverdhan Yadu , Mimi Akash Pateria, **Kusumanjali Deshmukh**, and Piyush Jha, Optical properties of CdSe nanocrystalline thin film by chemical deposition method, 'National Seminar on emerging Trends in Physics (ETP-2015)', held at Sant Guru Ghasidas Government Post Graduate College Kurud Dist-Dhamtari (C.G.) 07 Sep 2015.
8. **K. Deshmukh***, M.Mukherjee, S. Bhushan and R. C. Agrawal: Optical and characterization studies of nanocrystalline (Cd-Pb)S films prepared by chemical bath deposition method. NCLA 2011, RSU, Raipur,(C.G.),India
9. **Kusumanjali Deshmukh***, M. Mukherjee and S.Bhushan: Synthesis and Optical Property Characterization of Nanocrystalline CdS Films Prepared By Chemical Bath Deposition Method. Recent Advances in Nanoscience and Nanotechnology, 2009, SSCET, Bhilai,(C.G.),India
10. **Kusumanjali Deshmukh***, M. Mukherjee and S.Bhushan: Characterization of Chemically Synthesised Nanocrystalline Cadmium Sulphide films. ISRS 08, IIT Madras, (T.N.), India.
11. **Kusumanjali Deshmukh**; "Modeling of [0.75AgI:0.25AgCl] by Space Charge Depolarisation Technique"; 5th Chhatisgarh Young Scientist Congress; Chhatisgarh

Swami Vivekanand Technical University, Bhilai; 28Feb-01March' 07); received young scientist award.

12. Mohan L. Verma, **Kusumanjali Deshmukh**, Anil Choubey; "Modeling and Determination of Drift Mobility in Quenched [0.75AgI:0.25AgCl] at room temperature"; National Conference BITCON-2007 B.I.T,Durg (16-17 March 2007)
13. Mohan L. Verma, **Kusumanjali Deshmukh**, M.Mukherjee; A review article:Recent Trends in composite Materials; Recent Trends in Electronic Materials & Physical Sciences"; ST. Thomas College, Bhilai(16-17 Sep. 2007).
14. Mohan L. Verma, **Kusumanjali Deshmukh**, Anil Choubey; "Evaluation of TMM in [0.75AgI:0.25AgCl]: A mathematical modeling"; Recent Trends in Physics; Deptt. of Physics, Bhilai Mahila Mahavidyalaya, Bhilai;(25-27 Feb. 2007)

Training Programmes/Workshops Attended:

1. **Two-week Online Faculty Development Programme** on "Managing Online Classes & Co-creating MOOCS 6.0" organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, 5th – 19th July 2021.
2. **Two-week Online Faculty Development Programme** on "ICT Tools for Teaching, Learning Process and Institute" jointly organized by Electronics and ICT Academies under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" of the Ministry of Electronics and Information Technology (MeitY), Government of India, 10th - 21st August, 2020
3. **Two days Workshop** on "Computer Interfaced science Experiments using ExpEYES jointly" organized by SoS in Electronics & Photonics, Institute of Renewable Energy Technology & Management at Pt. RSU, Raipur, CG and Inter University Accelerator Center, New Delhi, 30th to 31st March 2019.
4. **One week workshop** on "*Materials Modeling for Device Applications*" sponsored by CSVTU, Bhilai under TEQIP-III at Shri Shankaracharya Technical Campus, Bhilai, 18th-23rd Feb., 2019.
5. **Two week workshop** on "Engineering Physics" organized by NME through ICT at the Remote Center, BIT, Durg, 8-18 December, 2015
6. **4 days** International workshop "IWMMS-2013" at Shri Shankaracharya Technical Campus-Shri Shankaracharya Group of Institutions, Bhilai, 24-27 Feb, 2013
7. **One week workshop** on "Laboratory workshop for PG teachers" at ISLE, IPS academy Indore, 4 - 8 Feb, 2013.
8. **Two days' National workshop** "NWPAL-09" at Shri Shankaracharya College of Engineering & Technology, Bhilai, in association with LSI, India, 3-4 Dec, 2009
9. **One week short term course** on "Recent Trends in Material Science" at NIT , Raipur (C.G.), during 27- 31, 2008
10. **Two days' workshop** on "Teacher training program WIPT-08" at Shri Shankaracharya College of Engineering & Technology, Bhilai, 30-31st Dec 2008
11. **Richard Feynman Lecture Series** organized by CSVTU, Bhilai, 1,6,11,22,23 Dec 2006

Personal Details:

Husband's Name : Shri S.N. Deshmukh
Date of Birth : 25th Jan. 1975
Nationality : Indian
Address for correspondence : Flat No. 145, CHPL Shikhar Apartments
Junwani Main Road , Smriti Nagar,
BHILAI, Chhattisgarh-490020

Declaration:

I hereby declare that all the aforesaid information is true and correct to the best of my knowledge and belief.

(Dr. Kusumanjali Deshmukh, Ph.D.)