#### PROF. VIJAY SHARMA

## **Research Papers:**

1. "Use of ZnO Nanoparticles in the degradation of Rhodamine B dye in waste water to save the environment".

*International Journal on Emerging Technologies* 11(4): 527-532.

### Link to the article/paper

 $\frac{https://www.researchtrend.net/ijet/pdf/77\%20Use\%20of\%20ZnO\%20Nanoparticles\%20in\%2}{0the\%20Degradation\%20of\%20Rhodamine\%20B\%20dye\%20in\%20Wastewater\%20to\%20S}{ave\%20the\%20Environment\%20SUNIL\%20KUMAR.pdf}$ 

2. "Synthesis, Characterization and Antimicrobial Activity of Novel Hydroxamic Acids of Pyrimidine- 5-Carboxylic Acid and their Complexes".

International Journal of Innovative Technology and Exploring Engineering 3(11): 40-

43

### Link to the article/paper

https://www.ijitee.org/wp-content/uploads/papers/v3i11/K15850431114.pdf

3. "Design of Controller for Chopper Fed DC Drive with Pulsating Load and Elastic Coupling Under Resonance".

*International Journal of Current Engineering and Technology* 4(4): 2450- 2457.

#### Link to the article/paper

https://inpressco.com/design-of-controller-for-chopper-fed-dc-drive-with-pulsating-load-and-elastic-coupling-under-resonance/

4. "Antimicrobial Activity of Newly Synthesized Hydroxamic Acid of Pyrimidin e-5-Carboxylic Acid and its Complexes with Cu(II), Ni(II), Co(II) and Zn(II) metal Ions". *Journal of Chemical and Pharmaceutical Research* 6(5):925-930.

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https://www.jocpr.com/articles/antimicrobial-activity-of-newly-synthesized-hydroxamic-acid-of-pyrimidine5carboxylic-acid-and-its-complexes-with-cuii-ni.pdf

5. Energy Transfer Studies in Binary Dye Solution Mixtures: Acriflavine+Rhodamine 6 GandAcriflavine + Rhodamine B".

*Spectrochimica Acta* 69(4):1257-1264.

#### Link to the article/paper

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6. "Estimation of Molecular Parameters in Laser Grade Dyes: Coumarin 450 and Coumarin 460".

*Dyes and Pigments* 76(2): 417-421.

# Link to the article/paper

https://www.sciencedirect.com/science/article/abs/pii/S0143720806003858

7. "Fluorescence Quenching of 3-Methyl 7-Hydroxyl Coumarinin Presence of Acetonem"

Spectrochimica Acta A 66(1):111-113.

### Link to the article/paper

https://ur.booksc.eu/book/3908702/1b8b3c

8. "Optical Gain Characteristics of C 450 and C 460". *Spectrochima Acta A* 59(5): 1035-1043.

#### Link to the article/paper

https://pubmed.ncbi.nlm.nih.gov/12633720/

9. "Influence of Solvent and substituent on Excited State Characteristics of Coumarin Laser Dyes".

Spectrochima Acta A 59(6):1161-1170.

### Link to the article/paper

https://www.academia.edu/16897763/Influence\_of\_solvent\_and\_substituent\_on\_excited\_state\_characterstics\_of\_laser\_grade\_coumarin\_dyes

10. "Excited State Characteristics of Acridine Dyes: Acriflavine and Acridine Orange". *Spectrochima Acta A* 59(8):1799-1804.

#### Link to the article/paper

https://pubmed.ncbi.nlm.nih.gov/12736066/

11. "Design, Fabrication and calibaration of low cost thermopower measurement set up In low-mid temperature range"

Measurement 150.

### Link to the article/paper

https://www.sciencedirect.com/science/article/abs/pii/S0263224119309200

12. "Synthesis of ZnO/polyaniline Nanocomposite and its Application as Liquefied Petroleum Gas Sensor"

*International journal of emerging technologies* 11(5): 419-424.

### Link to the article/paper

 $\frac{https://www.researchtrend.net/ijet/pdf/60\%20Synthesis\%20of\%20ZnOpolyaniline\%20Nanocomposite\%20and\%20its\%20Application\%20as\%20Liquefied\%20Petroleum\%20Gas\%20Sensor.pdf$ 

13. "The Effect of Modifications of Activated Carbon Materials on the Capacitive Performance: Surface, Microstructure, and Wettability" *Journal of composites science* 5(3): 66.

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https://www.mdpi.com/2504-477X/5/3/66

14. "Influence of Vanadium incorporated mesoporous silica on the decolorization of orange G under visible light irradiation"

\*Inorganic and Nano-Metal Chemistry\*

#### Link to the article/paper

https://www.tandfonline.com/doi/abs/10.1080/24701556.2021.1980019#:~:text=Research%20Article-

<u>"Influence% 20of% 20 Vanadium% 20 incorporated% 20 mesoporous% 20 silica% 20 on% 20 the% 2</u> <u>0 decolorization, G% 20 under% 20 visible% 20 light% 20 irradiation& text=Mesoporous% 20 MCM</u> % 2D41% 20 material% 20 was, by % 20 simple% 20 co% 2D precipitation% 20 method.

15. "Thermoelectric properties of spark plasma sintered PbTe synthesized without any surfactant and organic solvent"

Materials Research Express 8: 1-12.

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https://iopscience.iop.org/article/10.1088/2053-1591/ac0d2b/pdf

16. "Solving the equivalent circuit of a planar heterojunction perovskite solar cell using Lambert W-function"

Solid state communication 337.

#### Link to the article/paper

https://www.sciencedirect.com/science/article/abs/pii/S0038109821002337?via%3Dihub

17. "Revisiting the thermoelectric properties of lead telluride"

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https://www.sciencedirect.com/science/article/abs/pii/S2468606921000782

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Journal of Physics D Applied Physics 35(12):1330-1333.

19. "Physics of Modern Telecommunication".

International Research journal Commerce Arts and Science, 2(2): 272-276.

20. "An Overview: Nanoscience".

International Research journal of Management Science & Technology 3(1): 611-620.

#### **BOOKS:**

1. Mechanics.

Delhi:Apple Books, 2015

2. Basic Concept on Calculus of Variations.

Delhi.:Apple Books, 2015

3. Engineering Physics Applied Physics-I.

Delhi.: Apple Books, 2015

4. Engineering Physics Applied Physics-II.

Delhi.: Apple Books, 2015

5. Trends in Physics/Quantum -2015.

Delhi.: Apple Books, 2015

6. Thermal Physics.

Delhi: Abha Publicity, 2012

7. Experimental Physics.

Delhi: AbhaPublicity, 2012

8. Teaching of Basic Science.

Delhi: Abha Publicity, 2011