

# Faculty Detail Performa 2017-21



#### 1. Personal Details

Name	Dr. Onkar Mangla	
Designation	Assistant Professor	
Department	Physics	100
Email	onkarmangla@dr.du.ac.in	



# 2. Educational Qualification

Degree	Institution	Year
B.Sc. (H) Physics	Dyal Singh College, University of Delhi	2006
M.Sc. (Physics)	Kirori Mal College, University of Delhi	2009
Ph.D. (Physics)	University of Delhi	2015

## 3. Full Time Research Experience

Designation	Institute	Time period	Nature of Appointment
Junior Research Fellow	Department of	01.07.2009 to	NA
	Physics and	30.06.2011	
	Astrophysics,		
	University of Delhi		
Senior Research Fellow	Department of	01.07.2011 to	NA
	Physics and	30.06.2014	
	Astrophysics,		
	University of Delhi		

# 4. Full time Teaching Experience

s.no	Designation	Institution	Time Period	Nature of Appointment
1.	Assistant Professor	Daulat Ram College, University of Delhi	July 2017 to Till date	Adhoc
2.	Assistant Professor	Ramjas College, University of Delhi	October 2016 to May 2017	Adhoc

3.	Guest Faculty	Hindu College,	January 2015 to	Guest
		University of	April 2017	
		Delhi		
4.	Assistant Professor	Lingaya's	October 2014 to	Permanent
		University,	January 2015	
		Faridabad		
Total				

#### 5. Administrative Assignments

Name of Institute	Designation	Status	Time period	Experience
Daulat Ram College, University of Delhi	Teacher-in-Charge, Physics Department	NA	01.05.2018 to 30.04.2019	11 months
Daulat Ram College, University of Delhi	Member, Admission Committee	NA	2018-19	1 year
Daulat Ram College, University of Delhi	Member, Purchase committee	NA	2018-19	1 year
Daulat Ram College, University of Delhi	Member, In-House Skill Development committee	NA	2018-19	1 year
Daulat Ram College, University of Delhi	Member, Discipline committee	NA	2018-19, 2019-20, 2020-21	3 years
Daulat Ram College, University of Delhi	Member, Prospectus committee (Information Bulletin)	NA	2019-20, 2020-21	2 years

#### 6. Areas of Interest:

Elements of Mechanics, Mathematical Physics, Communication Electronics, Quantum Mechanics and Applications, Electronics, Digital Electronics, Microprocessors and Microcontrollers, Digital Systems and Applications, Analog Systems and Applications, Astronomy and Astrophysics.

## 7. Subjects Taught

S.No	Course	Subject Taught	Semester	Year
1.	B.Sc. Physical	Microprocess	VI	2017
	Sciences	or		
2.	B.Sc. (H)	Digital,	1	2017
	Chemistry/Maths	Analog and		
		Instrumentati		

		on		
3.	B.Sc. (H) Chemistry/Maths	Communicati on Systems	III	2017
4.	B.Sc. (H) Physics	Digital Systems and Applications	III	2018
5.	B.Sc. (H) Chemistry/Maths	Embedded Systems: Introduction to Microcontroll ers	II	2018
6.	B.Sc. (H) Maths	Astronomy and Astrophysics	IV	2018
7.	B.Sc. (H) Physics	Basic Instrumentati on Skills	III	2018
8.	B.Sc. (H) Maths	Communicati on Systems	III	2018
9.	B.Sc. (H) Physics	Analog Systems and Applications	IV	2019
10.	B.Sc. (H) Maths	Astronomy and Astrophysics	IV	2019
11.	B.Sc. (H) Physics	Digital Systems and Applications	III	2019
12.	B.Sc. (H) Physics	Quantum Mechanics and Applications	V	2019
13.	B.Sc. (H) Physics	Analog Systems and Applications	IV	2020
14.	B.Sc. (H) Maths	Astronomy and Astrophysics	IV	2020
15.	B.Sc. (H) Physics	Digital Systems and Applications	III	2020
16.	B.Sc. (H) Chemistry/Maths	Digital, Analog and Instrumentati on	I	2020

17.	B.Sc. (H) Physics	Analog	IV	2021
		Systems and		
		Applications		
18.	B.Sc. (H)	Embedded	II	2021
	Chemistry/Maths	Systems:		
		Introduction		
		to		
		Microcontroll		
		ers		
19.	B.Sc. (H) Physics	Quantum	V	2021
		Mechanics		
		and		
		Applications		
20.	B.Sc. (H) Physics	Thermal	III	2021
		Physics		

#### 8. Research Guidance Given:

v			
y		submissi	e of
		on of	Awa
		thesis	rd
			of
NIL	NIL	NIL	NIL
	NIL	NIL NIL	on of thesis

# 9. Details of refresher/orientation course/research methodology/workshop/syllabus up-gradation/teaching —learning-evaluation/technology programmes/Faculty Development Programme

S.No.	Details	Place	Po	eriod	Year	Sponsoring/Organising
			From	То		Agency
1.	Participated as a Resource person in Workshop for development of E-resources in science for secondary stage	NCERT New Delhi	30 <sup>th</sup> October, 2017	3 <sup>rd</sup> November, 2017	2017	NCERT
2.	Participated in Two day workshop entitled "Can We Engage the Young Age! ?" organized	Daulat Ram College, University of Delhi, Delhi	June 28, 2018	June 29, 2018	2018	DRC

	under Star DBT					
3.	Project & IQAC  Participated in Online one week Faculty Development Program (FDP) on Recent Advances in Science and Technology	RPS Group of Institutions, Mahendergarh, Haryana	21 May, 2020	27 May, 2020	2020	NA
4.	Completed the Online Orientation Course on Nonviolent Communication conducted	Gandhi Smriti and Darshan Samiti	-	-	2020	NA
5.	Attended and Participated in Online Refresher Course on Astronomy and Astrophysics 2020	Teaching learning Centre (TLC) of IUCAA	11 May, 2020	12 June, 2020	2020	IUCAA
6.	Participated in E-Faculty Development Programme (E-FDP) on Empowering Teaching- Learning Process Using Google Classroom and Other ICT Tools: A Comprehensive Practical Approach	Department of Commerce, Daulat Ram College, University of Delhi	21 July, 2020	23 July, 2020	2020	NA
7.	Participated in One Week Online International Faculty Development	Department of Computer Science and Engineering, Karunya Institute of	03 August, 2020	07 August, 2020	2020	NA

Program on	Technology			
Technologies	and Sciences,			
for Societal	Tamil Nadu,			
Needs- Real	India and			
Time	Department of			
Applications of	Computer			
AI, ML and	Science and			
Research	Engineering,			
initiatives	North Eastern			
	Regional			
	Institute of			
	Science and			
	Technology,			
	Arunachal			
	Pradesh, India			

# 10. MOOCs completed with e-certification

S.No.	Details	Subject	Certification	Date of	Level	Year	E-
	of		providing	certification	(UG/PG/Other)		certification
	MOOC		agency				no.
NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL

## 11. Contribution towards development of e-content/MOOCs in 4- quadrants

S.No.	Details of	Quadrants	No. of	Course	Sponsoring	Year	Level
	E-	developed	Modules		agency		(UG/PG/Other)
	contents/						
	MOOCs in						
	4-						
	quadrants						
NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL

#### 12. Contribution towards conduct of MOOCs

S.No.	Details of MOOC	Subject	Sponsoring agency	Level (UG/PG/Other)	Year	E-certification no.
NIL	NIL	NIL	NIL	NIL	NIL	NIL

# 13. Organising seminars/ conferences/workshops, other college/university activities.

S.No.	Year	Details	Place	Period		Sponsoring/Organising
				From	To	Agency
1.	2018	Resource person and	Daulat Ram	December	December	INSPIRE
		Member of organizing	College,	17, 2018	21, 2018	
		committee for	University			

		"Inspire Science	of Delhi,			
2.	2018	Camp"  Resource Person for In-House Skill  Development  Program under IQAC on "Basic Electronic Skills and Applications"	Delhi Department of Physics, Daulat Ram College	December 24, 2018	December 31, 2018	NA
3.	2019	Participated and Member of Organizing team in National Symposium/Workshop on Yoga and Meditation for the Holistic Well Being	Daulat Ram College, University of Delhi, Delhi	7 <sup>th</sup> March, 2019	7 <sup>th</sup> March, 2019	NA
4.	2019	Course-Coordinator and Resource Person for In-House Skill Development Program under IQAC on "Latex and its Applications"	Department of Physics, Daulat Ram College	July 12, 2019	July 19, 2019	NA
5.	2019	Resource Person in Skill Enhancement Workshop for Non- Teaching Staff	Daulat Ram College, University of Delhi, Delhi	July 2019	July 2019	NA
6.	2019	Participated and Member of Organizing team in Workshop on Quantum Mechanics and its Applications	Daulat Ram College, University of Delhi, Delhi	24 <sup>th</sup> September, 2019	24 <sup>th</sup> September, 2019	NA
7.	2020	Participated and Member of Organizing Team in Webinar on Art and Science of Mentoring	Daulat Ram College, University of Delhi, Delhi	1 June, 2020	1 June, 2020	NA

14. Creation of ICT mediated Teaching Learning pedagogy and content and development of new and innovative courses and curricula

**Development of Innovative Pedagogy e module** 

S.No.	Name of the Module	Subject	Stream	Organization for which it was developed	Year	Level (UG/PG/Other)	Weblink
NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL

# 15. Research Projects ongoing 2017-21

S.No	Name of Research	Funding Agency	National/International	Duration	Amount Sanctioned	Amount Received
	Project	Agency			Sanctioned	Received
NIL	NIL	NIL	NIL	NIL	NIL	NIL

#### 16. Research projects Completed

S.No	Name of Research Project	Funding Agency	National/International	Duration	Amount Sanctioned	Amount Received
NIL	NIL	NIL	NIL	NIL	NIL	NIL

# 17. Books published

S.No	Authors (year)Name of Book. Publisher, ISBN No	Publisher	Date of publishing	Authored/Edited	ISBN No
NIL	NIL	NIL	NIL	NIL	NIL

## 18. Book Chapters/Articles published

S.No	Author(year) Title of Chapter/Article,in Edited Book: Title of book, Publisher, Vol, Page no	Date of publishing	Authored/Edited	ISBN No
NIL	NIL	NIL	NIL	NIL

#### 19. E- Modules Published

S.N	Author (year) Title, Module, Subject	Date	Authored/E	Link
0	,Organisation, Weblink	of	dited	
		publis		
		hing		
NIL	NIL	NIL	NIL	NIL

#### 20. Research Publications:

S.No	Author/s(Year) Journal Name, Vol, series, pg no, ISSN	Date of Publishing	Impac t Facto r	UGC Care List Journal Yes/No	Scopus Inexed Journal Yes/No
1.	Onkar Mangla,	2018	3.423	Yes	Yes
	Savita Roy, S.				
	Annapoorni, and K.				
	Asokan, "Annealing				
	of deep level defects				
	in GaAs				
	nanostructures by				
	ion beam				
	irradiation",				
	Materials Letters				
	<b>217</b> , 231-234 (2018),				
	ISSN: 0167-577X.				
2.	Onkar Mangla and Savita Roy, "Zinc Oxide Nanostructures Fabricated under Extremely Non- Equilibrium Plasma Conditions", Solid State Phenomena 287, 75-79 (2019), ISSN: 1662-9779.	2019	0.468	Yes	Yes

3.	Onkar Mangla and Savita Roy, "Monoclinic Zirconium Oxide Nanostructures Having Tunable Band Gap Synthesized under Extremely Non-Equilibrium Plasma Conditions", Proceedings 3, 10 (2019), ISSN: 2504-3900.	2019	NA	No	Yes
4.	Onkar Mangla and Savita Roy, "Metal-Oxide- Semiconductor Capacitors Fabricated on Zirconium Oxide High-K Gate Dielectric Nano- Layers", International Journal of Recent Technology and Engineering (IJRTE) 7 (6S), 868-870 (2019), ISSN: 2277-3878 (Online).	2019	6.04	No	Yes
5.	Onkar Mangla and Savita Roy, "Study of Morphological, Structural, Optical and Transport Properties of Gallium Nitride Nanodots Fabricated under Extreme Plasma Conditions", International Journal of Advances in	2019	3.15	No	Yes

	Science Engineering and Technology (IJASEAT) <b>7 (1-S-2)</b> , 4-8 (2019), ISSN(p): 2321 – 8991, ISSN(e): 2321 –9009.				
6.	Onkar Mangla, Savita Roy, S. Annapoorni, and K. Asokan, "A study on defect annealing in GaAs nanostructures by ion beam irradiation", Bulletin of Materials Science 43, 78 (2020), ISSN: 0250-4707 (Print) 0973-7669 (Online).	2020	1.783	Yes	Yes
7.	Onkar Mangla and Savita Roy, "Synthesis of gallium arsenide nanostructures for solar cell applications", Materials Letters 274, 128036 (2020), ISSN: 0167-577X.	2020	3.423	Yes	Yes
8.	Onkar Mangla and Savita Roy, "Bilayer of zirconium oxide/lanthanum oxide high-k dielectric fabricated for metal-oxide- semiconductor nano-electronic device applications", Materials Letters	2021	3.423	Yes	Yes

	<b>301</b> , 130242 (2021), ISSN: 0167-577X.					
9.	Onkar Mangla, and Savita Roy, "Synthesis of nano-diamond-like carbon for protective optical window coating applications", Bulletin of Materials Science (Accepted) (2021), ISSN: 0250-4707 (Print) 0973-7669 (Online).	2021	1.783	Yes	Yes	

# 21. Conference Proceedings publication

S.no	Title of Paper (Year) Title of conference	Date of Publishing	Peer	Venue of
	proceedings , Vol, series, Pg no , ISBN		Reviewed	conferenc
			Yes/No	е
NIL	NIL	NIL	NIL	NIL

# **22.** Conference Attended and Paper presentation

s.no	Type of Event	Name of Event	Venue of conference	Date of conference	Attended only Yes/no	paper presen ted Yes/N o	Title of Paper Presente d
1.	Internation al Conference	9 <sup>th</sup> International Conference on Manufacturing Science and Technology (ICMST 2018)	University of Malaya, Kuala Lumpur, Malaysia	11-13 August, 2018	No	Yes	Zinc Oxide Nanostr uctures Fabricat ed Under Extremel y Non- Equilibri um Plasma

							Conditio ns
2.	Internation al Online Conference	1 <sup>st</sup> International Online Conference on Nanomaterials (IOCN 2018)	Online	1-15 September, 2018	No	Yes	Monocli nic zirconiu m oxide nanostru ctures having tunable band gap synthesiz ed under extremel y non-equilibri um plasma conditio ns
3.	Internation al Conference	4 <sup>th</sup> International conference on Nanotechnology and Nanomaterial's (Nanotek Summit 2k18)	Flora Creek Deluxe Hotel Apartments, Dubai, U.A.E.	21-22 September, 2018	No	Yes	Metal-Oxide-Semicon ductor Capacito rs Based on Zirconiu m Oxide High-K Gate Dielectri c Nanolay ers
4.	Internation al Conference	108 <sup>th</sup> International Conference on Nanoscience, Nanotechnology and Advanced Materials (IC2NM 2018)	Village Hotel Changi, Singapore	2-3 December, 2018	No	Yes	Study of Morphol ogical, Structur al, Optical and Transpor t Properti

							es of Gallium Nitride Nanodot s Fabricat ed under Extreme Plasma Conditio ns
5.	National Symposium	33 <sup>rd</sup> National Symposium on Plasma Science & Technology (PLASMA 2018)	Department of Physics and Astrophysics, University of Delhi, Delhi- 110007, India	4-7 December, 2018	No	Yes	Plasma- Assisted Depositi on of Zinc Oxide Nanostr uctures in Nitrogen Ambient
6.	Internation al Conference	International Conference on Advance in Smart Materials & Emerging Technologies (ASMET 2020)	Department of Applied Sciences and Humanities, Indira Gandhi Delhi Technical University for Women (IGDTUW), Delhi, India	23-24 January, 2020	No	Yes	Metal-Oxide-Semicon ductor Capacito rs Fabricat ed on Nanolay ers of Zirconiu m Oxide as High-K Gate Dielectri c

# 23. Resource Person (Invited Lecture/Paper Presentation/ Chairing session/judging/ educational trips)

S.N	Type of	Name of	Venue	Date of	State your role:	Duratio	No of
О	Event	Event		Event	Convener/Memb	n of	participan
					er organizing	Activity	t in the
					committee/		programm
					Speaker/		e
					Coordinator		

| NIL |
|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     |     |     |     |     |     |     |

#### 24. Awards Won

S.No	Name of	Awarding	Government/ NGO/	Recognition	Date of	Type of
	Award	Agency	International/Private	area	award	Honor
						received
1.	Excellent Paper Award	Academics World	International	Academics for paper presentation	2 December 2018	Certificate

# 25. Extension Activity ( Community related program )

S.No	Type of Activity	Centre and Venue	Title of Event	Role in the event	Date/period of Event	No of members of the community/students /Faculty benefitted
NIL	NIL	NIL	NIL	NIL	NIL	NIL

# 26. Membership of Professional Bodies

S.No	Type of Membership	Organisation	Year of Membership
1.	Life Member	Plasma Science Society	NA
		of India	

## Signature