


CENTRAL UNIVERSITY OF JAMMU

First Name	Dr. Princy	Middle Name		Last Name	Gupta	Photograph 
Title & Designation	Senior Assistant Professor					
Address	Department of Chemistry and Chemical Sciences, Central University of Jammu, Bagla, Rahya-Suchani, District Samba-181143, Jammu and Kashmir (India)					
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Educational Qualifications:						
Degree	Institution				Year	
Ph.D. in the field of Solid Acid Catalysis Thesis title: Studies on the development of green procedures for acid catalyzed organic reactions.	University of Jammu				2008-2012	
M.Phil in the field of Solid Acid Catalysis Thesis title: Silica functionalized sulfonic acid catalyzed synthesis of biologically important heterocycles under heterogeneous conditions.	University of Jammu				2007-2008	
M.Sc. (Gold Medalist) with specialization in Organic Chemistry	University of Jammu				2004-2006	
B.Sc. (Non-Medical), 3 rd Position in order of merit.	University of Jammu				2001-2004	
Qualified CSIR (NET) Examination in Chemical Sciences held on 21 June 2009.						
Career Profile:						
<ul style="list-style-type: none"> ❖ Presently working as Assistant Professor in the department of Chemistry and Chemical Sciences, Central University of Jammu from 22 July, 2016 to till date. ❖ Worked in the department of Chemistry University of Jammu, Jammu for 2 academic years and in the department of Chemistry, Guru Nanak Dev University, Amritsar for one academic year. 						
Administrative Assignments:						
<ul style="list-style-type: none"> ❖ Academic Coordinator, Department of Chemistry and Chemical Sciences, Central University of Jammu w.e.f 20th February, 2020-till date. ❖ Member of Board of Studies of the Department of Chemistry and Chemical Sciences w.e.f 11-03-2020-till date. ❖ UGC SWAYAM Mentor for coordinating SWAYAM related activities in the Department of Chemistry and Chemical Sciences, Central University of Jammu. ❖ Assistant Director, Directorate of Physical Education, Central University of Jammu. ❖ Member of Departmental Purchase Committee. ❖ Member of Departmental Technical committee. ❖ Member of Board of Studies, Department of Chemistry and Chemical Sciences, Central University of Jammu, 2016-2017. ❖ Member of Board of Studies, Department of Nano sciences, Central University of Jammu, 2017-2018. 						
Areas of Interest / Specialization:						

- ❖ Green Chemistry.
- ❖ Heterogeneous catalysis.
- ❖ Synthetic Organic Chemistry.
- ❖ Medicinal Chemistry.

Subjects Taught:

- ❖ **Ph.D**
Organic Synthesis
Green Chemistry
- ❖ **Integrated B.Sc. (Hons) M. Sc. Chemistry**
Organic Synthesis and Reaction Mechanism, Organic Chemistry-IV, Organic Synthesis-I, Analytical Chemistry, Organic Chemistry-II, Bioorganic and Heterocyclic Chemistry, Organic Reaction Mechanism and Stereochemistry, Seminar, Physical Chemistry Lab-II, Organic Preparation and Qualitative Analysis Lab, Organic Chemistry Lab-V, Organic Synthesis and Chromatography Lab, Inorganic Preparation, Analysis and Chromatography Lab

Research Guidance:

- ❖ Ph.D ongoing: 03, Awarded 1
- ❖ Project Students: 49 (Guided at B.Sc. and M.Sc. Level)

Publications Profile:

a. Research Paper

1. Sakshi Panhotra, Rashima Mehta, Wani Inam Ul Haq, Aakriti Mahajan, Manvi Mahajan and Princy Gupta*, Raw Halloysite Catalyzed an Efficient One-Pot Three-Component Synthesis of 9-Aryl-Hexahydroacridine-1,8-Diones, **2025, J. Chem. Sci.**, Accepted.
2. Sakshi Panhotra, Asif Raza, Amandeep Singh, Arun K. Sharma, Princy Gupta*, Diversity-Oriented Rapid Assembly of Mercapto-1,2,4-Triazoles and Quinolines and Exploring their Cytotoxic Activity for Prostate and Breast Cancer Cell Lines, *J. Mol. Struct.*, **2026**, 1349, 143706.
3. Sakshi Panhotra, Princy Gupta*, Exploring the antidiabetic efficacy of 3-mercapto-1,2,4-triazoles as potential inhibitors of α -amylase and α -glucosidase: A comprehensive review, *Intl. J. Biol. Macromol.*, **2025**, 328, 147418.
4. Pawan Kumar, Sakshi Panhotra, Muskan, Avtar Changotra, Sneha Lata, Ankit Mehta, Tamaghna Maitra, Princy Gupta*, Palladium Immobilized on Functionalized Halloysite: A Robust Catalyst for Ligand Free Suzuki–Miyaura Cross Coupling and Synthesis of Pyrano[2,3-c]pyrazole Motifs via Four Component Cascade Reaction and their In-silico Antitubercular Screening, *Appl. Catal. A: Gen.*, **2025**, 689, 120003.
5. Bindu Syal and Princy Gupta*, Cobalt Single Atom Catalyst: Synthesis, Characterization and Catalytic Activity, *Appl. Organomet. Chem.*, **2024**, 38, e7734.
6. Shriya, Bindu Syal, Sheetal Verma, Shivani Parothia, Shivani Angral and Princy Gupta*, Immobilized SbCl_3 @Chitosan as a Green Heterogeneous Catalyst for the Synthesis of 1,2,4,5-Tetrasubstituted Imidazoles, *Res. Chem. Intermed.*, **2024**, 50, 1745.
7. Pawan Kumar, Bindu Syal, Pule Seboletswe, Nosipho Cele, Olofinson, Parvesh Singh,* Md. Shahidul Islam, Deepika Singh and Princy Gupta*, Synthesis, Biological Evaluation, Molecular Docking and Kinetic Investigation of New 2,4,5-Trisubstituted Imidazole Derivatives as Antidiabetic Agents, *ChemistrySelect*, **2023**, 8, e202300924.
8. Pawan Kumar and Princy Gupta*, Halloysite-Based Magnetic Nanostructures for Diverse Applications: A Review, *ACS Appl. Nano Mater.*, **2023**, 6, 13824–13868.
9. Bindu Syal, Pawan Kumar and Princy Gupta*, Recent Advancements in the Preparation and Application of Copper Single Atom Catalysts, *ACS Appl. Nano Mater.*, **2023**, 6, 4987–5041.
10. Princy Gupta, Pawan Kumar, Bindu Syal and Tahira Shamim, Synthesis of 1,4-disubstituted-1,2,3-triazoles using starch-functionalized copper (II) acetate as a recyclable heterogeneous catalyst in water, *Res. Chem. Intermed.*, **2022**, 48, 4601–4615.
11. Pawan Kumar, Princy Gupta* and Chandan Sharma, Surface modified novel magnetically tuned halloysite functionalized sulfonic acid: Synthesis, characterization and catalytic activity, *Catal. Sci. Technol.*, **2021**, 11, 3775–3786.
12. Princy Gupta*, Nayan Prakash, Yogeshwar Ramawat, Palvi Rajput, Amir Fayaz, Tapta Kanchan Roy, Halloysite Nanotubes Functionalized Sulfonic Acid: Synthesis, Spectroscopic Characterization, Computational Studies and Application for the Synthesis of 1,4-Dihydropyridines, *Letters in organic chemistry*, **2022**, 19, 19-27.
13. Aman Mahajan* and Princy Gupta*, Coronavirus (COVID-19): Chemical entities of biological interest, Mini reviews in medicinal chemistry, **2021**, 17, 2497-2506.
- 14.
15. Aman Mahajan and Princy Gupta*, Halloysite nanotubes based heterogeneous solid acid catalysts, *New J. Chem.*, **2020**, 44, 12897-12908.
16. Princy Gupta and Aman Mahajan, Approaches for the development of potential dengue inhibitors, *Synth. Commun.*,

2020, 50, 2250-2265.

17. **Aman Mahajan and Princy Gupta***, Carbon based solid acids: A review, *Environ. Chem. Lett.*, **2020**, 18, 299-314.
18. **Princy Gupta and Aman Mahajan**, Sustainable approaches for steroid synthesis, *Environ. Chem. Lett.*, **2019**, 17, 879-895.
19. **Princy Gupta and Aman Mahajan**, Shades of chemical beauty: An overview of synthetic routes to some anticancer drugs (Review), *Synth. Commun.*, **2017**, 47, 16, 1415-1433.
20. **Princy Gupta* and Aman Mahajan**, Green Chemistry Approaches as sustainable alternatives to conventional strategies in Pharmaceutical Industry (Review), *RSC Adv.*, **2015**, 5, 26686-26705.
21. **Princy Gupta* and Satya Paul**, Solid acids: Green alternatives for acid catalysis (Review), *Catal. Today*, **2014**, 236, Part B, 153-170.
22. **Princy Gupta, Manmeet Kour, Satya Paul and James H. Clark**, Ionic liquid coated sulfonated carbon/silica composites: Novel heterogeneous catalysts for organic syntheses in water, *RSC Adv.*, **2014**, 4, 7461-7470.
23. **Princy Gupta and Satya Paul**, Sulfonated carbon/silica composites: heterogeneous catalysts for the one-pot synthesis of Hantzsch 1,4-dihydropyridines, 2,4,5-trisubstituted imidazoles and 2-arylbenzimidazoles, *Curr. Catal.*, **2014**, 3, 53-64.
24. **Princy Gupta and Satya Paul**, Sulfonated carbon/silica composite functionalized lewis acids for one-pot synthesis of 1,2,4,5-tetrasubstituted imidazoles, 3,4-dihydropyrimidin-2(1H)-ones and for Michael addition of indole to α,β -unsaturated ketones, *J. Mol. Catal. A: Chem.*, **2012**, 352, 75-80.
25. **Princy Gupta and Satya Paul**, Amorphous carbon-silica composites bearing sulfonic acid as solid acid catalysts for the chemoselective protection of aldehydes as 1,1-diacetates and for *N*-, *O*- and *S*-acylations, *Green Chem.*, **2011**, 13, 2365-2372.
26. **Kamini Kapoor, Vivek K. Gupta, Rajnikant, Princy Gupta, and Satya Paul**, Crystal Structure of 2-(4-Chlorophenyl)-1,4,5-triphenyl-(1H)-imidazole, *X-ray Structure Analysis Online*, **2011**, 27, 53-55.
27. **Navjot Jamwal, Ravinderpal Kour Sodhi, Princy Gupta and Satya Paul**, Nano Pd(0) supported on cellulose: A highly efficient and recyclable heterogeneous catalyst for the Suzuki coupling and aerobic oxidation of benzyl alcohols under liquid phase catalysis, *Int. J. Biol. Macromol.*, **2011**, 49, 930-935.
28. **Princy Gupta, Vineet Kumar and Satya Paul**, Silica Functionalized Sulfonic Acid Catalyzed One-Pot Synthesis of 4,5,8a-Triarylhexahydropyrimido[4,5-d]pyrimidine-2,7(1H,3H)-diones under Liquid Phase Catalysis, *J. Braz. Chem. Soc.*, **2010**, 21, 349-354.

b. Articles in newsletter

RSC Adv., 2014, 4, 7461-7470 publication has been highlighted in Green Chemistry Network Newsletter (University of York) January, 2014.
Catal. Today, 2014, 236, Part B, 153-170 publication has been highlighted Green Chemistry Network Newsletter (University of York) in May, 2014.

c. Books

d. Chapter in books

1. Book series: Annual Reports in Medicinal Chemistry (Elsevier) **Book Title:** Medicinal Chemistry Approaches to Malaria and other tropical diseases, **Princy Gupta**, Lovepreet Singh and Kamaljit Singh, Chapter 3: The hybrid antimalarial approach, Annual Reports in Medicinal Chemistry, 2019, 53, 73-105.

2. Book Title: Recent Developments in the Synthesis and Applications of Pyridines (Elsevier) Chapter 14: Pyridine based probes and chemosensors, Authors: Pawan Kumar, Bindu Syal and Princy Gupta* Page No: 445-503, ISBN (print): 978-032-3912-21-1

e. Conference Proceedings

Conference / Workshops/Training Organized:

- ❖ 2025, Organized NPTEL workshop and Felicitation Ceremony (Technical Committee)
- ❖ 2024, Organized Hackathon 2024
- ❖ 2024, International Conference on Sustainable Development in Chemical and Material Sciences
- ❖ 2023, Co-Convenor, Two-Week Online Faculty Development Programme/Refresher Course in Chemistry and Allied

Sciences [FDPCAS – 2023]

- ❖ 2023, Organized Women in STEM as Enablers of Change in Amrit Kaal
- ❖ 2022, Organizing Secretary (International conference on Recent Advances in Chemical Sciences)
- ❖ 2022, International Conference on Frontiers of Space Technology and Application for Humanity
- ❖ 2022, Accompanied students of IX semester to Indian Institute of Integrative Medicine (IIIM); Industrial visit
- ❖ 2017, Certificate of Appreciation for organizing member National Science Day themed “Science and Technology for specially abled persons”
- ❖ 2017, Organizer in National Conference on “Materials for sustainable development and new technology” in Department of Nanosciences and Materials.
- ❖ 2018, Organizing Member of National Science Day, organized by Central University of Jammu.
- ❖ 2019, Organizing member of “Chem forum series” held on 25th Jan, 2019 organized by the department of Chemistry and Chemical Sciences, Central University of Jammu.
- ❖ 2019, Organizing secretary for National Conference on Emerging trends in Chemical Sciences (ETCS-2019) held from 14-15th March 2019, organized by the department of Chemistry and Chemical Sciences, Central University of Jammu.

Creation of ICT Mediated Teaching Learning Pedagogy and Content:

Conference/Workshops/Training attended as Faculty Member:

1. **Princy Gupta**, Monika Gupta and Satya Paul, One-pot synthesis of Pyrimido[4,5-d]pyrimidines, Spirobi[pyrimidines] using $\text{SiO}_2\text{-SO}_3\text{H}$ as heterogeneous and recyclable catalyst, presented in 3rd JK Science Congress held at University of Jammu, 26-28th Feb. 2008.
2. **Princy Gupta** and Satya Paul, Silica functionalized sulfonic acid catalyzed one-pot synthesis of 2,4,5-trisubstituted imidazoles under solvent-free conditions, presented in 11th CRSI National Symposium in Chemistry, held at National Chemical Laboratory Pune, 6-8th Feb. 2009.
3. **Princy Gupta**, Manju Goyal and Satya Paul, Sulfonated carbon-silica composites as novel heterogeneous catalysts for the synthesis of 1,1-diacetates from aldehydes, presented in 5th JK Science congress held at University of Jammu, 8-10th Feb. 2010.
4. **Princy Gupta** and Satya Paul, Carbon/silica composites coated with ionic liquid for Knoevenagel condensation, presented in Conference on Green Chemistry “Newer challenges and sustainable development held at Govt. Degree college, Udhampur, 3-4th Dec. 2010.
5. **Princy Gupta**, Pooja Rasgotra, Monika Gupta and Satya Paul, Amorphous carbon-silica composite sulfonic acids catalyzed one-pot synthesis of Hantzsch 1,4-dihydropyridines, 2,4,5-trisubstituted imidazoles and 2-arylbenzimidazoles, presented in International conference on emerging trends in chemistry held at the Department of Chemistry, Panjab University, Chandigarh, 11-12th Feb. 2011.
6. **Princy Gupta** presented lecture on “Chemistry Our life, Our future” in seminar organised in the department of Chemistry, University of Jammu, 23rd March, 2011.
7. **Princy Gupta**, Seema Sahi, Manjulla Gupta, Manmeet Kour, Rajive Gupta and Satya Paul, Novel sulfonated carbon/silica composite functionalized lewis acids for one-pot synthesis of 1,2,4,5-tetrasubstituted imidazoles, 3,4-dihydropyrimidin-2(1H)-ones and for Michael addition of indole to α,β -unsaturated ketones, presented in Chemical Research Society of India, North Zone Meeting, held at University of Jammu, 22-24th Sept. 2011.
8. **Princy Gupta**, Rajive Gupta and Satya Paul, Amorphous carbon-silica composites bearing sulfonic acid coated ionic liquid as a heterogeneous catalyst for the Knoevenagel condensation in water, presented in 7th JK Science Congress held at University of Jammu, Jammu, 13-15th Oct. 2011.
9. Seema Sahi, **Princy Gupta**, RavinderPal Kour Sodhi, Pooja Rasgotra, Manmeet Kour, Madhvi Bhardwaj and Satya Paul, Green Chemistry and catalysis for sustainable development, presented in International Conference on Global Warming, “The Biggest Challenge of 21st Century” held at Govt. degree college, Udhampur, 24-26th Feb. 2012.
10. **Gupta Princy** and Paul Satya, Ionic liquid coated sulfonated carbon/silica composites catalyzed synthesis of 3-substituted indoles, presented in 3rd Biennial International Conference on New Developments in Drug Discovery From Natural Products And Traditional Medicines held at National Institute of Pharmaceutical Education and Research, Mohali, 22-24th Nov. 2012.
11. Seema Sahi, **Princy Gupta**, Indeeep kour and Satya Paul, Aqueous phase one-pot synthesis of 2-arylbenzimidazoles using covalently anchored RuCl_3 onto imine functionalized silica, presented in 101st Indian Science Congress held at University of Jammu, 3-7th Feb. 2014.
12. **Princy Gupta**, Comparative study of some carbon/silica composites, presented in 11th National Conference of the Indian Thermodynamics Society on “Advances in Chemical Sciences and Thermodynamics” held at University of Jammu on 2-3rd

December, 2016.

13. **Princy Gupta**, Solid acids as green alternatives for acid catalysis, presented in 12th JK Science Congress on Science and technology: Emerging trends and innovations held at University of Jammu on 2-4th March, 2017.
14. Participated in National Workshop on “Intellectual Property Rights” organized by University Business Incubation Centre, Central University of Jammu on 28th-29th, March 2017.
15. Participated in Workshop on “Transacting Students’ Engagement for Rural Community Development” held at Central University of Jammu on 26th April 2017.
16. Participated in National Conference on “Materials for sustainable development and new technology” held at Department of Nanosciences and Materials, Central University of Jammu on 28-29th April 2017.
18. Participated in Two days Professional Development Programme on “Online Teaching, Learning and Assessment using Moodle MOOC Platform and Open Educational Resources” Organized by Central University of Jammu under SWAYAM on 15-16th September, 2017.
19. Participated in Faculty Induction Training Programme/General Orientation Course organized by School of Education under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT) in collaboration with Faculty Induction Development Cell (FIDC), Central University of Jammu in line with provisions of UGC-HRDC held from 6th December, 2017 to 8th January, 2018 and obtained Grade A.
20. Participation: One day Acquaintance Programme on Accelerator based Research, organized by Inter University Accelerator Centre (IUAC), New Delhi, held at Department of Physics and Astronomical Sciences, Central University of Jammu, Jammu during March 26th, 2018.
21. Participation: One day Workshop on World Health Day, organized by Central University of Jammu, Jammu during April 9th, 2018.
22. Member of Fancy Dress Competition of UDAAN Event organized by Central University of Jammu, Jammu during 11-13th April 2018.
23. Participation: Inter-Disciplinary Refresher course on Online Teaching, Learning and Assessment” organized by Faculty Induction Development Cell (FIDC), Central University of Jammu in collaboration with UGC SWAYAM Cell, Central University of Jammu, Jammu in line with provisions of UGC-HRDC held from 25th May 2018 to 8th June 2018.
24. Participation: One day NPTEL AWARENESS WORKSHOP, conducted by Indian Institute of Technology, Kanpur at Central University of Jammu, Jammu during December 3rd, 2018.
25. Participation: Faculty Development Programme on “Entrepreneurship Development” sponsored by Entrepreneurship Development Institute of India, Gandhinagar, Gujarat under DST-NIMAT project organized by University Business Incubation Centre in collaboration with Faculty Induction Development Cell (FIDC), Central University of Jammu in line with provisions of UGC-HRDC for refresher course held from 20-05-2019 to 10-06-2019 and obtained Grade “A”.
26. Participated in Two-Day International Webinar on COVID-19 and Emotional Wellness on 15th and 16th May, 2020 organized by School of Education, Central University of Jammu.
27. Participated in Two-day International Webinar on Climate change and Sustainable Agriculture held on 12th and 13th June 2020 organized by Botany Department, Central University of Jammu.
28. Participated in the IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28th April to 22nd May 2020.
29. Participated in National Webinar on “Self-Reliant India” organised by Centre for Comparative Religions and Civilizations, Central University on 14th July 2020.
30. Online FDP on “Waste Technology”, AICTE Training and Learning Academy at CV Raman Global from 21st Dec 2020 to 25th Dec 2020
31. Seven days Faculty development programme “ICT Tools in Education”, Central University of Jammu under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching Mission from **1st Feb 2021 to 7th Feb 2021**
32. Five Days FDP cum Training Programme on “Media Writing and Program Production”, Department of Mass Communication and New Media, Central University of Jammu from **15th -19th November, 2022**
33. One Week Workshop cum Faculty Development Programme on “Yoga and Meditation with reference to Kashmir Saivism”, Centre for Comparative Religions and Civilizations, Central University of Jammu from **2nd -7th Feb. 2023.**
34. Ten Days FDP on NEP 2020 Orientation and Sensitization Programme under Malaviya Mission Teacher Training Programme of University Grants Commission Organized by Central University of Jammu from **9th -18th January 2024**
35. Participated in Three-day workshop on Integrating Recent Pedagogical Skills in Teaching-Learning at Higher Education Level at Department of Educational Studies on **27th to 29th November 2024**

Invited Lectures/Resource Persons:	
❖	Invited Plenary Lecture: National Conference JK Science Congress 2025 organized by PSPS Government College for Women, Gandhi Nagar, Jammu, in Collaboration with JKST&IC
❖	Invited Talk: Invited Lecture for Capacity building program in Chemistry for newly promoted lecturers
❖	Chaired Session: Chaired a Technical Session in Two day International Conference on “Recent Advances in Chemical Sciences”
❖	Resource Person: Two-Week Online Faculty Development Programme/Refresher Course in Chemistry and Allied Sciences [FDPCAS – 2023]
Research Projects (Major Grants/Research Collaboration):	
❖	Research Projects completed as PI UGC-start up grant, 2018-2020 (10 lakhs) University start up grant from Central University of Jammu (2 lakhs)
❖	Ongoing Research Projects as PI Title: Investigation of Suzuki coupling based novel potential antimalarial agents Funding Agency: JKST&IC Duration: 2 Years (2024-2026)
Awards and Distinctions:	
❖	Felicitated with Gold Medal as SWAYAM MOOC Coordinator for getting highest number of Gold medals in NPTEL courses from Chemistry Department
❖	Certificate of Recognition and Appreciation from ACS for Peer reviewer
❖	Qualified CSIR (NET) Examination in Chemical Sciences held on 21 June 2009.
❖	Secured First position (Gold Medalist) in M. Sc. Chemistry in Jammu and Kashmir State in 2006.
❖	Secured 3rd position in Jammu and Kashmir State in B.Sc. in 2004.
❖	Secured 14th position in Jammu and Kashmir State in the Matric examination in 1999.
Association with Professional Bodies:	
	Life member of National Environmental Science Academy
Other Activities:	