CURRICULAM VITE

Dr. DHEERAJ KUMAR PANDEY
Head & Assistant Professor
Department of Physics,
R. B. College, Dalsingsarai,
Samastipur (Bihar) - 848114
EmailId: pdhiraj2000@gmail.com,
pdhiraj2000@rediffmail.com

Research Specialization:

Condensed Matter Physics, Computational Nanoscience & Nanotechnology, Spectroscopy and Lasers**.**

Teaching Experience:

1) Presently working as **Assistant Professor** of Physics, R. B. College, Dalsingsarai, Samastipur (A Constituent Unit of Lalit Narayan Mithila University, Darbhanga) since 01st September, 2017.
2) Worked as Assistant Professor of Physics, S. S. Mahavidyalya, Allahabad (Affiliated to C. S. J. M. Kanpur University) since 10th September, 2014 to 09th August, 2017.
3) Worked as Assistant Professor in Department of Applied Sciences (Physics) at United Institute of Technology, Allahabad (Affiliated to AKTU, Lucknow) since 01st August 2013 to 9th September 2014.

Education:

1) **D. Phil.** (**Physics)** from **University of Allahabad** in the year **2013**.
2) **M. Sc. (Physics)** from D. D. U. Gorakhpur University, Gorakhpur in the year 2007.
3) **B. Sc. (Physics & Mathematics)** from D. D. U. Gorakhpur University, Gorakhpur in the year 2005.

Title of Thesis:

Theoretical Study of Physical Properties of Nanomaterials.

Supervisor: Prof. P. S. Yadav
Department of Physics,
University of Allahabad, Allahabad – 211002
Email: phsyadav@rediffmail.com

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Research Publications:

1. **Ab initio study of structural, electronic, optical and vibrational properties of Zn_xS_y (x + y = 2 to 5) nanoclusters.**
   P S Yadav, **D K Pandey,** S Agrawal and B K Agrawal**;** Journal of Nanoparticle Research [Springer],Vol. -12, (2010) 737-757.

2. **Structural, electronic and optical properties of Zn_xS_y (x + y = 2 to 4) nanoclusters: a B3LYP-DFT study.**
   P S Yadav, **D K Pandey,** S Agrawal and B K Agrawal; International Journal of Nanoscience [WSPC],Vol.-10, (2011) 341-344.

3. **Theoretical study of structural, electronic and optical properties of Zn_mSe_n small nanoclusters.**
   P S Yadav and **D K Pandey;** Advanced Science, Engineering and Medicine [ASP]**,** Vol.-3, (2011) 230-240.

4. **A DFT study for the structural and electronic properties of Zn_mSe_n nanoclusters.**
   P S Yadav and **D K Pandey;** Applied Nanoscience, [Springer]; Vol.–2, (2012) 351-357.

5. **Ab initio study for the optical properties of the most stable Zn_mSe_n (m + n = 2 to 5) nanoclusters.**
   D K Pandey and P S Yadav, Advanced Science, Engineering and Medicine **[ASP];** Vol. – 5, (2013) 479-484.

6. **Structural and electronic properties of ZnO nanoclusters: A B3LYP DFT study.**
   D K Pandey, P S Yadav, S Agrawal and B K Agrawal, Advanced Materials Research **[TTP];** Vol. – 650, (2013) 29-33.

7. **Ab initio study of structural, and electronic properties of Zn_mO_n (m + n = 2 to 5) nanoclusters**.
   P S Yadav, **D K Pandey,** S Agrawal and B K Agrawal; Quantum Matter **[ASP];** Vol. – 3, (2014) 39 –46.

8. **Ab initio study of vibrational and optical properties of Zn_mO_n (m + n = 2 to 5) nanoclusters**.
   P S Yadav, **D K Pandey,** S Agrawal and B K Agrawal; E P J Plus [Springer]; Vol – 130 (2015) 60.

9. ***Ab initio study of Structural, Electronic and Properties of ZnxTey (x + y = 2 to5) Nanoclusters.***
   D K Pandey, P S Yadav (2018) - Submitted

Paper Presented in International / National Conferences:

1) International conference on Advanced Nanomaterial and Nanotechnology.
Duration : December 9-11, 2009
Place: Indian Institute of Technology, Guwahati, Assam, India.
Title: *Structural, electronic and optical properties of Zn_xS_y (x + y = 2 to4) nanoclusters: a B3LYP-DFT study*.

2) National conference on Simulation and Characterization of Advanced Materials.
Duration: April 17– 18, 2010
Place: M. J. P. Rohilkhand University, Bareilly, **U P**, **India.**

Title: *Structural, electronic, optical and vibrational properties of Zn_xSe_y nanoclusters.*

3) Light Weight Materials – Monolithic To Composites
Duration: February 14– 16, 2011
Place: Advanced Materials and Processes Research Institute, Bhopal, MP, India.
Title: *Ab initio study of Structural and Electronic Properties of Zn_mO_n (m + n = 2 to5) Nanoclusters.*

4) 2nd International conference on Advanced Nanomaterial and Nanotechnology.
Duration: December 8-10, 2011
Place: Indian Institute of Technology, Guwahati, Assam.
Title: *A DFT study for the structural and electronic properties of Zn_mSe_n nanoclusters.*

5) 2012 International Conference on Advances Material Sciences and Engineering.
Duration: December 09 -10, 2012
Place: Fraser Place Central Seoul, Seoul, South Korea.
Title: *Structural and electronic properties of ZnO nanoclusters: a B3LYP-DFT study.*

6) 2nd Meghnad Saha Memorial International Symposium-cum-Workshop on Laser Induced Breakdown Spectroscopy.
Duration: February 19-21, 2018
Place: University of Allahabad, Allahabad.
Title: *Ab initio study of Structural and Electronic Properties of Zn_xTe_y (x + y = 2 to5) Nanoclusters.*

Attended International / National Conferences / Workshop:

1) International Conference on Transport and Optical Properties of Nanomaterials.
Duration & Place: *January 5-8, 2009*; University of Allahabad, Allahabad.

2) Meghnad Saha Memorial Symposiumon Emerging Trends in Laser & Spectroscopy and Applications.
Duration & Place: *March 23–25, 2009*; University of Allahabad, Allahabad.

3) Meghnad Saha Memorial International Symposium-cum-Workshop on Laser Induced Breakdown Spectroscopy.
Duration & Place: *December 21 – 23, 2010*; University of Allahabad, Allahabad.

4) National Workshop on Characterization and Properties of Exotic Materials.
Duration &Place: *January 10– 12, 2011*; University of Allahabad, Allahabad.

5) International Conference on Light Quanta: Modern Perspectives & Applications.
Duration & Place : *December 14 – 16, 2015*; University of Allahabad, Allahabad.

6) International Conference on Emerging Materials and Applications.
Duration &Place: *February 20– 22, 2017*; University of Allahabad, Allahabad.

Attended Academic Courses:

1) Attended "TEQIP – II Sponsered Short Term Course on Application Of Physical Sciences In Engineering & Technology" organized by Department of Applied Sciences, Madan Mohan Malviya University of Technology, Gorakhpur (UP) during July 02 – 08, 2016.

2) Attended "Science Academies 93rd Refresher Course on Experimental Physics" organized by Department of Physics, IIT Patna during November 07th – 22nd 2017.

Expertise (Hardware and Application Software)

1) Work experience on SUN Fire V880, HP Workstation J6700 and HP Workstation K360 server systems using UNIX & LINUX operating system.
2) Work experience of Personal Computers (All Windows OS), Scanners, Internet Browsing and Networking.
3) Experience in FORTRAN and C programming.
4) Experience in Atomistix, Grapher and Origin software applications.
5) Experience in Gaussian, Abinit and Matlab software applications.

Membership of Professional Bodies:

1) Life Member of **Material Research Society of India**.

Delivered Invited Lectures:

1) Delivered Invited Lecture on "**Nanoscience and Nanotechnology**" in National Seminar on the topic "Emerging Field of Physics in Nanoscience" organized by Department of Physics, U. R. College Rosera, Samastipur.

Organized Symposium/Conference/Workshop:

1) Organised one day National Symposium-cum-Workshop on "Recent Trends in Physics" on 7th April, 2018 at R. B. College, Dalsingsarai, Samastipur.

Professional Development Activities:

1) NCC Care Taker since 17 January 2018 at R. B. College, Dalsingsarai, Under 2/12 Bihar Batalliyan NCC, Samastipur.

2) SWAYAM Mentor of MOOCs (Massive Open Online Courses) of UGC at R. B. College, Dalsingsarai.

Personal Details:

- **Date of Birth:** DECEMBER 15, 1986
- **Marital Status** MARRIED
- **Nationality** INDIAN
- **Present Address:** CHAK SEKHU, BHAGWANPUR
  DALSINGSARAI, SAMASTIPUR (BIHAR) - 848114
- **Permanent Address:** HOME NO.- 393E, AZAD NAGAR
  POST- SHIVPURI NEW COLONY
  DIST. – GORAKHPUR, U. P. – 273016