

Dr. Swati Goyal
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Current Responsibilities

I have been working in Dr. A.P.J. Abdul Kalam University, Indore (M.P.) since July 2018 as:

- ✓ Associate Professor of Chemistry Subject
- ✓ Associate Dean of R&D
- ✓ Head of the Department of Applied Sciences & Humanities
- ✓ Senior Superintendent
- ✓ Member of Board of Studies (BOS)
- ✓ Dean (Chemical Sciences)
- ✓ Ph.D. Supervisor
- ✓ Teaching UG, PG & Research Scholars
- ✓ Paper Setter, Moderator, Practical Examiner and Evaluator for UG/PG
- ✓ Observer for RDC-2018 &2019 for Chemistry, Biochemistry and Physics Subject

Academic Profile

2012- March, 2016	Ph.D. Chemistry , Jiwaji University, Gwalior (M.P.) India Title-“Studies on Removal Pharmaceuticals from Waste Water”
2009-2011	M.Sc. (81.41%) (Pharmaceutical Chemistry), Jiwaji University, Gwalior (M.P.) India
2006-2009	B.Sc. (67.77%) (Chemistry, Botany, Biotechnology), IASCA, ITM Universe, Jiwaji University, Gwalior (M.P.) India

Current Research Activities

- Synthesis of metal nanoparticles using medicinal plants extract.
- Development of novel nanocomposites adsorbents based on environmental/food wastes.
- Development of novel nanocomposites adsorbents based functional nanomaterials (carbon nanomaterials, metal, metal oxide nanoparticles) for toxic removal of inorganic and organic contaminants from pharmaceuticals and dyes from waste water.

Research Interest

- Development of eco friendly nanoadsorbents based on carbon nanomaterials (carbon nanotubes, graphene), metal nanoparticles and metal oxides.
- Development of adsorbents using environmental/ecological/food wastes and sediments
- Application of synthesised nanoadsorbents in adsorptive removal and photocatalytic degradation for environmental studies (heavy metals, dyes and pharmaceuticals).

- Kinetic and isotherms studies.

Professional Experiences

- **January 2018 to June 2018**

Worked as a visiting faculty in School of Studies in Environmental Chemistry, Jiwaji University, Gwalior (M.P.), India

- **October 2015 to December 2017:**

Worked as a Research Associate on project entitled “**Studies on Removal of Dyes from Industrial Effluents Using Eco-friendly Non Conventional Biosorbent**” in Department of Applied Sciences, Madhav Institute of Technology and Sciences (MITS), Gwalior (M.P.), India.

- **January 2012 to September 2015:**

Worked as visiting faculty in Instrumentation & Chemical Analysis, Environmental Chemistry, Pharmaceutical Chemistry dept., Jiwaji University, Gwalior, (M.P.), India

- **June 2012 - June 2014:**

Worked as visiting faculty in School of Studies in Engineering and Technology, Jiwaji University, Gwalior, (M.P.), India

- **July 2013 - June 2014:**

Worked as visiting faculty in Department of Pharmaceutical sciences, Jiwaji University, Gwalior, (M.P.), India

Peer Reviewer/Editorial Board Member

- International Journal of Research and Analytical Reviews (IJRAR)
- SCIREA Journal of Chemistry
- Global Innovative Research Journal of Multidisciplinary Sciences (GIRJMS)
- Journal of Water Resource and Protection
- Natural Science
- International Journal Of Engineering Development And Research
- International Journal Of Creative Research Thoughts
- International Journal of Science & Engineering Development Research – IJSDR
- International Journal for Research and development in technology(IJRDT)
- Materials Engineering Research
- International Journal of Engineering Research & Technology (IJERT)

Membership of International/National Bodies:

- Social Science and Humanities Research Association (SSHRA)
- Scientific and Technical Research Association (STRA)
- Teaching and Education Research Association (TERA)

Awards and Scholarships

- International Award for **“Cutting-Edge Researcher”** In International Award Convention-2020 organized by Research Foundation of India and World Federation of Science & Technology, California.
- Awarded Fellowship for training of “Young Scientists (2016-17)” by Madhya Pradesh Council of Science and Technology (MPCST), Bhopal (M.P.), India.
- Elected, Student Member, Indian chemical Society, India. (2014)
- Awarded Fellowship for training of “Young Scientists (2015-16)” by Madhya Pradesh Council of Science and Technology (MPCST), Bhopal (M.P.), India.
- Awarded Fellowship for training of “Young Scientists (2014-15)” by Madhya Pradesh Council of Science and Technology (MPCST), Bhopal (M.P.), India.
- 2nd University Topper in M.Sc. Pharmaceutical Chemistry from School of Studies in Chemistry, Jiwaji University, Gwalior, M.P. in 2011.
- 2nd University Topper in B.Sc. in 2009.
- I have participated as Co-Convenor in One day National Conference on **“Role of Intellectual Property Rights in Global Economic Development RIPRGED-2020”** held on 17th February 2020 Organized by Dr. A.P.J. Abdul Kalam University, Indore, India.
- Participated as a **Core Committee Member** in “International Conference on Science, Technology, Management & Engineering- ICSTME”, held on 25th-26th February 2019 at Pune, Maharashtra, India.
- Participated as an Organizing Committee Member in “23rd International Conference on Innovative Research on Engineering, Science, Pharmacy, Humanities and Management (ICIR-2019)” held on 27th-28th September 2019 Organized By Dr. A.P.J. Abdul Kalam University, Indore, India.
- Participated as a Session Chairperson in “23rd International Conference on Innovative Research on Engineering, Science, Pharmacy, Humanities and Management (ICIR-2019)” held on 27th-28th September 2019 Organized By Dr. A.P.J. Abdul Kalam University, Indore, India.

Industrial Training

- Three months training at Ranbaxy Laboratories Limited, Dewas, Indore.
- One month training in “*Molecular Biology*” From BIMR College of Life Sciences, Gwalior.

Research Publications - International/National Journals

1. “Synthesis of Silver Nanoparticles Using Ocimum Sanctum L. (Tulsi) Leaf Extract & Study of Antimicrobial Activity: A Green Chemistry Approach”, International Journal of Green and Herbal Chemistry, 8 (2019) 601-609
2. “Green” Nanotechnologies: Synthesis of Silver Nanoparticles Using Catharanthus roseus Leaf Aqueous Extract & Its Antimicrobial Activity”, Journal of Emerging Technologies and Innovative Research (JETIR), 6 (2019) 122-133.
3. “Adsorptive Removal of Dyes From Aqueous Solution Onto Cost Effective And Non-Conventional Adsorbents: A Review”, International Journal of Research and Analytical Reviews (IJRAR), 6 (2019) 750-765.
4. “Green Synthesis of Zinc Oxide Nanoparticles From Plant Extract: A Review”, International Journal of Green and Herbal Chemistry, 8 (2019) 650-659.
5. “A Review on Adsorptive and Photocatalytic Removal of Pharmaceuticals from Aqueous Solution onto Cost Effective Nano Adsorbents””, Journal of Innovative Engineering and Research (JIER) 2 (2019) 5-12.
6. “Langmuir-Hinshelwood (L-H) adsorption isotherm and photo degradation of copper surfactants derived from long chain saturated fatty acid catalyzed by zinc oxide”, Journal of Indian Chemical Society, 96 (2019) 281-288.
7. “Milk adulteration with melamine screening test and real time detection”, International Journal of Science and Humanities Research, 8 (2019) 1-10.
8. “Colorimetric detection of Melamine in raw milk by unchanged gold nanoparticles”, International Journal of Science and Humanities Research, 8 (2019) 1-17.
9. “Adsorptive removal of Methylene Blue (MB) onto an environmental friendly bioadsorbent prepared from pongamia pinnata pod shell (Karanj Tree)”, International Journal of Innovative Research Explorer, 5 (2018) 7-19.
10. “A Review on Green Synthesis of Zinc Oxide Nanoparticles from Plant Extract”, Journal of Innovative Engineering and Research (JIER) 1 (2018) 25-29.
11. “Kinetic and equilibrium isotherm studies for the adsorptive removal of an antibiotic Doxycycline (DOXY) from aqueous solutions using nano talc (NT)”, GIRJMS, 1 (2018) 6-21.

12. "Photocatalytic degradation of an antibiotic Rifabutin in the presence of TiO₂ nanocatalyst assisted UV radiation", Journal of Scientific & Industrial Research, 76 (2017) 442-445.
13. "Photocatalytic removal of antacid histamine H₂-receptor antagonist ranitidine", Journal of Indian Chemical Society, 94 (2017) 1-8.
14. "Semiconductor sensitized photodegradation of antibiotic tetracycline in water using heterogeneous nanoparticles", Journal of Scientific & Industrial Research, 75 (2016) 355-358.
15. "Photocatalytic degradation kinetics of anti-inflammatory drug balsalazide using semiconductor TiO₂ under UV irradiation", Journal of Indian Chemical Society, 93 (2016) 327-332.
16. "Photocatalytic degradation of an antiparkinsonism drug Entacapone in an aqueous suspension of titanium dioxide", Journal of Indian Chemical Society, 92 (2015) 1-6.
17. "Adsorption Study of Tetracycline onto an Unsaturated Polyester Resin (UPR)", Desalination and Water Treatment, 57 (2015) 6875-6883.
18. "Kinetics and isotherm studies on the adsorption of an anti parkinsonism drug Entacapone from aqueous solutions using unsaturated polyester resin (UPR)", Desalination and Water Treatment, 54 (2014) 3169-3176.
19. "Langmuir Hinshelwood kinetic expression for the photocatalytic degradation of antimigraine rizatriptan benzoate aqueous solutions using nanocrystalline TiO₂" (Communicated).
20. "Equilibrium, Thermodynamic and kinetic modelling of an antimigraine drug rizatriptan benzoate from aqueous solution by unsaturated polyester resin (UPR) in a batch system" (Communicated).
21. "Equilibrium Isotherm Studies on the adsorption of Methylene Blue (MB) onto Pongamia Pinnata: A Bioadsorbent" (Communicated).
22. "Adsorptive removal of malachite green dye from aqueous solution using a biosorbent prepared from pongamia pinnata-kinetic study and equilibrium isotherm analysis" (Communicated)

Chapter books published in International Conferences

1. **"A Study on Adsorptive Removal of Malachite Green (MG) Dye from Model Liquid Phase onto Activated Pongammia Pinnata Pod Powder (AP4): An Eco- Friendly Bioadsorbent"** in AICTE sponsored **International Conference on Sustainable and Innovative Solution for Current Challenges in Engineering & Technology (ICSISCET-2019)** Madhav Institute of Technology and Science, Gwalior (M.P.), India.
2. **"A Study on Synthesis of Silver Nanoparticles Using Ocimum Sanctum L (Tulsi) Leaf Extract & Their Antimicrobial Activity: A "Green Chemistry Approach" in Innovative**

Research on Engineering, Science, Pharmacy, Humanities And Management (ICIR-2019)

Organized By Dr. A.P.J. Abdul Kalam University, Indore, M.P.

3. **“Nanoparticles under UV Irradiation Photocatalytic Removal of Organic Dyes from Aqueous Solutions Using Composite”** in **Innovative Research on Engineering, Science, Pharmacy, Humanities and Management (ICIR-2019)** Organized By Dr. A.P.J. Abdul Kalam University, Indore, M.P.
4. **“Adsorptive Removal of Pharmaceutical Contaminants from Waste Water Using Different Types of Nanoadsorbents”** in **Innovative Research on Engineering, Science, Pharmacy, Humanities and Management (ICIR-2019)** Organized By Dr. A.P.J. Abdul Kalam University, Indore, M.P.
5. **“Biosynthesis Of Gold Nanoparticles Using Plant Extracts: A Review”** in **Innovative Research on Engineering, Science, Pharmacy, Humanities And Management (ICIR-2019)** Organized By Dr. A.P.J. Abdul Kalam University, Indore, M.P.

Conferences/ Symposia/ Workshops – International/National

1. One day National Conference on **“Role of Intellectual Property Rights in Global Economic Development RIPRGED-2020”** held on 17th February 2020 Organized by Dr. A.P.J. Abdul Kalam University, Indore, India.
2. National Conference on **“Emerging Trends in Environmental Management & Challenges”** held on 28th-29th February 2019 sponsored by MPHEQIP Higher Education Department, M.P and Organized by Govt. College, Niwali, M.P. (Oral)
3. One day Workshop on **“Ethics and Value of Research in Current Scenario”** held on 18th January 2020 sponsored by **International Research Guide Federation** at Choithram College of Professional Studies.
4. 2nd National Conference on **“Fruitfulness of Multidisciplinary Approach in Research”** held on 11th January 2020 organized by Comp-Feeders Group of Institutions, Indore, India. (Oral Presentation)
5. International Conference on **“Role of Spectroscopy in Chemical Sciences”** held on 21st-23rd November 2019 Organized by Dr. A.P.J. Abdul Kalam University, Indore, India. (Oral)
6. 23rd International Conference on **“Innovative Research on Engineering, Science, Pharmacy, Humanities and Management (ICIR-2019)”** held on 27th-28th September 2019 Organized by Dr. A.P.J. Abdul Kalam University, Indore, India. (Oral)
7. Three Days National Workshop on **“Communication Skills: Training and Development”** held on 3rd-5th September 2019 Organized by Christian Eminent College, Indore, India.

8. Two Days Workshop on **“Modern ICT Tools for Teaching Learning Process”** held on 30th-31st August 2019 Organized by Dr. A.P.J. Abdul Kalam University, Indore, India.
9. International Conference on, **“Nanotechnology: Initiative and Application”**, March 9-11, 2018 at Jiwaji University, Gwalior (M.P.) India (Oral).
10. International Conference on, **“Recent Trends in Chemical Sciences”**, February 15-17, 2018 at Jiwaji University, Gwalior (M.P.) India (Oral).
11. International Conference on, **“Study of Nanomaterials and Scientific Development in 21st Century (ICSNSDC) And IVth Annual Meeting of “Academy of Microscope Science & Technology (AMST), India”** November 3–5, 2017 at Jiwaji University, Gwalior (M.P.) India (Oral).
12. International Conference on, **“Electrochemical Science and Technology”**, August 10-12, 2017 at Indian Institute of Sciences, Bangalore, Karnataka (Oral).
13. National Conference on **“Emerging Trends in Engineering and Sciences”**, organized by School of Studies in Chemistry, Jiwaji University, May 15-16, 2016 at Jiwaji University, Gwalior (M.P.) India (Oral).
14. **“31st M.P. Young Scientist Congress”** organized by M.P. Council of Science & Technology, Bhopal, Feb 28 - 29, 2016 at MPCST, Bhopal (M.P.) India (Oral).
15. **“103rd Indian Science Congress Association”**, Jan 03 - 07, 2016 at Mysuru University, Mysuru, Karnataka, India (Oral).
16. One week Short Term Training Programme on **“Applications of Optimization Techniques for Engineering & Technology”**, November 23 - 27, 2015 at Madhav Institute of Technology and Science, Gwalior (M.P.), India. (Attended).
17. **“30th M.P. Young Scientist Congress”**, Madhya Pradesh Council of Science and Technology (MPCST) Bhopal, February 28-March 01, 2015 at MPCST, Bhopal (M.P.) India. (Oral).
18. **“International Conference on Green Initiatives in Science and Technology (GIST 2015)”**, January 15, 2015 at Manav Rachna College of Engineering (MRCE), Faridabad. (Accepted for Oral Presentation).
19. **“3rd Water Research Conference”**, January 11-14, 2015 at Shenzhen, China (Accepted for Poster Presentation).
20. **“51st Annual Convention of Chemists 2014”** organized by The Indian Chemical Society, 9 -12 December 2014 at Kurukshetra University, Kurukshetra, India. (Poster).
21. **“Indian Roadshow Workshop”** organized by Royal Society of Chemistry, Cambridge, UK, 4 November 2014 at IIT Delhi, Delhi, India (Poster).
22. **“30th M.P. Young Scientist Congress”**, Madhya Pradesh Council of Science and Technology (MPCST) Bhopal, February 28-March 01, 2014 at MPCST, Bhopal (M.P.), India (Oral).

23. National Conference on **“Electrochemistry for Cleaner Environment”**, organized by School of Studies in Chemistry, Jiwaji University, January 17-18, 2014 at Jiwaji University, Gwalior (M.P.) India (Oral).
24. National Conference on **“Pharmaceutical industry- academia relation: Current opportunities and future prospects”** organized by IPS College of Pharmacy, November 16, 2013 at IPS College, Gwalior (M.P.) India (Oral).
25. National Conference on **“Greener technology for detection & treatment of pharmaceuticals”** organized by School of Studies in Chemistry, Jiwaji University, March 22-23, 2013 at Jiwaji University, Gwalior (M.P.) India (Oral).
26. 1st International conference on **“Recent advances in Chemical Sciences”** organized by Department of Chemistry, February 24-26, 2013 at Arya P.G. College, Panipat, India (Poster).
27. National Conference on **“Recent advances in Chemical Sciences: emphasis on Healthy Life”** organized by Dept. of Engineering Chemistry, September 21-22, 2012 at ITM GOI & ITM University, Gwalior, (M.P.) India (Oral).
28. National Seminar on **“Recent Advances in Environmental Sciences”**, organized by P.G. Department of Life Sciences, Institute of Allied Sciences and Computer Application, February 27-28, 2009 at ITM Universe, Gwalior (M.P.) India (Poster).
29. National Research Seminar on **“Recent Trends in Biotechnology”**, organized by Department of Biotechnology & Microbiology, Institute of Allied Sciences and Computer Application, May 10, 2008 at ITM Universe, Gwalior (M.P.) India (Poster).

Technical Expertise:

- Well versed with materials characterization techniques like, scanning electron microscopy, FTIR, Raman spectroscopy, electro analytical techniques, Electrochemical Impedance Spectroscopy (EIS).
- UV spectrophotometer, Column Chromatography, HPLC (Waters, Agilent, Shimadzu), Polarimeter.
- Familiar with softwares like MS Office, Chems sketch, Chemdraw, 757 computrace, NOVA 1.10.

Personal Profile

Full Name	Dr. Swati Goyal
Father's e	Lt. Mr. Vijay Kumar Goyal
Mother's Name	Mrs. Laxmi Goyal
Date of Birth	January 8, 1990
Marital Status	Unmarried
Languages Known	English, Hindi

Nationality	Indian
Address	GL-4, Kamini Palza, Gandhi Nagar, Gwalior (M.P.) India

Declaration

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

Date:

Place: Indore

(Swati Goyal)