GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY
Sector 16-C, Dwarka, New Delhi-110078

ACADEMIC AUDIT (for USS/Centres)

(For the Academic Session 2024-25)
(01.08.2024 to 31.07.2025)

PART – I : PRELIMINARY INFORMATION

1. Name of the School/Centre: **UNIVERSITY SCHOOL OF BASIC & APPLIED SCIENCES**

Telephone :_01125302400

E-Mail :dean.usbas@ipu.ac.in

2. Date and Time of Visit : _____19th August 2026_____11:00 am_____

3. Members of the Visiting Committee:

(i) Prof. Meenu Kapoor, USBT - Chairperson

(ii) Prof. Pushpender Bharti, USICT - Member

(iii) Prof. M. Thirumal, DU - Member

(iv) Prof. Satyabrata Mohapatra, Convener

4. (a) Academic Programmes conducted in the School/Centre :

S. N.	***Name of the Programme***	***Sanctioned Intake***								***Actual number of Students admitted during the year***								***Whether approved by AICTE/ SRA/BCI/ COA/NCTE, etc.****	***Program Status (Running or Closed)***
(1)	***(2)***	***(3)***								***(4)***								***(5)***	***(6)***
		SC	**ST**	**OBC**	**PWD**	**JKM**	**EWS**	**Gen**	**Total**	**SC**	**ST**	**OBC**	**PWD**	**JKM**	**EWS**	**Gen**	**Total**		
1	M.Tech Nanotechnology 010								15							1	1		Closed
2	B.Sc./M.Sc (Physics) - 491	11	5	16	2	0	6	33	73 + 2 Def = 75	-	-	1	-	-	-	7	8		Running
3	B.Sc./M.Sc (Chemistry) – 492	11	5	16	2	0	6	33	73 + 2 Def = 75	-	-	-	-	-	-	6	6		Running
4	B.Sc./M.Sc (Mathematics) - 493	11	5	16	2	1	6	33	74 + 2 Def = 76	-	-	1	-	-	-	5	6		Running
5	Ph.D. in (Physics)									1	1	1	-	-	-	2	5		Running
6	Ph.D. (Chemistry)									1	-	1	-	-	1	10	13		Running
7	Ph.D. (Mathematics)									-	-	-	-	-	1	5	6		Running

* Enclose letter of approval with Seat intake from Regulatory Body, if applicable

19.08.2026

(b) Details of programs and courses:

Total No. of Programmes in the School:

S. No.	Programme Code	Programme Name	Duration	Total no. of students in the Programme (for all years)	Total No. of courses in program	New courses introduced during the year (Course Code & Course Name)
1	010	M.Tech. NST	2 yr	3	36	
2	491	B.Sc./M.Sc. dual degree in Physics,	4 + 1 year	8	170	
3	492	B.Sc./M.Sc. dual degree in Chemistry	4 + 1 year	6		
4	493	B.Sc./M.Sc. dual degree in Mathematics	4 + 1 year	6		
5	904	Ph.D. in Physics		14	22	
6	905	Ph.D. in Chemistry		30		
7	945	Ph.D. in Mathematics		12		

(c) How many programs in which syllabus revision was carried out during the year (enclose copy of the BOS and AC minutes). N.A.

Program Code	Program Name	If revision has been carried out in the syllabus during the year, Percentage of content added or replaced

Note: If the number of courses in which the content is revised in a given programme to the extent of 20 % or more, it should be considered as "change in syllabus

(d) Which of the following features have been adopted in the Academic Programmes. (If done partially, indicate the same):

(i) Course Outcomes have been defined (**Yes**/No)
(ii) Program Outcomes have been defined (**Yes**/No)
(iii) Program Specific Outcomes have been defined (**Yes**/No)
(iv) Mapping of CO's, PO's & PSO's has been done (**Yes**/No)
(v) Are all programmes NEP Aligned? (Yes/**No**)
(vi) Open elective offered by Schools. (**Yes**/No)
(vii) Elective Course system implemented (**Yes**/No)
(viii) Do you have course on Professional Ethics in any of the program (**Yes**/No)
(ix) Do you have course on Entrepreneurship: (**Yes**/No)
(x) Do you have course on Environment and sustainability: (**Yes**/No)
(xi) No of Skill Development courses offered (course code and title): 04
BSEC-131, The Story of Science
BSEC-132, From Galileo to Hawking: Exploring the Cosmos
BSEC101, EXCEL-I
BSEC102, EXCEL-II

(e) Does the course curriculum in various programs include gender awareness, environment and sustainability, human values and professional ethics, Entrepreneurship, if yes, please give details of such courses and the student enrollment.

Course Code	Course Name	Students Enrolled	Type
NST-111 (EMES-611)	Environmental Studies	1	NUES
NST-112 (HVE-102)	Human Values and Ethics	1	NUES
NST-114 (USMS112	Entrepreneurial Mindset	1	NUES
VAC202	Human Values & Ethics	20	UES
BSVAC121	Universal Human Values: Understanding Harmony	20	UES
RPE-701	Research Publication and Ethics	24	UES
EMES111	Environmental Studies	20	UES

f) Does the school assesses / measure attainment of POs, PSOs and COs, if yes, state the method used. N.A.

(g) Does school conduct any value added courses such as Life Skills, etc. (Please provide details with course name, students enrolled and passed, duration, credits)

Value added course conducted	Students Enrolled	Duration	Students completed
BSSEC-132, From Galileo to Hawking: Exploring the Cosmos	18	3 credits	18
BSSEC101, EXCEL-I	15	3 credits	15
BSSEC102, EXCEL-II	15	3 credits	15

Note: Value Added Courses offered should be minimum of 30 hours.

5. Details of Research, Innovations and Consultancy in School:

(a) Details of JRF / SRF /Other Research Fellows/Post Doctoral Fellows/Research Associates:

Name of Research Fellow / Awardee	Year of Enrollment	Duration of Fellowship	Granting Agency	Type of Fellowship / Award	Whether pursuing Phd or not?
Ms. Vinita Sangwan	2022	As per University norms	GGSIP University / UGC	JRF/SRF	Yes

Ms. Kajal Chaudhary	2022	As per University norms	GGSIP University / Self-financed	Research Scholar (Ph.D.)	Yes
Ms. Divisha Kansal	2023	As per University norms	GGSIP University / Self-financed	Research Scholar (Ph.D.)	Yes
Ms. Ekta Lamba	2023	As per University norms	GGSIP University / Self-financed	Research Scholar (Ph.D.)	Yes
Ms. Jyoti Kumari	2024	As per University norms	GGSIP University / Self-financed	Research Scholar (Ph.D.)	Yes
Ms. Surbhi Sharma	2025	As per University norms	GGSIP University / Self-financed	Research Scholar (Ph.D.)	Yes
Mr. Inderjeet Yadav	2021	As per University norms	GGSIP University / UGC	JRF/ SRF	Awarded in March 2026
Mr. Shanky Garg	2020	As per University norms	GGSIP University / Self-financed	NBHM	Awarded in August 2025
Ms. Ekta Prajapati	2026	As per University norms	GGSIP University / Self-financed	Research Scholar (Ph.D.)	Yes
Sweksha Srivastva	2019		GGSIPU		Yes
Simrandeep Kaur	2021		GGSIPU		Yes
Rashmi	2024		GGSIPU		Yes
Mansi Sharma	2025		GGSIPU		Yes
Vinita	2024	5 years	UGC-CSIR	JRF	Yes
Gourav Arora	2021	3 years	GGSIPU	STRF	Yes
Priya	2022	5 years	IPU-CSIR	STRF-JRF	Yes
Jyoti Dahiya	2021	2022-2026	GGSIPU	STRF	Submitted
Krishna Kumar	2022	2023-2027	GGSIPU	STRF	Yes
Nikita	2022	2023-2027	GGSIPU	IPRF	Yes
Shagun Singh	2023	2024-2026	GGSIPU	IUPF	Yes
Debolina Roy	2024	2025-2027	GGSIPU	IUPF	Yes
Tulsi	2025	2026-2028	GGSIPU	IUPF	Yes

(b) Research Project Details

(i) Does the School has any of the departmental project from UGC SAP, CAS, DST FIST, DBT, ICSSR or other similar Govt. agencies. **No**

(ii) Extra mural project grants:

Name of the	**Name of**	**Year of Award**	**Name of the**	**Amount of**	**Duratio**	**Status**

Scheme	Funding Agency (Govt Only)		PI/Coordinator	Fund	n of Project	of Project (New / Ongoing)
SERB SURE	SERB, DST	2023	Prof. S. Neeleshwar	2996400/-	3 years	Ongoing
Development of Mathematical Modelling and Numerical Simulation of Carbon Nano Tube (CNT) based flow of Nanofluid (Nano Coolant) using Lattice Boltzmann Method	National Board of Higher Mathematics (NBHM), Department of Atomic Energy, Govt. of India	2022 (F.No. 0211/5/2022 NBHM(RP)/R&D II/2009 dated 10.02.2022)	Prof. Rashmi Bhardwaj (Principal Investigator)	Rs. 16,80,900 /	February 2022 - March 2026	Ongoing

c) For non-Govt., Please provide following details:
Note: Non-Govt. means sources such as industry, corporate house, endowments, chairs or international bodies.

Name of the Project / Endowment / Chairs	Name of the PI	Year of Award	Amount of Fund	Duration of Project	Funding Agency	Status of Project (New / Ongoing)
Prof. S. Neeleshwar	2025	5,39,000/-	12 months	Prototype of air Ionization system	Instapower ltd	New
Prof. S. Neeleshwar	2025	3,63,000/-	3 months	Devlopment of a miniatuzed high temperature heating element for advanced engeering and research application	Instapower ltd	New

(d) List of initiatives for creation and transfer of knowledge by students and faculty (innovations) N.A.

(e) List of activities conducted on IPR and industry academia innovative practices.

Name of Workshop / Seminar	No. of participants	Duration	Link to the report
One Day Internal Hackathon - 'Overview of Intellectual Property Rights in India: A Journey towards an Intellectual Revolution' (Prof. Rashmi Bhardwaj - Chief Guest and Keynote Speaker), Swami Vivekananda Institute of Technology, Bhubaneswar	200	30.08.2024	-

(f) Details of awards for innovation won by teachers / research scholar / students.

Name of the faculty/ Research Scholar/ Students	Award	National / International	Prize (if any)
Prof. Rashmi Bhardwaj	Certificate of Appreciation for dedication, commitment, growth and development of the University (Silver Jubilee Anniversary), 05.09.2024 - Guru Gobind Singh Indraprastha University	National / International	Certificate / Recognition
Prof. Rashmi Bhardwaj	Certificate of Appreciation for two decades of unwavering support (Silver Jubilee Anniversary), 12.12.2024 - Guru Gobind Singh Indraprastha University	National / International	Certificate / Recognition
Prof. Rashmi Bhardwaj	Dr. A. P. J. Abdul Kalam Nation Star Award 2024 as an Excellent Researcher - WELRED Organization (registered with NITI Aayog, Govt. of India)	National / International	Certificate / Recognition
Prof. Rashmi Bhardwaj	Rabindranath Tagore Hall of Fame Award 2024 as an	National / International	Certificate / Recognition

	Excellent Researcher - WELRED Organization (registered with NITI Aayog, Govt. of India)		

(g) Details of start up incubated on campus (sanction order of the university, if available).

N.A.

Name of the start up	Nature of start up	Year of start up	Details of promoters (Equity)	Valuation, if any

(h) No. of patents filed/published or awarded/granted with copies.

Name of the Patent Published / Awarded	Patent No.	Income generated, if yes, mention the amount
Polyvinyl pyrrolidone functionalized silver nanoparticles based colorimetric sensor for manganese (II) detection", Inventors: Shipra Mital Gupta, Surendra Kumar Sharma, Shailja Pandey, Applicant: Guru Gobind Singh Indraprastha University	Patent Application No. 202411097846 dated 11/12/24	Nil
Artificial Intelligence Based Sea Water and Ground Water Desalination Device (Indian Design Patent) - Published 23.01.2026, Journal No. 04/2026	Design Patent Application No. 416816-001 (filed 14.05.2024); The Indian Patent Office, New Delhi	Nil
Water Quality Monitoring Device (Indian Design Patent) - Published 17.07.2026, Journal No. 29/2026	Design Patent Application No. 456593-001 (filed 25.04.2025); The Indian Patent Office, New Delhi	Nil
NATURAL pH RESPONSIVE COLORIMETRIC INDICATOR FILMS COMPRISES OF CURCUMIN-SULPHUR NANOCRYSTALS-WHEAT GLUTEN FOR INTELLIGENT FOOD PACKAGING	202511096535 (Published)	Nil

(i) Publications in scopus / web of science /others

Title of the Paper and year of publication	Name of the Author(s)	Title of the Journal and ISSN No.	Volume, issues and page nos.	Indexing database and Impact factor /Cite score if any	Link of the paper or DOI
Facile fabrication of Au@CoFe2O4-ZnO hybrid plasmonic nanostructures with enhanced photocatalytic performance, 2024	Shipra Choudhary and **Satyabrata Mohapatra**	Journal of Materials Science: Materials in Electronics 0957-4522	35, 1610	Scopus 3.2	**https://link.springer.com/article/10.1007/s10854-024-13359-w**
Facile synthesis, microstructural, morphological, catalytic, optical, and photocatalytic properties of Ag nanoparticles loaded Ce doped ZnO hybrid plasmonic nanorods, *2024*	Shipra Choudhary, K. P. Sooraj, Mukesh Ranjan and **Satyabrata Mohapatra**	Inorganic Chemistry Communications 1879-0259	1*69, 113008*	Scopus 5.9	**https://doi.org/10.1016/j.inoche.2024.113008**
Editorial: Emerging leaders in nanotechnology, *2025*	Marcos H. D. Guimaraes, Simona Badilescu, **Satyabrata Mohapatra**, Giancarlo Franzese	Frontiers in Nanotechnology 2673-3013	*7, 1637617*	Scopus 5.8	**https://doi.org/10.3389/fnano.2025.1637617**
Facile synthesis of mesoporous tin oxide particles: effect of synthetic routes, *2025*	Alka Singh, Mansi Vats, **Satyabrata Mohapatra**, Vaishali Singh	Journal of Materials Science 0022-2461	*60, 7273-7288*	Scopus 4.4	**https://link.springer.com/article/10.1007/s10853-025-10884-9**
Enhanced photodegradation of pollutants by Er doped ZnO nanorods	Shipra Choudhary and **Satyabrata Mohapatra**	Next Materials 2949-8228	*8, 100744*	Scopus 4.7	**https://doi.org/10.1016/j.nxmate.2025.100744**

fabricated using thermal decomposition, *2025*					
Low temperature NO_2 gas sensing achieved by mesoporous SnO_2, *2025*	Alka Singh, **Satyabrata Mohapatra**, Monika Tomar, Arijit Chowdhuri, Vaishali Singh	Journal of Alloys and Compounds 1873-1252	*1013, 178592*	Scopus 6.7	**https://doi.org/10.1016/j.jallcom.2025.178592**
Maltose-based pyrotechnic aerosol forming composites for fire extinguishing application, 2025	Braham Prakash, Amit Saxena, **Yogesh Kumar Tyagi**, Kavita Devi, Rajesh Kumar Tanwar, Arvind Kumar	FirePhys Chem 2667-1344	5, 190-200	Scopus 5.1	**https://doi.org/10.1016/j.fpc.2024.09.003**
Novel Synthesis, and Application of Carboxymethylated Cassia fistula-Based Hydrogel for Extended-Release of Dinotefuran, 2024	Vaishali Prashar, Manu Nandal, Rajinder K Gupta, **Yogesh Kumar Tyagi**	ChemistrySelect 2365-6549	9, e202403421	Scopus 2.3	**doi.org/10.1002/slct.202403421**
High-temperature effects on oscillatory conductivity in disordered quantum dot arrays: Role of Coulomb interactions and localization length, 2025	Panwar, A., Malik, V., Mahanti, S. D., **Sonnathi, N.**, & Bagga, A	Journal of Applied Physics,	137(11).	**2**.7	doi.org/10.1063/5.0238227
Engineering SnSe Nanoparticles via High-Energy Ball Milling and Melting: A Comparative Study on Phase and Structural Properties. 2025	Bairwa, M. K., Saini A., Gowrishankar R., & **Sonnathi, N.**	Phys. Status Solidi A	Volume 222, Issue 10	**2**	https://doi.org/10.1002/pssa.202400550
Theoretical and experimental studies on 2D β-NiS battery-type electrodes for highperformance supercapacitor. 2024	Singh D, Samtham M, Bisht N, Choudhary E, Kumar V, Jangir R, **Sonnathi N**, Hosmani SS, Katre A, Devan	Electrochimica Acta.	506, 14499	**6.6**	10.1016/j.electacta.2024.144998

	RS.				
η-*Einstein Hopf real hypersurface in the complex space (2025/1/1)	Savita Rani, Ram Shankar Gupta, Young Jin Suh	Filomat ISSN: 2406-0933	Vol. 39, No. 10 (2025)	SCIE, SCOPUS Impact factor 1	https://www.jstor.org/stable/27388485
Detection of Mercury Ions Using PVP-Capped AgNPs for Wastewater Analysis, 2024	Shailja Pandey, S.K. Sharma, *Shipra Mital Gupta	Springer Proceedings in Materials, ISSN(E) 2662-317X, ISBN(P) 978-981-99-4877-2, ISBN(E) 978-981-99-4878-9	27, 383-388		https://doi.org/10.1007/978-981-99-4878-9_54
Detection of Mercury in aqueous system via O-Phenylenediamine using polyvinyl pyrrolidone functionalized silver nanoparticles, 2024	Shailja Pandey, *Shipra Mital Gupta, S.K. Sharma	Microchemical Journal 207, ISSN 0026-265X	207, 112094	Impact Factor: 5.2	https://doi.org/10.1016/j.microc.2024.112094.
A DFT study of $(La_2O_3)_n$ clusters and effect of Ba, Y and Hf doping for their optoelectronic applications	Kashyap, S. and **Batra, K.**	Molecular Physics ISSN:0026-8976	122, 18 (2024)	IF=1.8 SCIE /Scopus	https://doi.org/10.1080/00268976.2024.2317449
Effect of Zr substitution on structural, electronic, vibrational, thermodynamic and optical properties of $(HfO_2)_p$ clusters: a DFT study of $(HfO_2)_p$ and $Hf_qZr_rO_{2(q+r)}$ clusters",	Kashyap, S. and **Batra, K.**	Journal of Nanoparticle Research, ISSN: 1388-0764.	26, 13 (1-19) 2024	IF=3.5 SCIE /Scopus	https://doi.org/10.1007/s11051-023-05876-2
Cupric ion-functionalized polyaniline/single-walled carbon nanotube hybrids for dimethyl methylphosphon	Himanshu, Ankit Choudhary, Kunal, Rishabh Mudgal, Karan Singh, Anindya Datta*, and	*J Mater Sci: Mater Electron* Print ISSN: 0957-	**Vol. 35**, Page 652, Year(2024)	**Science Citation Index Expan**	https://doi.org/10.1007/s10854-024-12426-6.

ate detection.	Tapan Sarkar*	4522 Electronic ISSN (e-ISSN): 1573-482X		**ded (SCIE)**, **Scopus**, and **EI Compendex**	
High-temperature effects on oscillatory conductivity in disordered quantum dot arrays: Role of Coulomb interactions and localization length, 2025	Anjali Panwar, Vikas Malik, Subhendra D Mahanti, Neeleshwar Sonnathi and Anjana Bagga*	Journal of Applied Physics Print ISSN: 0021-8979 Online ISSN: 1089-7550	Volume 137, Issue 11, 114302-14	Scopus Impact Factor: 2.7	doi: 10.1063/5.0238227
Novel 10,11-dihydro-5H-dibenzo[b,f]azepine triazoles hybrids: Synthesis, in vitro antioxidant activity and xanthine oxidase inhibition and computational study, 2024	Shilpa Yadav; Mansi; Neeti Misra; Pankaj Khanna; Leena Khanna	Journal of Molecular Structure. ISSN: 0022-2860	Volume 1312, Part 1 Article: 138639	Scopus/4.0	https://doi.org/10.1016/j.molstruc.2024.138639
Recent report on indoles as a privileged anti-viral scaffold in drug discovery 2024	Asmita Singh; Charu Bhutani; Pankaj Khanna; Sangeeta Talwar; Sandeep Kumar Singh; Leena Khanna	European Journal of Medicinal Chemistry. ISSN: 0223-5234	Article: 117017 Volume: Volume 281	Scopus/6.7	10.1016/j.molstruc.2024.138639
Morpholino Pyrimidine/Pyrimidino-Oxazines: An Integrated Study as DGAT1 Inhibitors Through QSAR, Molecular Docking, ADMET, and Computational Simulation, 2025	Asmita Singh; Mansi; Pankaj Khanna; Deepshikha Gupta; Sandeep Kumar Singh; Leena Khanna	ChemistrySelect, ISSN:2365-6549	10, no. 34 (2025): 10, e02210	Scopus/2.0	10.1002/slct.202502210
In silico screening of	Mansi; Pankaj Khanna; Shilpa	Journal of	*43*(15),	Scopus/2.4	10.1080/07391102.2024.2443126

dicoumarols as potential Mur B enzyme inhibitors in Mycobacterium tuberculosis : molecular docking, ADME, QSAR and MD simulations, 2024	Yadav; Asmita Singh; Leena Khanna	Biomolecular Structure and Dynamics, ISSN: 1538-0254	8772–8787		
In Silico Screening of Flavonoids From Cycas as Potential Aromatase Inhibitors for Breast Cancer Therapy and Estimation of Total Flavonoid Content and LC–MS Analysis of Cycas revoluta Extract, 2025	Charu Bhutani; Mansi; Pankaj Khanna; Asmita Singh; Sangeeta Talwar; Leena Khanna	Chemistry & Biodiversity, ISSN:1612-1880	*22, no. 12 (2025) : e01571*	Scopus/2.9	10.1002/cbdv.202501571
Synthesis and multifaceted exploration of dibenzoxepinones : in vitro antimicrobial and ct-DNA binding, DFT/TD-DFT, molecular docking and simulation studies, 2025	Shilpa Yadav; Mansi; Priyanshu; Pratibha Chanana; Pankaj Khanna; Asmita Singh; Leena Khanna	RSC Advances, ISSN: 2046-2069	*15 (23): 18089 – 18107*	Scopus/6.1	https://doi.org/10.1039/d5ra01068c
Inclusion complexes of novel formyl chromone Schiff bases with β-Cyclodextrin: Synthesis, characterization, DNA binding studies and in-vitro release study, 2024	Mansi; Pankaj Khanna; Shilpa Yadav; Asmita Singh; Leena Khanna	Carbohydrate Polymers, ISSN: 0144-8617	*Volume 347, 1 January 2025, 122667*	Scopus/13.2	10.1016/J.CARBPOL.2024.122667
Biological Applications and Synthesis of 1,2,3-triazole Linked Six Membered Fused N-heterocycles, 2025	Himani; Asmita Singh; Pankaj Khanna; Sandeep Kumar Singh; Leena Khanna	Chemistry & Biodiversity, ISSN:1612-1880	*23, no. 4 (2026) : e03719.*	Scopus/2.9	10.1002/cbdv.202503719

Effect of 0.015 mol % cobalt (Co) doping on the broadband terahertz optical properties of congruent $LiNbO_3$ Single Crystal	Mukesh Kumar	Infrared Physics and Technology	147 Pg: 1-10	3.4	10.1016/j.infrared.2025.105823
Machine Learning Framework for predicting Water Quality Classification (2024)	Sangwan, Vinita; Bhardwaj, Rashmi	Water Practice and Technology; ISSN 1751-231X (IWA Publishing)	19(11), 4499-4521	Scopus, ESCI; IF 1.6	https://doi.org/10.2166/wpt.2024.259
A Novel Geometric Modification to the Regula Falsi Method to Achieve Cubic Order of Convergence (2024)	Inderjeet; Bhardwaj, Rashmi*	Nanotechnology Perceptions; ISSN 1660-6795 (Brookfield Academic Ltd., UK)	20(14), 1183-1189	Scopus	https://doi.org/10.62441/nano-ntp.vi.2930
Fractional-ordered Adams-Bashforth-Moulton (FABM) method for Controllers' Numerical Simulations for DC Motors in Electric Vehicles (2024)	Bangia, Aashima; Bhardwaj, Rashmi	Results in Control and Optimization; ISSN 2666-7207 (Elsevier)	17, Art. 100466, 10 pp.	SCI / Web of Science, Scopus	https://doi.org/10.1016/j.rico.2024.100466
Exploring the influence of factors causing stress among doctoral students by combining fuzzy DEMATEL-ANP with a triangular approach (2024)	Garg, Shanky; Bhardwaj, Rashmi	Scientometrics; ISSN 0138-9130 (P), 1588-2861 (E) (Springer)	129, 4695-4719	Scopus, SCI; IF 3.8	https://doi.org/10.1007/s11192-024-05108-x
Multi-Objective and Blockchain Based Optimization Algorithm for Fleet Sharing Management (2024)	Garg, Shanky; Bhardwaj, Rashmi	Opsearch; ISSN 0030-3887 (P), 0975-0320 (E) (Springer)	61, 1131-1151	Scopus, SCI; IF 1.6	https://doi.org/10.1007/s12597-023-00729-x
Fluid Simulation using Lattice	Bhardwaj, Rashmi;	Indian Journal	15(1&2), 33-	Indian Citatio	https://doi.org/10.5958/1945-919X.2024.00003.8

Boltzmann Method (2024)	Kansal, Divisha	of Industrial and Applied Mathematics; ISSN 0973-4317 (P), 1945-919X (O)	38	n Index (ICI)	
Rough Set Method in Machine Learning - A Review (2024)	Lamba, Ekta; Bhardwaj, Rashmi	Indian Journal of Industrial and Applied Mathematics; ISSN 0973-4317 (P), 1945-919X (O)	15(1&2), 76-88	Indian Citation Index (ICI)	https://doi.org/10.5958/1945-919X.2024.00006.7
Fractional ordered epidemiology model simulation for pathogenesis of the pandemic (2025; published 11.07.2025)	Bangia, Aashima; Bhardwaj, Rashmi*	Franklin Open; ISSN 2773-1863 (Elsevier)	12 (2025), 100320	Scopus, Q3	https://doi.org/10.1016/j.fraope.2025.100320
Analysis of Pollution causing Attributes during Traffic on Roads (2025; published 10.03.2025)	Garg, Shanky; Bhardwaj, Rashmi	Jnanabha; ISSN 0304-9892 (P), 2455-7463 (O) (Vijnana Parishad of India)	55(1), 16-22	UGC (Group -D)	https://doi.org/10.58250/jnanabha_SI.2025.55101
Numerical Simulation(s) of Non-Linear Equations by Adaptive Secant Technique (2025)	Inderjeet; Bhardwaj, Rashmi*	Boletim da Sociedade Paranaense de Matematica; ISSN 2175-1188 / 0037-8712 (Estadual University of Maringa)	43(2), 1-10	Scopus, Web of Science; IF 0.4	https://doi.org/10.5269/bspm.78976
Numerical Simulation of Nonlinear Equation by	Inderjeet; Bhardwaj, Rashmi*	Journal of Interdisciplinary	28(5), 1837-1845	Scopus, Web of Scienc	https://doi.org/10.49974/JIM-2138

Converting Quadrature Rule to Iterative Technique (2025)		Mathematics; ISSN 0972-0502 (Taru Publications)		e; IF 1.1	
Numerical Simulation of Nonlinear Equations by Modified Bisection and Regula Falsi Method (2025)	Inderjeet; Bhardwaj, Rashmi*	Proceedings of Pakistan Academy of Sciences: A; ISSN 2518-4253	62(1), 873	Scopus	https://doi.org/10.53560/PPASA(62-1)873
An Integrated Approach of the Numerical Simulation of Nonlinear Equations by Modified Bisection and Regula Falsi Method (2025)	Inderjeet; Bhardwaj, Rashmi*	Journal of Interdisciplinary Mathematics; ISSN 0972-0502 (Taru Publications)	28(4), 1553-1571	Scopus, Web of Science; IF 1.1	https://doi.org/10.47974/JIM-2136
Enhancing Convergence: A Comparative Analysis of the Modified Newton-Raphson Based Iterative Method for Simulating Nonlinear Equations (2025)	Inderjeet; Bhardwaj, Rashmi*	International Research Journal of Multidisciplinary Scope; ISSN 2582-631X (IRJMS Iquz Galaxy)	6(1), 857-866	Scopus	https://doi.org/10.47857/irjms.2025.v06i01.02852
Numerical simulation of nonlinear equations by modified secant method (2025)	Inderjeet; Bhardwaj, Rashmi*	IAPQR Transactions; ISSN 0970-0102 (Indian Association of Productivity, Quality & Reliability)	49(1), 100-117	UGC CARE listed	https://doi.org/10.3238/IAPQRT.2025.49.01.6
A New Iterative Newton Raphson Technique for the Numerical Simulation of	Inderjeet; Bhardwaj, Rashmi*	Journal of Integrated Science and	13(4), Art. 1080, 1-6	Scopus	https://doi.org/10.62110/sciencein.jist.2025.v13.1080

Nonlinear Equations (2025)		Technology; ISSN 2321-4635 (ScienceIn Publishing)			
Fractals - Complex Structures (2025; June 2025)	Sharma, Surbhi; Bhardwaj, Rashmi*	Swanirman Sunirmit Publication of Research; ISSN 2583-2654	5(2), 44-50	-	https://www.swanirmanconsultancy.in/pubjun2025/SSPR_Jun2025_5.pdf
Modeling the density of chlorinated brines with nonlinear multivariate regressions (2025)	Sepulveda, M.; Sarrut, T. B. de S. P.; Soto-Bubert, A.; Bhardwaj, Rashmi; Acevedo, R.	Chemical Thermodynamics and Thermal Analysis; ISSN 2667-3126 (Elsevier)	18 (2025), 100181, 1-11	Scopus, ESCI; IF 1.9	https://doi.org/10.1016/j.ctta.2025.100181
Numerical Simulation of Nonlinear Equations by using Modified Newton Raphson Technique (2025)	Inderjeet; Bhardwaj, Rashmi*	Advances in Nonlinear Variational Inequalities; ISSN 1092-910X	28(2), 01-08	Scopus	https://doi.org/10.52783/anvi.v28.1719
Newton Cotes Quadrature R-I Model for the Numerical Simulation of Nonlinear Equations (2025)	Inderjeet; Bhardwaj, Rashmi*	Advances in Nonlinear Variational Inequalities; ISSN 1092-910X (International Publications)	28(1), 580-588	Scopus	https://doi.org/10.52783/anvi.v28.2454
Viscosity modelling of chlorinated brines in three-component systems with a continuously variable temperature range between	Soto-Bubert, A.; Bhardwaj, Rashmi; Rajendran, S.; Acevedo, R.	Chemical Thermodynamics and Thermal Analysis; ISSN 2667-3126 (Elsevier)	18 (2025), 100162, 1-13	Scopus, ESCI; IF 1.9	https://doi.org/10.1016/j.ctta.2025.100162

293-323 K (2025)					
Mean-Variance optimal portfolio selection integrated with Support Vector and Fuzzy Support Vector Machines,	Simrandeep Kaur, Arti Singh, Abha Aggarwal	Journal of Fuzzy Extension and Applications, 2783-1442	Vol. 5, No. 3, pp.434-468. July, 2024	Scopus	https://doi.org/10.22105/jfea.2024.453926.1453
Non-homogeneous DEA approach in the presence of negative data: A prospective approach to enhance decision-making.	Sweksha Srivastva, Abha Aggrwal, Pooja Bansal	Computational and Applied Mathematics, 2238-3603	Vol. 43, No. 4,pp 255. May, 2024	SCIE	
Efficiency analysis and ranking employing data envelopment analysis and multi-criteria decision analysis incorporating cumulative prospect theory.	Sweksha Srivastva, Abha Aggrwal	Operations Research Forum	Vol. 6, No. 3, p. 100, July, 2025	Scopus	
Low temperature NO2 gas sensing achieved by mesoporous SnO2 (2025)	Alka Singh, Satyabrata Mohapatra, Monika Tomar, Arijit Chowdhuri, Vaishali Singh	Journal of Alloys and Compounds	Volume 1013; page.	I.F – 6.7	https://doi.org/10.1016/j.jallcom.2025.178592
Eco-friendly urea-assisted m-SnO2-based hydroelectric cell for green energy production (2025)	Mansi Vats, Alka Singh, R. K. Kotnala, Jyoti Shah and Vaishali Singh	New Journal of Chemistry	Volume 49; pg-4072-4084	I.F – 2.6	https://doi.org/10.1039/d4nj04280h
Facile synthesis of mesoporous tin oxide particles: effect of synthetic routes (2025)	Alka Singh, Mansi Vats, Satyabrata Mohapatra, and Vaishali Singh	Journal of Materials Science	Volume 60; pg-7273-7288	I.F-4.4	https://doi.org/10.1007/s10853-025-10884-9
A strategic approach towards the synthesis of jackfruit peel-based activated	Krishna Kumar, Uplabdhi Tyagi, Saurav Kumar Maity, Shagun Singh,	2190-6823	15, 12387–12408	Scopus	10.1007/s13399-024-06030-1

carbon: assessment of different activating agents and operating conditions (August 2024)	Nikita & Gulshan Kumar				
A critical review on nanostructure-doped carbonized biomass: A new Era in sustainable supercapacitor technology (Nov 2024)	Krishna Kumar, Uplabdhi Tyagi, Sidhharth Sirohi, Ritesh Kumar, Saurav Kumar Maity, Nikita, Shagun Singh, Gulshan Kumar	1873-7153	381, 133707	Scopus	https://doi.org/10.1016/j.fuel.2024.133707
Graphene-enhanced polymer composites: A state-of-the-art perspective on applications (Dec- 2024)	Saurav Kumar Maity, Uplabdhi Tyagi, Ritesh Kumar, Krishna Kumar, Nikita Sheora, Shagun Singh, Gulshan Kumar	2452-2627	49, 100797	Scopus	https://doi.org/10.1016/j.flatc.2024.100797
Enhancing the electrical performance of chitosan-based triboelectric nanogenerator using graphene nanoplatelets for real-time sports application (Jan 2025)	Saurav Kumar Maity, Uplabdhi Tyagi, Akhilesh Kumar Sharma, Prashant Bisht, Sidhharth Sirohi, Krishna Kumar, Nikita Sheoran, Shagun Singh & Gulshan Kumar	1572-882x	32, 1787-1804	Scopus	https://doi.org/10.1007/s10570-025-06373-6
The multifaceted potential of azasugars: synthetic	Jyoti Dahiya Gulshan Kumar Anudeep Kumar Narula	2717-1892	6, 79-92	Scopus	https://doi.org/10.22034/jchemlett.2024.485355.1240

approaches, molecular interactions and therapeutic usage (Feb 2025)					
Fabrication of natural polymer-based films for food preservation and packaging application: characteristic assessment of ultra-low graphene content (March 2025)	Saurav Kumar Maity, Uplabdhi Tyagi, Ritesh Kumar, Krishna Kumar, Gulshan Kumar & Sidhharth Sirohi	1436-2449	82, 4075-4097	Scopus	https://doi.org/10.1007/s00289-025-05707-5

(j) Number of books and chapters in edited volumes / books published, and papers in national/ international conference- proceedings per teacher.

S. N.	Name of the teacher	Title of the book/ chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National/ International	Year of Publication	ISBN/ ISSN number of the proceeding	Affiliating Institute at the time of Publication	Name of the Publisher
	Ram Shankar GUPTA, Andreas ARVANITOYEORGOS, Savita RANI, Marina STATHA	Modern Approaches to Differential Geometry and its Related Fields	Biconservative Hypersurfaces in E_s^5	Proceedings of the 7th International Colloquium on Differential Geometry and its Related Fields	7th International Colloquium on Differential Geometry and its Related Fields	International	March 2025	ISBN: 978-981-12-9670-3	GGSIP University	World Scientific
	Shipra Mital Gupta	"Advances in Carbon based Nanomaterials" in Nanotechnology: A quick guide to Materials and Technologies					2024	ISBN: 978-981-5256-78-9, eISBN: 978-981-5256-77-2		Bentham Science Publishers
	Shipra Mital Gupta	"Green Solution for environm					2025	ISBN: 9780443219900		Elsiever

		ental sustainability" in Green Chemistry: A Path to Sustainable Development								
1.	Prof. Rashmi Bhardwaj	Fundamentals of Mathematical Analysis (Theory and Problems) - Book	-	-	-	National	2024	ISBN 9789392549366	GGSIP	Khanna Publishers, Delhi
2.	Prof. Rashmi Bhardwaj	Numerical Simulation of Parabolic Partial Differential Equation - Chapter (pp. 149-162); published 21.06.2025 Proceedings	Numerical Simulation of Parabolic Partial Differential Equation	Mathematical Modeling, Analysis and Simulations of Multiscale Transport Phenomena	ICMASMTP 2022, Kharagpur, India	International	2025	ISBN 978-981-96-3098-1;	GGSIP University,	Springer Nature Singapore
3.	Prof. Rashmi Bhardwaj	A Comparative Study of Neural Networks and Time Series Analysis for Water Assessment (pp. 123-135); published 31.03.2025		Computational Techniques in Environmental Engineering	-	International	2025	ISBN 978-1-032-79694-9	USBAS, GGSIP University,	CRC Press,
4.	Prof. Rashmi Bhardwaj	Soil remediation using Principal Component Analysis and Hierarchical Cluster Analysis - (pp. 78-91); published 31.03.2025	-	Computational Techniques in Environmental Monitoring	-	International	2025	ISBN 978-1-032-79694-9	USBAS, GGSIP University,	CRC Press,
5	Prof.	Forecasti	-	Springer	-	Internation	2024	ISBN	USBAS,	Sprin

.	Rashmi Bhardwaj	ng Groundwater Levels in Gurugram City, Haryana, India with Artificial Neural Networks and Multiple Linear Regression - (pp. 323-342)		Proceedings in Physics, Vol. 397		al		978-3-031-58640-8 (P);	GGSIP University, Delhi	ger
6.	Prof. Rashmi Bhardwaj	Forecasting the COVID-19 pandemic through the hybridization of Machine Intelligent Algorithms - Chapter 50 (pp. 313-321)	-	Artificial Intelligence in Biomedical and Modern Healthcare Informatics	-	International	2024	ISBN 9780443218705	USBAS, GGSIP University,	Elsevier
7.	Prof. Rashmi Bhardwaj	Application of Machine Learning Model for Assessing Water Quality Index - Chapter (pp. 291-308)	-	Integrated Management of Water Resources in India: A Computational Approach	-	International	2024	ISSN 0921-092X	USBAS, GGSIP University,	Springer
8.	Prof. Rashmi Bhardwaj	Soft Computing Techniques Based Assessment of Water Quality - (pp. 257-270)	-	Integrated Management of Water Resources in India: A Computational Approach	-	International	2024	ISSN 0921-092X	USBAS, GGSIP University,	Springer
9.	Prof. Rashmi Bhardwaj	Stochastic Locomotive of Nanofluid(s) - Chapter (pp. 171-186)	-	Mathematical Modelling of Complex Patterns through Fractals and Dynamica	-	International	2024	ISBN 978-981-97-2343-0	USBAS, GGSIP University, Delhi	Springer Nature

				l Systems, Studies in Infrastructure and Control						
10.	Prof. Rashmi Bhardwaj	Study of the heat transfer and simulation through a nanotube for Distribution Function D2Q9 using the Lattice Boltzmann Method - Chapter (pp. 847-858)		ICRESH 2024 Conference Proceedings, BARC-DAE	5th Reliability, Safety and Hazard (ICRESH 2024),	International	2024	ISBN 978-981-97-3086-5	USBAS, GGSIP University, Delhi	Springer
11.	Prof. Rashmi Bhardwaj	Regional Analysis of Influential Meteorological Factors in Daily Precipitation Forecasting Using Machine Learning (pp. 562-567); published 24.04.2025		IEEE Xplore Conference Proceedings	10th Signal Processing and Communication (ICSC 2025),	International	2025	ISBN 979-8-3315-1189-0;	USBAS, GGSIP University, Delhi	IEEE
	Prof. Gulshan Kumar	Next-Gen Energy Storage Devices: Carbon-Based Materials for Flexible Supercapacitors					2024	ISBN: 9798369375051	G.G.S.I.P.U.	Rachid Amrousse & IGI Global Scientific Publishing
	Prof. Gulshan Kumar	Innovative GO Membranes: An Insight Into the					2024	ISBN: 9781032661537	G.G.S.I.P.U.	Rachid Amrousse & IGI

		Fabrication and Wastewater Treatment								Global Scientific Publishing
	Prof. Gulshan Kumar	Flexible Temperature Sensor					2024	ISBN: 9798337306698	G.G.S.I.P.U.	Pragati Kumar & CRC Press
	Prof. Gulshan Kumar	Exploring the Chemistry of Energy Storage Systems Batteries, Supercapacitors, and Energy Storage					2025	ISBN: 9798337314099	G.G.S.I.P.U.	Shrikant Kulkarni & IGI Global Scientific Publishing

(k) Details of consultancy

Name of the consultancy Project	Consulting Agency	Revenue Generated

(l) Details of linkages with institutions / industries for internship / training / project work / sharing of research facilities

Organization / Industries	Type of linkage (Training / Project / Research)	Year of commencement	Duration	No. of students / teachers benefited
Intapower ltd	project	2025	12 months; 3 months	08
Bhaskaracharya College of Applied Sciences	2 Research Papers	2024, 2025		8
IIT- Delhi and Sungkyunkwan University	Research Paper	2024-25		9

(m) Details of functional MOUs with institutions of national, international importance, other universities, industries for internship / training / project work / sharing of research facilities.

Organization with which MOU were signed	List of Activities	Year of signing of MOU	Duration	No. of students / teachers benefited
Instapower ltd	Training project	2025	Years	08

6. Details of FDPs/MDPs and other short term Programmes/Training organised by the School

(a) No. of Professional Development Programs such as FDPs / MDPs/Others organized by the school None

Program Type and its Title	Duration (from- to)	No. of participants	Income generated

(b). No. of Professional Development Programs such as FDPs / MDPs / Orientation Program / Refresher Course / Short Term Course attended by the faculty.

Name of the faculty	Program Type and its Title	Duration (from- to)	Venue
Prof. Kriti Batra	Faculty development program on Role of Artificial Intelligence in Viksit Bharat @2047 from conducted by Association of Indian Universities and GGSIPU	11 March-15 March 2024	GGSIPU
Prof. Kriti Batra	Jury Member Smart Delhi Ideathon 2025	18-31st January 2025	GGSIPU
Prof. Rashmi Bhardwaj	Keynote Speaker - One-day International Symposium on 'Recent Advances in Differential Equations and Applications' (ISRADEA-2024); talk on 'Complexity analysis of Kinesiology movements'	06.08.2024	Deshbandhu College, University of Delhi, Delhi
Prof. Rashmi Bhardwaj	Special Guest - Exhibition of Mathematics and Science Models	08.08.2024	Indian Heritage School, Sector 23, Dwarka, Delhi
Prof. Rashmi Bhardwaj	Keynote Speaker - One Day Internal Hackathon on 'Overview of Intellectual Property Rights in India: A Journey towards an Intellectual Revolution'	30.08.2024	Swami Vivekanand da Institute of Technology, Bhubaneswar
Prof. Rashmi Bhardwaj	Chief Guest - One Day Internal Hackathon on 'Overview of Intellectual Property Rights in India'	30.08.2024	Swami Vivekanand da Institute of Technolog

			y, Bhubaneswar
Prof. Rashmi Bhardwaj	Resource Person - Faculty Development Programme on Research Pedagogy; talk on 'Research Methodology'	09.09.2024	Malaviya Mission Teacher Training Centre (MMTTC), HNB Garhwal University
Prof. Rashmi Bhardwaj	Resource Person - UGC sponsored Refresher Course in Mathematics; talk on 'Fractal Analysis'	12.09.2024	Malaviya Mission Teacher Training Centre (MMTTC), GJ University, Hisar
Prof. Rashmi Bhardwaj	Resource Person - Five-Day National Mathematics Workshop on Emerging Areas in Differential Equations: Theory, Modelling, Discretization & Numerical Solvers; three talks on 'Complexity analysis of real life problems (I, II, III)'	16.09.2024 - 20.09.2024	Government College, Kullu, Himachal Pradesh
Prof. Rashmi Bhardwaj	Resource Person - Two-Day International Seminar on Digital Humanities and Redefining Research; talk on 'Global Perspectives in Digital Research'	27.09.2024 - 28.09.2024	GIET, Bhubaneswar with IAPPR and University of Uyo, Nigeria
Prof. Rashmi Bhardwaj	Keynote Speaker - Kalam Physical Symposium; talk on 'Fractal Pathways to Real Life Application'	15.10.2024	BlueBells School International, Delhi
Prof. Rashmi Bhardwaj	Keynote Speaker - International Conference on Mathematical Sciences and Its Applications; talk on 'Bifurcation and Fractal Pathways for Nonlinear Complexity'	15.10.2024 - 17.10.2024	Sri Guru Tegh Bahadur Khalsa College, University of Delhi, Delhi
Prof. Rashmi Bhardwaj	Keynote Speaker - 11th Global Webinar on Applied Science, Engineering and Technology; talk on 'Fractal and Bifurcation Pathways for Nonlinear	26.11.2024 - 27.11.2024	Global Scientific Guild

	Complexity'		
Prof. Rashmi Bhardwaj	Keynote Speaker - One Day National Conference and Awareness Programme 'Mathematics in Daily Life' (National Mathematics Day 2024); talk on 'The Ubiquity of Mathematics in Real Life'	21.12.2024	Division of Social Science, Faculty of Fisheries, SKUAST, Srinagar, Kashmir
Prof. Rashmi Bhardwaj	Keynote Speaker - National Mathematics Day; talk on 'Mathematical Modelling for Real Life Applications'	21.12.2024 - 22.12.2024	Department of Mathematics, Acharya Institute of Technology, Bangalore
Prof. Rashmi Bhardwaj	Keynote Speaker - National Symposium on 'Empowering Faculty: Advancing Excellence for NextGen Education'; talk on 'New Pedagogical Techniques: Kinesthetic Learning, Game Based Learning'	30.01.2025 - 05.02.2025 (talk on 04.02.2025)	Teaching Learning Centre, Sharda University, Greater Noida, U.P.
Prof. Rashmi Bhardwaj	Technical Lecture - Inspire: Workshop on Women Empowerment and Technical Excellence; talk on 'Applications of Mathematics in Artificial Intelligence and Machine Learning'	07.02.2025	Aditya University, Surampalem, Andhra Pradesh
Prof. Rashmi Bhardwaj	Technical Lecture - Inspire: Workshop on Women Empowerment and Technical Excellence; talk on 'Future Trends in Quantum Technologies'	08.02.2025	Aditya University, Surampalem, Andhra Pradesh
Prof. Rashmi Bhardwaj	Online Lecture - Mathematics Society; talk on 'Nonlinear Dynamics Pathways for Mathematical Modeling'	17.02.2025	Department of Mathematics, Shaheed Bhagat Singh College, University of Delhi
Prof. Rashmi Bhardwaj	Technical Lecture - Research Colloquium; talk on 'Fractals: Complexity Analysis for Real Life Challenges'	21.02.2025	Department of Mathematics,

			SRMIST, KTR Campus, Chennai
Prof. Rashmi Bhardwaj	Technical Lecture - Departmental Festival 'Origin 25'; talk on 'Bridging the Gap in STEM'	28.02.2025	Department of Mathematics, Miranda House, University of Delhi
Prof. Rashmi Bhardwaj	Technical Lecture - National Mathematics Day; talk on 'Mathematics for AI and ML'	19.03.2025	Department of Mathematics, GJUST, Hisar
Prof. Rashmi Bhardwaj	Technical Lecture - International Women's Day week concluding ceremony; talk on 'Bridging the Digital Divide through Gender Lens'	24.03.2025	CSIR - National Physical Laboratory (NPL), Delhi
Prof. Rashmi Bhardwaj	Technical Lecture - 12th Global Webinar on Applied Science, Engineering and Technology; talk on 'Artificial Intelligence Wavelet Conjunction Fractal Analysis of Water Quality'	26.03.2025	Global Scientific Guild
Prof. Rashmi Bhardwaj	Technical Lecture - Seminar 'Implosion 25'; talk on 'Nonlinear Pathways for Industry'	08.04.2025	Ramlal Anand College, University of Delhi, Delhi
Prof. Rashmi Bhardwaj	Resource Person - National Seminar; talk on 'The Future of Libraries in the Era of Artificial Intelligence'	03.05.2025	Chitkara University, Himachal Pradesh, sponsored by RRRLF, Ministry of Culture, Govt. of India
Prof. Rashmi Bhardwaj	Resource Person - National Workshop on Mathematical Modelling and AI Techniques in Infectious Disease Dynamics; talk on 'Nonlinear Pathways of COVID-19'	27.06.2025 - 28.06.2025	SASTRA Deemed to be University, Thanjavur, Tamil Nadu
Prof. Rashmi Bhardwaj	Resource Person - International	28.06.2025 -	Departmen

	Conference on Mathematical Analysis & Its Applications (ICMAA-HM-2025); talk on 'Fractal Neuronal Wavelet Hybridized Modelling of COVID-19'	30.06.2025 (talk on 29.06.2025)	t of Mathematics, Karnatak University, Dharwad with PIMSCI
Prof. Rashmi Bhardwaj	Resource Person - World Conference on Statistical Inference (WCSI 2025), National Statistical Day; talk on 'Real Life Challenges through Nonlinear Complexities'	29.06.2025 - 01.07.2025 (talk on 30.06.2025)	Department of Statistics, Bharathiar University, Coimbatore, Tamil Nadu

(C) E content developed by faculty (E-PG Pathshala / Swayam / MOOCS / NPTEL / School LMS / any other): None

7. Faculty Information:

(a) Details of teachers who have received grant for research from University under FRGS/other scheme

Name of the Faculty	Amount of Grant	Duration of the Grant	Project Name
Prof. Anindya Datta	Rs. 4,20,000 (1st Year)	3 years	Cobalt oxide nanoparticle decorated MoS_2 hybrid for Bioanalytical Applications
Prof. Vaishali Singh	Rs. 2,00,000	1 year	Effect of doping Zn in m-SnO2 for improved hydroelectric cell applications
Prof. Tapan K. Jain	Rs. 2,00,000	1 year	Preparation of novel Covalent Organic frameworks with its surface modification for cancer theranostic purpose
Prof. Gulshan Kumar	Rs. 2,00,000	1 year	Fabrication and characterization of bio-based nanocomosites for smart food packaging applications
Prof. S. Neeleshwar	Rs. 2,00,000	1 year	Quantum Size Efect in Mo-Doped Mn_4Si_7:

			Tuning Magnetic and Thermoelectric Properties
Prof. Anjana Bagga	Rs. 2,00,000	1 year	Machine Learning and Percolation Modeling of Electronic transport in Disordered of PbTe Quantum Dots
Prof. Satyabrata Mohapatra	Rs. 2,00,000	1 year	Development of $CoFe_2O_4$ based nanohybrids for application in hydroelectric cell for generation of green electricity
Prof. Yogesh K. Tyagi	Rs. 2,00,000	1 year	Investigations on the antioxidant potential of Hawan Samagri and synthesis of its Nanoparticles.
Prof. Ram Shankar Gupta	Rs. 93,500	1 year	A study of Solitons, Biharmonic and Biconservative Submanifolds
Prof. Shipra Mital Gupta	Rs. 2,00,000	1 year	Synthesis of stable CNT nanofluids in mixed surfactant for utilization in a solar harvesting system
Prof. Leena Khanna	Rs. 2,00,000	1 year	In silico screening and Synthesis of pyrimidine derivatives for Potential Biological application

(b) Details of teachers who have received any research project by Govt./Non –Govt. Sources (other than FRGS) including Departmental Projects

Name of the faculty	**Month and Year of Award**	**Amount of Grant**	**Duration of the Grant**	**Project Name**	**Funding Agency**	**Project status (New/Ongoing)**
Prof. S. Neeleshwar	2025	5,39,000/-	12 months	Prototype of air Ionization system	Instapower ltd	New
Prof. S. Neeleshwar	2025	3,63,000/-	3 months	Devlopment of a miniatuzed high temperature heating element for advanced engeering and	Instapower ltd	New

				research application		
Prof. S. Neelehswar	2023	2996400/-	3 years	Disorder-induced enhancement of thermoelectric properties of a random array of SnSe quantum dots	SERB, DST	ongoing
Prof. Rashmi Bhardwaj	February 2022 – March 2026	Rs. 16,80,900/-	February 2022 - March 2026	Development of Mathematical Modelling and Numerical Simulation of Carbon Nano Tube (CNT) based flow of Nanofluid (Nano Coolant) using Lattice Boltzmann Method	National Board of Higher Mathematics (NBHM), Department of Atomic Energy, Govt. of India	Ongoing

(c) Details of teachers awarded international fellowship for Advance Studies / Research

Name of the Faculty	Name of the Award	Year of Award	Awarding Agency
Prof. Rashmi Bhardwaj	Fellow of the Institute of Mathematics and Applications (FIMA), UK - membership no. P0044462 (continuing)	July 2021 onwards	Institute of Mathematics and Applications, United Kingdom
Prof. Rashmi Bhardwaj	Fellow of the Indian Society for Mathematical Modelling and Computer Simulation (FISMMACS) (continuing)	August 2021 onwards	Indian Society for Mathematical Modelling and Computer Simulation, India

(d) List of Ph.D Scholars (Teacher-wise)

Name of the Ph.D. Scholar	Name of Guide(s)	Year of Registration	Part Time / Full Time
Mukesh kumar bairwa	Prof. S. Neeleshwar	2018	Full time

Anjali saini	Prof. S. Neeleshwar	2019	Full Time
Arun kumar	Prof. S. Neeleshwar	2023	Full time
Vinod kumar	Prof. S. Neeleshwar	2026	Full Time
Gunjan Goel	Prof. Ram Shankar Gupta	2024	Full time
Simarjeet Kaur Bhatia	Prof. Ram Shankar Gupta	2024	Full Time
Ms. Nidhi Yadav	Yogesh K. Tyagi	2019	Full Time
Mr. Braham Prakash	Yogesh K. Tyagi	2020	Full Time
Ms. Vaishali Prashar	Yogesh K. Tyagi	2022	Full Time
Ms. Parul Dagar	Yogesh K. Tyagi	2026	Full Time
Ms. Ria Nagar	Yogesh K. Tyagi	2026	Full Time
Nishu	Prof. Kriti Batra	2025	Full time
Ms. Shalini Pandey	Prof. A. Datta	2021	Full Time
Vedanga Shiva	Dr. Anjana Bagga	2022	Full Time
Charu Bhutani	Prof. Leena Khanna	2022	Full time
Asmita	Prof. Leena Khanna	2023	Full time
Reema Haldar	Prof. Leena Khanna	2026	Full time
Harita	Prof. Leena Khanna	2026	Full time
Mansi Tyagi	Prof. Satyabrata Mohapatra	2018	Full Time
Venus Sharma	Prof. Satyabrata Mohapatra	2021	Full Time
Shalini Pandey	Prof. Satyabrata Mohapatra	2021	Full Time
Mansi Vats	Prof. Vaishali Singh	2021	Full Time
Gourav Arora	A. A. Khan	2021	Full Time
Priya	A. A. Khan	2022	Full Time
Suman	Dr. Jyoti	2024	Full Time
Jyoti Kumari	Prof. Rashmi Bhardwaj	2024	Full Time
Vinita	Prof. Vaishali Singh	2024	Full Time
Sakshi Sharma	Prof. Vaishali Singh; Prof. Satyabrata Mohapatra	2024	Full Time
Madhubala	Dr. Sushobhan Chowdhury	2024	Full Time
Himani	Dr. Leena Khanna	2024	Full Time
Debolina Roy	Prof. Gulshan Kumar	2024	Full Time
Shruti	Dr. Pooja Rana	2024	Full Time
Anita	Prof. Anindya Datta	2024	Full Time

Arpita Sharma	Prof. Rajesh Kumar	2024	Full Time
Rashmi Pawar	Prof. Abha Aggarwal	2024	Full Time
Manashvi	Dr. Arti Singh	2024	Full Time
Surbhi Sharma	Prof. Rashmi Bhardwaj	2024	Full Time
Nilesh Parmhans	Dr. Ruchika Sehgal	2024	Full Time
Riddhima Talwar	Dr. Sushobhan Chowdhury	2024	Full Time
Prerna Mahajan	Dr. Sushobhan Chowdhury	2024	Full Time
Yoshita Katiyar	Dr. Anirban Dandapat	2024	Full Time
Harshit Sharma	Prof. Shipra Mital Gupta	2024	Full Time
Pooja Yadav	Prof. Shipra Mital Gupta	2024	Full Time
Neha Saini	Prof.Shruti Aggarwal	2024	Full Time
Pooja	Prof. Shruti Aggarwal	2024	Full Time
Mohit Kumar	Prof. S. Neeleshwar	2024	Full Time
Shivam Dwivedi	Dr. Mahesh Chand	2024	Full Time
Smarika Sagar	Dr. Mahesh Chand	2024	Full Time
Jyoti Dahiya	Prof. Gulshan Kumar	2021	Full time
Krishna Kumar	Prof. Gulshan Kumar	2022	Full time
Nikita	Prof. Gulshan Kumar	2022	Full time
Shagun Singh	Prof. Gulshan Kumar	2023	Full time
Tulsi Nagar	Prof. Gulshan Kumar	2026	Full time
Ms. Priya Jha	Prof. Tapan K. Jain	2019	Full time
Ms. Sadhna Devi Kaliramna	Prof. Tapan K.Jain	2019	Full Time

(e) List of Ph.Ds awarded (Teacher-wise)

Name of the Ph.D. Scholar	Name of Guide(s)	Year of Registration	Year of Award	Part Time / Full Time
Shilpa Kashyap	Prof. Kriti Batra	2019	2024	Full Time
Ms. Anjali Panwar	Dr. Anjana Bagga	2016	2025	Full Time
Shilpa	Prof. Leena Khanna	2020	2025	Full time
Mansi	Prof. Leena Khanna	2020	2025	Full time
Priyanka Yadav	Prof. Shipra Mital Gupta	2018	2025	Full time

(f) Details of corporate training/sessions conducted by Faculty: None

Name of the Teacher	Training program name	Agency seeking training	No. of Trainees	Revenue earned

(g) Number of Research Scholars/ Post Graduate students getting Scholarship/financial assistance from the University/State/ Central Govt./Non-Govt.

Name of the Scheme	No. of students benefited	No. of students applied	Amount
Inspire fellowship, DST	1	1	37,000 per month+HRA
IP fellowship	1	1	25,000 per month
STRF	1	1	25,000 per month
IPRF	1	1	38,440 per month
CSIR-UGC-JRF	1	1	47,000 per month
IUPF	1	1	25,000 per month
IPRF-SRF	1	1	43,400 per month
CSIR-UGC-JRF	1	1	47,000 per month
IUPF	1	1	25,000 per month
IPRF-SRF	1	1	43,400 per month

(h) Provide the Following Details of Students Enrolled in your School during the Current Academic Year.

Programme Name		No. of Students admitted under Delhi Local Category	No. of students admitted under Outside Delhi Category *	International Students	Total
B.Sc. (PCM) (2024-25)	Male	6	3	-	9
	Female	8	3	-	11
	Transgender	-	-	-	-
MTech (NST) (2024-25)	Male	-	1	-	1
	Female	-	-	-	-
	Transgender	-	-	-	-
Ph.D. (2024-25)	Male	-	-	-	5
	Female	-	-	-	19
	Transgender	-	-	-	-

**** Those students who have passed their eligibility qualification from Institute located in places other than Delhi.***

(i) Details of students admitted under PwD Category

None

S.No.	Name of the Student	Enrolment No.	Programme	Disability Category
1.				
2.				

(j) Does your school identifies learning levels of the students as Slow Learner/Advanced Learner N.A.

If yes, how is that done (method used):

If yes, Does your School organize Special Program for Slow / Advance learner. Please provide details of such programs for:

Slow Learner _____

Advanced Learner _____

(k) Details of field projects / internships N.A.

Programme Name	Programme Code	List of students undertaking field projects /research projects / internships	Link to the relevant document	Company Name	Title of Project Report

(m) Details of School's engagement in community services and social resposnsibility Programmes / Projects / activities. None

Name of the Programmes / Projects / activities	Name of scheme	Duration & Period	No. of students involved	Details of Faculty involved

(n) No. of students appeared / qualifying in state / National / International level examination : N.A.

Students' Progression Examination	Year of Exam	No. of students Appeared	No. of students Qualified
NET	**NET (LS)**	**1**	**1**
SLET			
GATE			
GMAT	**GATE**	**2**	**2**
CAT			
GRE			
TOFEL			
All India Central Civil Services exam			
State Public Services examination			
Any Other			

8. Details of Alumni Association, Activities & Contribution

Year of Registration & Registration No.	Details of Current Office barriers	Engagement Activities undertaken	Donation or specific contribution during the year
	Mr. Mukesh Kumar	NIL	NIL

9. Does your school has vision and mission statement? Give details.

Vision

Basic sciences lie at the heart of technical and applied sciences and represent the bedrock on which they firmly stand. Physics, chemistry and mathematics form the backbone of science and technical education.

The ethos of USBAS is to nurture a platform where there is plenty of scope for excellence in teaching basic and applied science both at the undergraduate and postgraduate levels as well as support an ambiance for world class research.

Mission

To ensure that our research programmes combine the best of both fundamental and applied sciences. To expand our existing base in areas of theoretical physics, foundations of quantum mechanics, quantum information, solar photovoltaics, renewable energy, nanomaterials, thermoelectrics, differential geometry, fuzzy logic, non linear dynamics, applied mathematics, multifunctional materials, ion beam technology, mesoscopic condensed matter physics, quantum heterostructures, medicinal and natural products chemistry, photocatalysis, drug delivery and nanocomposites, to name a few.

To offer innovative and world class teaching programmes propelled by the expertise of our highly experienced and competent faculty.

10. (a) Details of Faculty who availed financial support for attending conferences / workshops / membership of professional bodies etc.

Name of the teacher	**Name of conference / workshop / Professional Body**	**Amount sanctioned**	**Month/Year**
Prof. Rashmi Bhardwaj	Annual membership SIAM	As per University norms $189.00	2024- 2025

(b) Percentage of full time Faculty who received awards, recognition, fellowships at State, National, International level from Government, Non-Govt. recognized bodies during the academic year. (Full Time means regular and contracts both)

Year of award	Name of full time Faculty receiving awards from state level, national level, international level	Name of the award, fellowship, received from Government or recognized bodies
2024	Prof. Rashmi Bhardwaj	Certificate of Appreciation for dedication, commitment, growth and development of the University (Silver Jubilee Anniversary), 05.09.2024 - Guru Gobind Singh Indraprastha University
2024	Prof. Rashmi Bhardwaj	Certificate of Appreciation for two decades of unwavering support (Silver Jubilee Anniversary), 12.12.2024 - Guru Gobind Singh Indraprastha University
2024	Prof. Rashmi Bhardwaj	Dr. A. P. J. Abdul Kalam Nation Star Award 2024 as an Excellent Researcher - WELRED Organization (registered with NITI Aayog, Govt. of India)
2024	Prof. Rashmi Bhardwaj	Rabindranath Tagore Hall of Fame Award 2024 as an Excellent Researcher - WELRED Organization (registered with NITI Aayog, Govt. of India)

11. Publications of the School : (with details of frequency of publication, indexing and mode – online or print) N.A.

Journals:

Newsletter:

Magazines:

12. Areas of Concern:

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13. Overall Observations and Recommendations

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(_____)
Name & Signature:

(_____)
Name & Signature:

(_____)
Name & Signature:

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Name & Signature:

Note : *May add additional sheet/s, if required.*