




Faculty Detail Performa (2018-21)



Name of Faculty

Name	Dr. Shefali Jain	Photo 
Designation	Assistant Professor	
Phone No	9013779052	
Email	jshefali85@yahoo.com	

Educational Qualification

Degree	Institution	Year
Ph.D. (Physics)	AcSIR-National Physical Laboratory, Delhi	2019
M.Tech (Nanotechnology)	NIT Kurukshetra	2010
M.Sc. (Physics)	Kirori Mal College, University of Delhi	2007
B.Sc (H) Physics	Kirori Mal College, University of Delhi	2005

Full Time Research Experience

Designation	Institute	Time period	Nature of Appointment
Ph. D. Awarded (With Women Scientist WOS-A Scheme)	National Physical laboratory Delhi	2015-2019	Ph.D.

Full time Teaching Experience

s.no	Designation	Institution	Time Period	Nature of Appointment
1.	Assistant Professor	Daulat Ram College, University of Delhi	August 2019-Present	ADHOC
2.	Assistant Professor	Kirori Mal College	Jul 2012- Mar 2013	ADHOC
3.	Assistant Professor	S. G. T. B. Khalsa College	Jul 2011- May 2012	ADHOC
4.	Assistant Professor	Kalindi College	Jan- Jun 2011	ADHOC

Administrative Assignments

Name of Institute	Designation	Status	Time period	Experience
Daulat Ram College	Coordinator from Physics	Completed	December 2019	5 months

	Department, NIRF Ranking work			
Daulat Ram College	Coordinator for Physics Fest Activity "IMPROMPTIUM"	Completed	February 2020	-
Daulat Ram College	Students Association in Charge Physics Department "Coherence" 2021	Ongoing	July 2021	
Daulat Ram College	Department Library Committee	Ongoing	July 2021	
Daulat Ram College	College Library Committee	Ongoing	July 2021	
Daulat Ram College	Library committee	Ongoing	August 2021	
Daulat Ram College	Eco Club	Ongoing	September 2021	
Daulat Ram College	Placement Cell	Ongoing	September 2021	

Areas of Interest in Teaching:

Physics (Communication Systems, Astronomy and Astrophysics, Electronics, Digital, analog and Instrumentation, Mathematical Physics, C/C++, SCI Lab.), Nanomaterials and applications.

Subjects Taught

S.No	Course	Subject Taught	Semester	Year
1	B.Sc. (H) Chem, Maths	Digital, Analog and Instrumentation (GE)	II	2019
2	B.Sc. (H) Physics	Communication Systems (DSE)	VI	2020
3	B.Sc.(H) Maths	Astronomy and Astrophysics (GE)	IV	2020
4	B.Sc. (H) Physics	Mechanics (Lab)	I	2020
5	B.Sc. (H) Physics	C++ (Lab)	I	2020
6	B.Sc. (H) Physics	Mathematical Physics-I	I	2020
7	B.Sc. (H) Physics	Communication Systems (GE-Theory)	III	2020

8	B.Sc. (H) Physics	Advanced MP I (DSE- Lab)	V	2020
9	B.Sc. (H) Physics	Waves and Optics (Lab and Theory)	II	2021
10	B.Sc. (H) Physics	Embedded Systems- Introduction of Microcontroller (GE- Lab)	II	2021
11	B.Sc. (H) Physics	Astronomy and astrophysics (GE -Theory and tutorials)	IV	2021
12	B.Sc. (H) Physics	Electromagnetic theory (Lab)	VI	2021

Research Guidance

Name of student	Gender	Degree for which guidance given	Date of Registration	Supervisor/Cosupervisor	University	Title of Thesis	Date of submission of thesis	Date of Award of Degree
Anshu Tyagi	Female	B.Sc. (H) Physics	NA	Dr. Shefali Jain	University of Delhi	TIME CONTROLLED SYNTHESIS OF CADMIUM SULFIDE NANOPARTICLES BY CHEMICAL BATH DEPOSITION METHOD	June, 2020	NA

Research Projects ongoing 2018-20

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

Research projects Completed 2018-20

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

Publications:

Books

S.No	Citation	Publisher	Date of publishing	Authored/Edited	ISBN No

Book Chapters/Articles

S.No	Citation	Publisher	Date of publishing	Authored/Edited	ISBN No
1	Jain S, Semalti P, Singh VN, Sharma SN. Chemical Route Synthesis and Properties of CZTS Nanocrystals for Sustainable Photovoltaics. In Chemical Methods for Processing Nanomaterials 2021 Mar 15 (pp. 195-216). CRC Press.	First edition published 2021, CRC Press, Taylor & Francis Group, LLC	Mar 2021	Authored	ISBN: 978-0-367-0888-9 (hbk)

E- Modules

S.No	Citation	Publisher	Date of publishing	Authored/Edited	Link

Research Publications:

International

S.No	Citation	Date of Publishing	Impact Factor	UGC Care List Journal	Scopus Indexed Journal	ISSN No
	ISSN No. : ISSN 0749-6036					

	UGC Care list: Yes Scopus index: Yes			Yes/No	al Yes/No	
1	Shefali Jain , Parul Chawla, Shailesh Narain Sharma, Dinesh Singh and N Vijayan, “Efficient Colloidal Route to Pure Phase Kesterite Cu ₂ ZnSnS ₄ (CZTS) Nanocrystals with Controlled Shape and Structure” Journal of Superlattices and Microstructures, Elsevier, Volume 119, 59-71. https://doi.org/10.1016/j.spmi.2018.04.003 (2.123)	July 2018	2.123	Yes	Yes	ISSN 0749 - 6036
2	Shefali Jain , Akanksha Singh, Govind Gupta, N. Vijayan, Shailesh Narain Sharma, “Precursor Ratio Optimizations for the Synthesis of Colloidal CZTS Nanoparticles for Photocatalytic Degradation of Malachite Green” in Journal of Physics and chemistry of solids 122,8-18 https://doi.org/10.1016/j.jpcs.2018.05.048	November 2018	2.207	Yes	Yes	ISSN : 0022 - 3697
3.	Shefali Jain , Shilpi Verma, Surinder P. Singh and Shailesh Narain Sharma, “Novel Electrochemical Biosensor for Uric Acid Detection nanostructured Cu ₂ ZnSnS ₄ (CZTS) thin films” Journal of Biosensors and Bioelectronics 127, 135-141 https://doi.org/10.1016/j.bios.2018.12.008	February 2019	8.173	Yes	yes	ISSN : 0956 - 5663
4.	Jain, S. , Singh, A., Kumar, M., & Sharma, S. N. (2020). Structural Modelling of Hybrid ZnO–CdSe Nano-Compounds Using X-ray Photoelectron Spectroscopy Depth-Profiling Technique. Journal of nanoscience and nanotechnology, 20(6), 3741-3753. https://doi.org/10.1166/jnn.2020.17513	June, 2020	1.353	Yes	yes	ISSN : 1533 - 4880
5.	An insight into the mechanism of charge transfer of organic (P3HT): inorganic (CZTS) composites for hybrid photovoltaics	Jan, 2021	3.846	Yes	Yes	ISSN : 1066

	https://doi.org/10.1080/10667857.2020.1870195					- 7857

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s.no	Citation	Date of Publishing	Impact Factor	UGC Care List Journal Yes/No	Scopus Indexed Journal Yes/No	ISSN No
1	Shefali Jain, Pooja Semalti, S P Singh, Shailesh Narain Sharma, “Role of Hot-Injection Technique for the Synthesis of Phase-Pure Kesterite CZTS Nanocrystals for Biosensing Applications”, Nano Trends: A Journal of Nanotechnology and Its Applications, Vol 20, No 3 (2019) pp.6-12 ISSN: 0973-418X.	27 Feb, 2019	NA	yes	Yes	ISSN: 0973-418X

Conference Proceedings publication

S.no	Citation	Date of Publishing	Name of conference	Venue of conference	ISBN No

Conference Attended and Paper presentation

s.no	Type of Event	Name of Event	Venue of conference	Date of conference	Attended	paper presented	No of papers presented
1.	Webinar	Art and Science of Mentoring	On Online portal Google meet organized by Physics Department, Daulat Ram College	01 June, 2020	Yes	No	NA
2.	Webinar	Celebrating Biodiversity	On Online portal Google meet, Daulat Ram College	04 June, 2020	Yes	No	NA
3.	Webinar	Origin of Universe: Scientific and Vedic Perspectives	On Online portal, Bhaskaracharya College of Applied Sciences (by Physics Society QUBIT)	12 June, 2020	Yes	No	NA
4.	Webinar	Material Science, Technology and Society	On online portal, by School of Physical Sciences, JNU Delhi	8-9 May, 2020	Yes	No	NA
5.	Webinar	Online Teaching and Learning Technology	Online Portal, ARSD College, Delhi University.	27 April, 2020	Yes	No	NA
6.	Workshop	Quantum mechanics and its application	Daulat Ram College, University of Delhi	24 September, 2019	Yes	No	NA
7.	Webinar Series	Century of Quantum Mechanics and Still Going Strong	Applied Physics Department, Faculty of Technology and Engineering The	15-17 June, 2020	Yes	No	NA

			Maharaja Sayajirao University of Baroda, Indian Physics Association (Baroda Chapter), Indian Association of Physics Teachers (IAPT-RC7) and Gujarat Science Academy in Association with National Academy of Sciences.				
8.	VCAN Conference	"International Virtual Conference on Advanced Nanomaterials and Applications (VCAN 2020)".	Centre for Nanotechnology Research, Vellore Institute of Technology, Vellore, India	17-19 June, 2020	Yes	No	NA
9	E-FDP	FDP on Empowering Teaching Learning Process using Google Classroom and other ICT Tools: A Comprehensive Practical Approach	Department of Commerce, Daulat Ram College, Delhi University	21-23 Jul, 2020	Yes	No	NA
10	Webinar	International Webinar - A short history of Solar Physics	Bhaskaracharya College of Applied Sciences (BCAS)	30 th July 2020	Yes	No	NA
11	E-FDP	E-FDP - Research Scholars week:	National Institute of	23-27 Sep 2020	Yes	No	NA

		Applied sciences and Humanities	Technology, Kurukshetra.				
12	Workshop	Online National workshop - Challenges of teaching physics laboratory courses in online mode	Department of Physics, Kalindi College, Department of Physics and Astrophysics, University of Delhi and NASI Delhi Chapter	23-25 Jan 2021	Yes	No	NA
13							

Resource Person (Conference/seminar/ workshop/training programme/ educational trips)

S.No	Type of Event	Name of Event	Venue	Date of Event	State your role: Convener/Member organizing committee/ Speaker/ Coordinator	Duration of Activity	No of participant in the programme
1.	Webinar	Art and Science of Mentoring	On Online portal Google meet organized by Physics Department, Daulat Ram College	01 June, 2020	Member organizing committee	1 Hour	165
2.	Educational Trip	Vigyan Samagam-Mega Science Exhibition	National Science Centre (NCSM), Delhi	14 th February 2020	Coordinator of excursion	1 Day	45
3.	Workshop	Quantum mechanics and its application	Daulat Ram College, University of Delhi	24 September, 2019	Member organizing committee	1 Day	200
4.	Educational Trip	CSIR-National Physics	National Physics	30 September 2019	Coordinator of excursion	1 Day	40

		Laborator y , Open day 2019	Laboratory, Delhi				
5.	e-SDP on Enhancing Learning Through ICT Tools for 2 nd and 3 rd year students	Physics Departme nt	Physics Department , Daulat Ram College, Delhi University	17-19 August 2020	Resource person	3 day	80
6.	e-SDP on Enhancing Learning Through ICT Tools for 1 st year students	Physics Departme nt	Physics Department , Daulat Ram College, Delhi University	17-19 December 2020	Resource person	3 day	45
7.	e-SDP on Enhancing Learning Through ICT Tools for sports, ECA & other super- numerary students (1 st year students, 2 days)	Daulat Ram College, Delhi University	Daulat Ram College, Delhi University	6 th and 9 th Jan 2021	Resource person	2 Days	30

Awards Won Nil

S.No	Name of Award	Awarding Agency	Government/ NGO/ International/Private	Recognition area	Date of award	Type of Honor received

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

Membership of Professional Bodies

S.No	Type of Membership	Organisation	Year of Membership
1	Community Member (31126333)	ACS Chemistry of life.	2020-2021