

# Faculty Profile on University Website www.mjpru.ac.in

Title <b>Dr.</b>	First Name	Gaurav Kumar	Last I	Name	Upadhy	ay	Photograph		
Designation	Assistant I	Assistant Professor							
Department	Physics	TOTOSSOT							
Address		t Governm	ent Co	illege.	Rhadnu	ra.			
51 51 5 15 15	Constituent Government College, Bhadpura, Nawabganj, Bareilly								
(Residence)	Tuwasgan	j, Durenry							
Phone No									
(Campus)							AHA NETT		
(Residence)									
Mobile		196845, +91- 7983139279							
Fax							The state of the s		
Email	gauravphd	123@gmai	l.com						
		narupadhya		jpru.a	ıc.in				
Research Gate Id	https://www	v.researchgat	te.net/	profile,	/Gaurav-K	-Upa	<u>adhyay</u>		
Orcid Id	https://orcid	d.org/0000-0	002-56	72-295	66				
Linkedin Id	https://www	v.linkedin.cor	m/in/dı	r-gaura	ıv-kumar-ı	upad	lhyay-b6077920b		
Web-Page									
Educational Qualifica	tions (Gradu	ation Onwa	rds)						
Course/Degree	Institution			Year		Deta	ails/Thesis		
						Top	ic/Subjects		
B.Sc.	Gurukula Kangri		2			Physics, Computer Science,			
		ishwavidyalaya, aridwar-249404				Mat	athematics, DDS		
	Uttarakhan								
M.Sc.	Gurukula K	_	2	2016		Phys	sics		
	Vishwavidyalaya,								
		Haridwar-249404							
	Uttarakhan								
Ph.D.	Gurukula Kangri (Deemed		ned 2				Synthesis and		
	to Be Unive	• / /					aracterisation of		
	Haridwar-249404 Uttarakhand			Nan Pho			nocomposites for		
							otocatalytic and		
Career Profile						LII0	tovoltaic Applications		
Organization / Institut	tion	Designation	)	Durat	tion		Role		
Constituent Government		Assistant	L			722	Taught UG and PG		
College, Bhadpura, Nawabgani,		Professor				classes & Researcher			
Bareilly, (A part of MJPRU),		1 10103301		10 00	Continue	<b>4</b>	Classes & Researcher		
Bareilly	,,								
Doon University (A State		Assistant		From 05-09-2022		)22	Taught UG and PG		
University), Dehradun		Professor		to 07-12-2022			classes & Researcher		
.,,, = =======		_ 10145501					(Active role in NAAC		
							data preparation)		
Gurukula Kangri (Dea	emed to Be	Assistant		From 30-05-2022		)22	Taught UG and PG		
University), Haridwar		Professor		to 15-06-2022			classes & Researcher		

Uttarakh	and		
Research	n Interests / Specialization	1	
Conden Semicor Applica	nductor for Photocata	•	haracterization of Metal Oxide Solar Cell Application/ Sensing
Teaching	g Experience (Subjects/C		
Taught S. No.	PHYSICS in UG and Po Class	G classes Subject	Place
1.	B.Sc.	Physics	Constituent Government PG Degree
		1 Hysics	College Bhadpura, Nawabganj,
			Bareilly
2.	M.Sc.	Mathematical Physics,	Constituent Government PG Degree
		Quantum Mechanics,	College, Bhadpura, Nawabganj,
		Classical Dynamics,	Bareilly
		Advance Quantum II,	
		Electrodynamics, Solid	
		State Physics,	
		Electronic and Digital	
		<b>Electronics, Thermal</b>	
		and Statistical Physics,	
		Communication	
		Electronic, Atomic	
		Physics, Nuclear	
		Physics	
3.	B.Sc. III Sem.	Thermal and	Gurukula Kangri Vishwavidyalaya
		Statistical Physics	Haridwar
4.	M.Sc. Lab III Sem and	Communication I and	Gurukula Kangri Vishwavidyalaya
	IV Sem.	II	Haridwar
5.	B.Sc. II Sem	Electricity and	Gurukula Kangri Vishwavidyalaya
	•	Magnetism	Haridwar
6.	B.Sc. IV Sem	Wave and Optics	Gurukula Kangri Vishwavidyalaya
			Haridwar
7.	M.Sc. Lab I Sem and	General Physics Lab	Gurukula Kangri Vishwavidyalaya
	II Sem		Haridwar
8.	B.Sc. I year	Electricity and	Pherupur Degree College
		Magnetism	Pherupur
9.	B.Sc. I year	Electricity and	Pherupur Degree College

		Magnetism	Pherupur
10.	B.Sc. I year	Waves and Oscillations	Pherupur Degree College
ļ			Pherupur
11.	B.Sc. I year Lab	General Physics Lab	Pherupur Degree College
ļ			Pherupur
12.	B.Sc. II Sem Lab	Electricity and	Gurukula Kangri (Deemed to be
(		Magnetism Lab	University) Haridwar
13.	B.Sc. IV Sem Lab	Optics lab	Gurukula Kangri (Deemed to be
;			University) Haridwar
14.	B.Sc. VI Sem Lab	Electronics Lab	Gurukula Kangri (Deemed to be
			University) Haridwar
15.	M.Sc. IV Sem	Quantum II	Gurukula Kangri (Deemed to be
;			University) Haridwar
16.	M.Sc. II Sem	Vedic Physics	Gurukula Kangri (Deemed to be
•			University) Haridwar
17.	Integrated M.Sc. I Sem	Mechanics	Doon University, Dehradun (A
;	Lab		State University)
18.	Integrated M.Sc. I Sem	Basic Instrumentations	Doon University, Dehradun (A
	Lab		State University)
19.	Integrated M.Sc. V	Classical Dynamics	Doon University, Dehradun (A
,	Sem		State University)
20.	M.Sc. I Sem	Quantum Mechanics	Doon University, Dehradun (A
;			State University)
21.	M.Sc. I Sem	Quantum Mechanics II	Doon University, Dehradun (A
,			State University)

Honors & Awards

During B.Sc. and M.Sc. received Inspire Scholarship by Department of Science and Technology (DST) Govt. of India.

M.Sc. Physics (**First Rank Holder/Gold Medalist- Batch-2016**) from Gurukula Kangri University, Haridwar.

**Inspire Junior Research Fellow** from Oct. 2016 to Nov. 2018.

**Inspire Senior Research Fellow** from Dec. 2018 to 07-04-2021.

Publications / Academic Activities (Numbers Only)							
Books &	Research Papers	<b>Papers Presented</b>	Seminars/		Research Projects		
Monographs	<b>Published in</b>	in Seminars/	Conferences		(Completed)		
(Single	International	Conferences	Organized				
Author)	Journals						
00	11	07	00		00		
Books (Co-	Research Papers	Seminar/	Workshops		Research Projects		
authored)	<b>Published in</b>	Conferences	Organized		(Ongoing)		
	<b>Other Journals</b>	Attended					
00	00	00	00		00		
Books (Edited)	<b>Articles Published</b>	<b>Sessions Chaired</b>	Membership	01	<b>Foreign Countries</b>		
Chapters in	in Popular Fora,	in Seminars/	of Academic/		Visited for		
Edited Books	e.g., Websites,	Conferences	Professional		Academic		
Euiteu Dooks	Blogs, Newspapers,	Resource	Bodies		Assignments		
		Lectures					
	Magazines etc.	Delivered					

Details of P	ublications /Academic Activities (201	l O Or	wards)			
(a) Books /	Monographs					
Year of Publication	<u>Title</u>		<u>Publisher</u>		<u>ISBN</u>	Co-Author (s) (if any)
(b) Papers P	Published in Indexed/ Peer Reviewed.	Journ	<u>als</u>			
Year of	<u>Title</u>	Jou	<u>rnal</u>	I	SSN/	Co-Author
<b>Publicati</b>				In	dexing	<u>(s)</u>
on						(if any)
(2022)	Sb incorporated SnO <sub>2</sub>	Jou	rnal of	0025	5408	Mohini
	nanostructured thin films for CO <sub>2</sub>	Alle	oy and			Panday,
	gas sensing and humidity sensing	Cor	mpounds			Gaurav K.
	applications		-			Upadhyay,
						L.P. Purohit
(2022)	Gd-doped ZnO:TiO <sub>2</sub>	Ma	terials	0025	5408	Sagar Panwar,
	Heterogenous Nanocomposites for	Res	search			G.K.
	Advance Oxidation Process,	Bul	lletin			Upadhyay,
	ŕ					L.P. Purohit
(2021)	Sustainable behavior of	Joi	urnal of	0925	8388	Kumud
	cauliflower like morphology of Y-	Alle	oys and			Choudhary,
	doped ZnO:CdO nanocomposite		mpounds			Richa Saini,
	thin films for CO <sub>2</sub> gas sensing		-			G.K.
	application at low operating					Upadhyay,
	temperature					L.P. Purohit
(2021)	Effect of Li-doping on passivation	Par	mana	0304	4289	Mohini
	of trap states and improvement in					Pandey, G.K.

	charge transport in TiO <sub>2</sub> Thin			Upadhyay,
	Films			L.P. Purohit,
(2021)	Wrinkle type nanostructured Y-	Materials	00255408	Kumud
	doped ZnO thin films for oxygen	Research		Choudhary,
	gas sensing at lower temperature,	Bulletin		Richa Saini,
				G.K.
				Upadhyay,
				Vijay S. Rana,
				L.P. Purohit
(2021)	rGO-ZnO nanocomposites as	Journal of	03043894	S. Kumar,
	efficient photocatalyst for	Hazardous		R.D. Kaushik,
	degradation of 4-BP and DEP	Materials		G.K.
	using high temperature refluxing			Upadhyay,
	method in in-situ condition			L.P. Purohit
(2021)	Optimized CdO:TiO <sub>2</sub>	Journal of	09258388	G.K.
	nanocomposites for heterojunction	Alloys and		Upadhyay,
	solar cell applications	Compounds		V. Kumar,
				L.P. Purohit,
(2020)	Heterogeneous Ternary Metal	Crystal and	02321300	G.K.
	Oxide Nanocomposites for	Research		Upadhyay,
	Improved Advanced Oxidation	Technology		T.K. Pathak,
	Process under Visible Light			L.P. Purohit
(2020)	Photoactive CdO:TiO <sub>2</sub>	Materials	02540584	G.K.
	nanocomposites for dyes	Chemistry		Upadhyay,
	degradation under visible light,	and Physics,		J.K. Rajput,
				T.K. Pathak,
				H.C. Swart,
				L.P. Purohit
(2020)	Tailoring and optimization of	Applied	1694332	G. K.
	hybrid ZnO:TiO <sub>2</sub> :CdO	Surface		Upadhyay, J.
	nanomaterials for advance	Science		K. Rajput, T.
	oxidation process under visible			K. Pathak,
	light			P.K. Pal, L.P.
				Purohit
(2019)	Synthesis of ZnO:TiO <sub>2</sub>	Vacuum	0042207X	G.K.
	nanocomposites for photocatalyst			Upadhyay,
	application in visible light,			J.K. Rajput,
				T.K. Pathak,
				V. Kumar,
				L.P. Purohit

(c) Articles

## (d) Seminar/Conference Presentations

## **International Conferences**

- 1. Z- scheme based photoactive ZnO:TiO  $_2$ :CdO:g-C $_3$ N $_4$  nanocomposites for advance oxidation process, **22-24 November 2023,** Department of Physics, University of Allahabad, Allahabad, (India)
- 2. Tailoring and Optimization of Hybrid ZnO:TiO<sub>2</sub>:CdO Nanomaterials for Advance Oxidation Process in Visible Light, International Conference on Recent Advances in Fundamental and

Applied Sciences, November 5-6, 2019, Lovely Professional University, Punjab, India.

3. ZnO:TiO<sub>2</sub> Nanocomposite for Application in Photocatalyst Under Visible Light, International Symposium on Functional Materials, **April 13-15**, **2018**, Chandigarh University, Chandigarh.

#### **National Conferences**

- 4. Z- Scheme based ZnO:TiO<sub>2</sub>:CdO:g-C<sub>3</sub>N<sub>4</sub> nanocomposites for advance oxidation process under visible light, National Conference on Recent Advances in Theoretical & Experimental Sciences (NCRATES-2023), **29-30 September**, **2023**, Bhakt Dharshan PG College Jaiharikhal, Uttarakhand (**Awarded by Best Oral Presentation**).
- 5. Nanocomposites for Efficient and Low Cost Water Purification, Relevance of Veda, Science & Technology in COVID-19, **30-31 July 2020**, Gurukula Kangri Vishwavidyalaya, Haridwar, India.
- 6. Photoactive CdO:TiO<sub>2</sub> Nanocomposites for Dyes Degradation Under Visible Light, National Conference on Science & Technology: Rural Development, **February 15-16, 2020,** The Indian Science Congress Association: Haridwar Chapter Gurukula Kangri Vishwavidyalaya, Haridwar, India (**Awarded third Prize in poster presentation**).
- 7. Electrical, Optical and Photocatalytic Activity of ZnO/TiO<sub>2</sub> Thin Films Synthesized by Sol-Gel Method, XXXII annual IAPT convention 2017 and National Symposium on Recent Trends in Physics at different scales, **October 29-31**, **2017**, Gurukula Kangri Vishwavidyalaya, Haridwar, India.
- (e) Resource Lectures Delivered
- (f) Seminars/Conferences/Workshops Organized
- (g) Public Service / University Service / Consulting Activity
- (h) Memberships of Academic/Professional Bodies

Life member of The Indian National Science Congress Association (ISCA).

Projects (With Title, Year, Grants, Funding Agency and Collaborations)

#### Administrative Positions/Assignments Held

- ❖ A **convenor** of Internal Quality Assurance Cell (IQAC) Committee in CGC, Bhadpura, Nawabganj, MJPRU, Bareilly
- ❖ A **member** of Proctorial Board in CGC, Bhadpura, Nawabganj, MJPRU, Bareilly.

- ❖ A **member** of Cultural and Literary Activities Committee (CLAC) in CGC, Bhadpura, Nawabganj, MJPRU, Bareilly.
- ❖ A **member** of Internal Exam Affairs and Time Table Committee in CGC, Bhadpura, Nawabganj, MJPRU, Bareilly.
- ❖ A **member** of Career Counselling Committee in CGC, Bhadpura, Nawabganj, MJPRU, Bareilly.

### Academic Foreign Visits

#### Any Other Details

- ♣ Successfully completed and obtained A<sup>+</sup> grade in a two-week refresher course "Managing Online Classes & Co-creating MOOCS" conducted by Teaching learning Centre, Ramanujan College, University of Delhi in the collaboration with Bareilly College Bareilly, U.P. from 05 to 19 August 2023.
- ♣ Participated in **DST INSPIRE review meet**, Sept. 2019, organized by Department of Science and Technology, Govt. of India at Chandigarh University.
- ♣ M.Sc. Dissertation on "Solar Power Economy in India" at G.K.V. Haridwar, India.

Signature of Faculty Member