RESUME

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Delhi-110075.



WORKE EXPERIENCE:

Presently working as Assistant Professor, Department of Physics, Maitreyi College, South Campus, Delhi University **since January 02, 2012.**

EDUCATIONAL QUALIFICATIONS

Ph.D: Date of Registration: **28-03-2006**; Date of Award: **10-11-2009**;

Thesis Title: A Theoretical Study of the Electromagnetic Response of Heavy Electron Compounds; Degree Awarding University: Vinoba Bhave University,

Hazaribag (Jharkhand).

M.Sc. (Spl: Electronics): Year 2003, Vinoba Bhave University, Hazaribagh, with a First Class.

B.Sc. (Physics Hons): Year 2001, St. Columba's College, Vinoba Bhave University, Hazaribagh with

Distinction in honours.

PROFESSIONAL DEGREES

1. M.C.A. - Year 2009, from IGNOU with a First Class.

2. B.Ed. - Year 2006, from Ranchi University, Ranchi, with a First Class,

PHYSICS BOOKS PUBLISHED

Title of Book	Year of Publication	Publication Type	Author/Co- Author	Publisher/ISSN/ISBN
Nuclear Physics	2017	Authored	Pricipal Author	Ayushman Publication House, New Delhi, ISBN-978-93-81842- 64-5
Study of the Electromagnetic Properties of Heavy Electron Compounds: UPt ₃ & CeAl ₃	2015	Authored	Author	Ayushman Publication House, New Delhi, ISBN-978-93-81842- 70-6
Computational Physics	2010	Edited	Co-Author	Knowledge Book Distributors, New Delhi, ISBN-978-93-80350- 18-9

CHAPTERS IN EDITED BOOKS

Title of the Edited Book	Year of Publication	Publication Type	Author/Co- Author	Publisher/ISSN/ISBN
Contribution Of Subjects In Eradication Of Unemployment	2022	Authored	Co-Author	Neel Kamal Prakashan Shahdara, Delhi ISBN: 978-93-93248-03-9
Environmental Concerns Of 21st Century: India And Global Context With Chapter-Title - "E-Waste: Modern Day Curse Of Society To Environment"	2016	Authored	Co-Author	Book Age Publications, Laxmi Nagar, Delhi, ISBN:977-81-933172-6-6

PAPER PUBLICATIONS IN NATIONAL-INTERNATIONAL JOURNALS / CONF. PROCEEDINGS

- Research paper on SOIL RESISTIVITY TEST FOR GREEN FIELD APPLICATIONS is published in © 2023 IJNRD | Volume 8, Issue 9 September 2023 | ISSN: 2456-4184 | IJNRD.ORGP
- 2. Research paper entitled Extraction of Fuel from Plastic Waste published in © 2023 IJNRD | Volume 8, Issue 8 August 2023 | ISSN: 2456-4184 | IJNRD.OR
- Research paper entitled A STUDY OF EARTHING SYSTEM FOR 132/33KV SUBSTATION OF GEVRA MEGA OPEN CAST COAL MINE OF KORBA COALFIELDS IN CHHATTISGARH published in Education and Society ISSN: 2278-6864,UGC Care Group 1 Journal, Vol. 46, No.3 January-March 2023
- Research Paper entitled 'A Comparative Study of Electrical System of 132/33kV Substations in India'. Published in IOSR Journal of Electrical and Electronics Engineering (IOSR-JEEE), e-ISSN: 2278-1676, p-ISSN: 2320-3331, Vol. 17, Issue 2, Ser. II, pp 06-12 (2022).
- 5. Research paper entitled "Role of Infrastructure in Improving Students Outcomes' published in Research Journal of Humanities and Social Sciences", Print ISSN: 0975-6795. Online ISSN: 2321-5828, Vol. 10, Issue 3, pp 918-924 (2019).
- 6. Research paper entitled "A Quantitative study of the dynamical conductivity of the heavy electron compounds CeAl3 and UPt3" published in Pelagia Research Library, Advances in Applied Science Research, Impact Factor 0.533, ISSN: 0976-8610, 7(4), pp 97-99 (2016).
- 7. Research paper entitled "Evaluation of effective mass and scattering rate for the heavy electron system UPt3" published in IOSR Journal of Applied Physics (IOSR-JAP); e-ISSN: 2278-4861.Volume 7, Issue 2 Ver. III, pp 27-28 (2015).
- Research Paper entitled "Temperature Dependent Effective Mass and Scattering Rate for the Heavy Electron System CeAl3", published in the conference proceeding (ISBN:978-93-83083-98-5) of the 3rd International Conference on "Innovative Approach in Applied Physical, Mathematical/Statistical, Chemical Sciences and Emerging Energy Technology for Sustained Development" held at Jawaharlal Nehru University, New Delhi (2014).
- 9. Research paper entitled "An Evaluation of Plasmon Frequency Associated with Charge Careers for Heavy Electron Systems" published in Indian Journal of Physics, ISSN-0973-1458/82, Impact Factor-1.785; Vol. 82, No. 12, pp1665-1669 (2008).

10. Research paper entitled "Pressure Dependent Energy Band Studies on BP", published in the abstract book of international seminar Advances in Material Sciences (DDUG Univ., Gorakhpur), P-8 (2005).

PAPERS/POSTERS IN SEMINARS/CONFERENCES /SYMPOSIA ETC.

- 1. **Presented** a paper on Soil Resistivity test for Green field applications in the International Conference on Research, Development and Social Transformation organized by the Centre for Research, Maitreyi College from August 23 -25, 2023
- 2. Participated in National Seminar on Innovation in Higher Education through Public Private Model organised by **Cluster Innovations Centre**, University of Delhi during 13-15 March, 2023.
- 3. Participated in National Seminar on Bamboo Sector Development and Bamboo Exhibition, organised by National Bamboo Mission, ministry of agriculture and farmer welfare on 9-10 March, 2023 at PHD house, New Delhi.
- 4. **Presented** a paper on theme "*Modulating the environment with microbes*" during **7**th **Annual International conference** of INSCR (Indian Contribution for Soil Contamination Research, November 8-11 (**2022**).
- 5. **Presented** a paper entitled "Online Education: Redefining Teaching during Pandemic" in the **International e-Conference** on the theme "Surviving in Tough Times: Strategies for Success & Sustainability", June 06 (2020).
- 6. **Presented** a paper in **International Conference** on People Analytics and Future of Work on "Enhancing Productivity in Higher Education" organized by New Delhi Institute of Management, Okhla Industrial Estate, New Delhi, January 23 (2018).
- 7. **Presented** 4 papers and 3 posters in the **National conference** on "*Interdisciplinarity: Prospects and challenges*" Organized by Maitreyi College under star college scheme, April 5-7(2017).
- 8. **Presented** a Paper in the **National Conference** on "Environmental Concerns of 21st Century: Indian and Global Context" on E- waste: Modern Day Curse of Society to Environment, Organized by Zakir Husain Delhi College (Evening), DU, March 21-22 (2016).
- 9. **Presented** a Paper in **National Symposium** on "Man-made Diseases: An Urban Menace" on E waste Hazard: An Impending Challenge to Human Health and Environment, Organized by Maitreyi College, DU, February 11-12 (2016).
- 10. **Presented** a Poster on "Nanoscience-A Futuristic Solution to Heal Air Pollution" in **the National Conference** on 'Nanoscience-Opportunities and Challenges' organized by the Department of Chemistry, Maitreyi College, DU, February 19-20 **(2016)**.
- 11. **Presented** a Paper in the **3rd International Conference** on 'Innovative Approach in Applied Physical, Mathematical/Statistical, Chemical Sciences and Emerging Energy Technology for Sustained Development" (APMSCSET-2014), Organized by 'Social Welfare Foundation' In association with "Krishi Sanskriti", at JNU, New Delhi. September 28 **(2014)**.
- 12. Research paper entitled "An Evaluation of Plasmon Frequency Associated with Charge Careers for Heavy Electron Systems", Accepted for presentation in International Conference, GG University, Bilaspur(2008).

PROJECTS MENTORED

1. Four students successfully completed Summer Internship project on "DESIGNING OF SOIL RESISTIVITY MEASUREMENT KIT FOR GREEN FIELD

- **APPLICATIONS** under Summer Internship Programme 2022-23 at Centre for Research, Maitreyi College.
- 2. Five students successfully completed Summer Internship project entitled "Investigation of Structural and Optical Properties of Solution Grown Glycine Glutaric Acid Single Crystal" under Summer Internship Programme 2021-22 at Centre for Research, Maitreyi College.
- 3. Four students successfully completed Summer Internship project entitled "Battery Capacity: Measurement and Analysis" under Summer Internship Programme 2021-22 at Centre for Research, Maitreyi College.
- 4. Three students in two months project titled "Aquaponics- A Method Towards Sustainable Agriculture" from 25th April, 2021 to 24th June, 2021 under the Summer Internship Programme (2020-2021) at Centre for Research, Maitreyi College.
- Two students in two months project titled "A detailed study of COVID-19 scanning and tracking device" from 25th May, 2020 to 25 July, 2020 under the Summer Internship Programme (2019-2020) at Centre for Research, Maitreyi College.
- 6. Four students in two months project titled "Extraction of Oil from Waste Plastic" from 25th May, 2019 to 25 July, 2019 under the Summer Internship Programme (2018-2019) at Centre for Research, Maitreyi College.
- Nine students in one month project titled "Waste LDPE Plastic to Floor Tiles- An Alternative to Plastic
 Waste Management' and "Extraction of Oil from Waste Plastic" done under the supervision of Dr. S.K.
 Dhawan, Sr. Scientist at National Physical Laboratory from 12 June, 2019 to 11th July, 2019.
- 8. Six students in project entitled "Fabrication of Silver Nanoparticles Impregnated Activated Carbon Membrane" and "Conversion of Plastic Waste into Oil and Tiles" at National Physical Laboratory in association with Maitreyi College under Star College Scheme from 19-23 Dec, 2016.

TRAINING/WORKSHOPS

- 1. Training programme on Solar Energy for Sustainable Development organised by Mahatma Gandhi Institute for Combating Climate Change. Govt NCT of Delhi.
- 2. Training workshop for Summer Internship Programme-2021 organised by Centre for Research, Maitreyi College on May 20, **2021**
- 3. Workshop on Data Analysis using Python organized by department of Computer Science, Maitreyi College during June 24-28, **2021**
- 4. Full-time participant in a training programme in Astrophysics & Astronomy conducted by and at the Inter University Centre for Astronomy and Astrophysics in association of National Centre fo Radio Astrophysics, Pune (2000).

FACULTY DEVELOPMENT PROGRAMMES

- One-Week National Faculty Development Program organized by University of Delhi (Skill Enhancement Course Committee) in collaboration with Daulat Ram College, DU (Department of Physics) and Guru Angad Dev Teaching Learning Centre, a Centre under PMMMNMTT, Ministry of Education, Government of India. The participant has obtained Grade "A" as required for promotion under CAS of UGC and AICTE..This FDP covered the following Skill Enhancement Courses (SECs) of DU as introduced in Academic Session 2022-23 under NEP-2020.
 SEC: Radiation Safety 2. SEC: PCB Designing and Fabrication 3. SEC: Electronics Product Testing 4. SEC: Electronics and hands on training.
- 2. National Level Online Faculty Development Programme in Science Pedagogy, organised by the Department of Physics & IQAC, Dwaraka Doss Goverdhan Doss Vaishnav College (Autonomous) in association with Indian Association of Physics Teachers (RC-13), August 9 to16, 2021.
- 3. National Level FDP, conducted by Maitreyi College in collaboration with GAD-TLC on Digital Pedagogy to Enhance Teaching and Learning, **December 15 to 21, 2020.**

- 4. Faculty Training Programme organised by Department of Computer Science, Maitreyi College, Delhi University, July 16 to August 14, 2020.
- **5.** National Level FDP on Applications of Nanotechnology in Agriculture and Food Industry by AMITY UNIVERSITY, NOIDA from **April 8 to10, 2019.**
- 6. National Level Faculty Development Program on "Personality Development" held in Maitreyi College, **July** 23 to 25, 2019.
- 7. National Level Faculty Development Programme on Higher Education Faculty Career Orientation and Advancement (CEGR Certified Faculty) by CEGR in New Delhi Institute of Management, Tughlakabad, New Delhi, **December 26 to 30, 2017.**

AWARDS AND RECOGNITIONS

- 1. Best Mentor Award by UP Chairperson for training and development, Women Ladies League, Women Economic Forum, Hand in Hand Workshops, on occasion of teacher's day on 3rd September at Radisson Blue Kaushambi.
- 2. Best Teacher Award by Institute of Scholars in 2020.
- 3. Award for Contribution to Education Community by Asian Educational Awards in 2020.
- 4. Profile has been published in "Asia Pacific Who's who" in volume 16 by Rifacimento International.
- 5. Nominated for "Personality of the year-2019" by Reguerdon Inc., New Delhi.

LIFE MEMBERSHIP OF LEARNED BODIES

- 1. Indian Association of Physics Teachers
- 2. Indian Science Congress
- 3. Materials Research Society of India
- 4. Centre for Education Growth and Research
- 5. Institute of Scholars

AWARDS WON

- 1. Best Case Study Award in the First PIMR Case Study Contest on "e-waste awareness in India and Abroad: A step towards greener environment" at Prestige Institute of Management and Research, Indore.
- 2. Best posters' award in the 5th IAPT National Student Symposium on Physics held at Department of Physics, Punjab University, Chandigarh.

OTHER ACHIEVEMENTS

- 1. Qualified **Central Teacher's Eligibility Test** (CTET)-2012 conducted by CBSE.
- 2. Obtained Diploma in Software Management from APTECH.
- 3. Completed **Certificate in Computing** (CIC) from IGNOU with 77% marks.
- 4. Co Convenor of Departmental Magazine
- 5. Core committee member of Astronomy Club

RESOURCE PERSON/ MEMBER OF ORGANIZING COMMITTEES

 Member, Organizing Committee of the National workshop on Spreading Awareness on Emerging Challenges of Air Pollution and Climate Change on Human Health in Urban Ecosystem organized by Environmental Pollution Laboratory, Department of Environmental Studies, University of Delhi in collaboration with Eco-Club 'Prakriti', Maitreyi College, University of Delhi, sponsored by DST, Govt of India on November 9, 2023.

- 2. Resource Person in Virtual lab experiments online lecture cum hands on training series organized by Department of Physics under the aegis of DBT Star College Scheme, K. N. Govt. PG College, Gyanpur, Bhadohi (U.P.) for B.Sc. II semester on 5th October, 2023.
- 3. Local coordinator of Preliminary round of NAEST23 organised by NANI a unit of IAPT in collaboration with Shiksha Sopan.
- 4. Resource person in **National lecture series** in Physics on topic "Electronic Instrumentation" during June 21-30, 2022 organised by IAPT RC-4 UP in association with IEEE Photonics society UP.
- 5. Resource person in NAEST-2021 Organised in association with IAPT, NANI and Vigyan Prasar.
- 6. Organizing Committee Member of the **7**th **Annual International conference** of INSCR (Indian Contribution for Soil Contamination Research. During 8-11, November 2022
- 7. Organizing Committee Member of the **International Conference** on 'Recent Trends in Drug Discovery and Development' organized by the Department of Chemistry under the aegis of IQAC, Maitreyi College, University of Delhi held during October 08-09, 2021 on virtual platform.
- 8. Resource person in the National Workshop on **Challenges of Teaching Physics Laboratory Courses** in online mode on January 24, 2021 which held between January 23-24, 2021 organized by Kalindi College in association with Department of Physics and Astrophysics, University of Delhi and The National Academy of Sciences, Delhi Chapter.
- Resource person in the National Workshop on 'Advanced Biological Techniques', held from 2-9 December, 2015 at Maitreyi College under SCS (DBT) for PG teachers organized by the Department of Zoology, Maitreyi College, University of Delhi.
- 10. Resource person in the Extension Workshop-cum-camp on Foldscope from 23-24th February 2016 under DBT, organized by all the departments of science, Maitreyi College, University of Delhi.
- 11. Resource person in the Interdisciplinary Workshop 'In Vitro: Techniques to Technologies' for science students of different colleges of Delhi University at Maitreyi College under SCS (DBT) organized by the Department of Botany, Maitreyi College, University of Delhi held from 14-19 December 2015.
- 12. Resource person in the workshopon "Understanding Dynamics of Life Sciences- Concepts to Techniques", July 6-10, 2015 organized by department of Zoology, Maitreyi College.
- 13. Resource person in the academic and cultural exchange workshops held at Maitreyi College for three consecutive years i.e 2013,2014 and 2016 as a part of Study India Programme organized under the UK-India Education and Research Initiative (UKIERI)

MEMBER OF COLLEGE COMMITTEES

- 1. Criteria 2- Teaching Learning and Evaluation of NAAC
- 2. Admission Committee
- 3. AQAR
- 4. IQAC
- 5. E-Cell: MERAKI
- 6. Centre for Research
- 7. Eco Club- Prakriti
- 8. Free ship Committee
- 9. Short of attendance Committee
- 10. Grievance Committee
- 11. Website Committee
- 12. Staff association secretary
- 13. Placement Cell

EXTRA-CURRICULAR

In spare time I engage myself in the following:

1. Making **motivational** videos on the ways of developing The Power of Positivity:

Instagramhttps://www.instagram.com/drprajwalit/?hl=en

2. Making tutorial videos on Physics Concepts:

YouTube- https://www.youtube.com/channel/UCvpZDQLjMVEdro9RBbll6YA

DECLARATION

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

P.Shikha Prajwalit Shikha