# FACULTY PROFILE (Curriculum vitae)

1.	Name	:	Dr. CHARU DOGRA RAWAT					
2. 3.	ORCID id	:	0000-0003-4141-216X (www.ord (a) Date of Birth: 19-10-1977		Cov. Female			
3.	Personal Information	:	1-7	(0)	Sex: <b>Female</b>			
4.	Address and Name of the	:	(c) Nationality: INDIAN  Name of Institute:	DAMIAS COLL	ECE LINUVERSI	TV OF		
4.	Institute where employed	•	ivame of institute:	RAMJAS COLL DELHI, DELHI,	-	IT UP		
	mstitute where employed		Department/Center/Unit	DEPARTMENT				
			Department/center/onit					
					OLECULAR BIOLOGY AND GENOMICS SEARCH LABORATORY			
				112027111011 271				
5.	Current Official Designation	:	ASSOCIATE PROFESSOR					
6.	(i) Name of Organization	:	RAMJAS COLLEGE					
	(ii) Address	:	UNIVERSITY ENCLAVE					
			UNIVERSITY OF DELHI					
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1			2 20t. (20dt. ), area,	9818616058				
1	Official Email	:	cdrawat@ramjas.du.ac.in	Official M: (d				
	Personal Email id	:	cdrawat@gmail.com	Personal M:		+91-9818616058		
7.	Permanent address	:	3 <sup>rd</sup> Floor, H. No. 87					
			KALYAN VIHAR					
			Town/City: <b>DELHI</b>	State & Cou	ntry: <b>DELHI,</b>	PIN: <b>110 009</b>		
			Londino #Joousta:	INDIA				
8.	Address for Communication	+.	Landline #:(country, area)					
٥.	Address for Communication	:	1307, TOWER 22, LOTUS BOULEVARD, SECTOR-10	in .				
			Town/City: <b>NOIDA</b>	State & Cou	ntry: <b>UTTAR</b>	PIN: <b>201304</b>		
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			Landline #:(country, area) +91-1	20-4997348				
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			1.	B.Sc.							
				D.3C.	KIRORI MAL	DE	ELHI	UNIV		1998	
			2.	M.Sc.	KIRORI MAL	DE	ELHI	UNIV	. OF	2000	
				M. Phil.	COLLEGE			DELH	ı		
			3. 4.	Ph.D.	- DEPARTMEN	JT DE	ELHI	- UNIV	OF	SUBMITTED -	
			5.	. Post- Doc. Fellow	Jerry L. Petti Memorial V. Medical Center	y is Ca	alifornia, ISA)	DELH -	_	2005 AWARDED – 2006 2005-2006	
			6.	MS	School of	Fd	linburgh	Unive	ersity	2010-2011	
			٥.	1415	Biological		nited	of	J. Jicy	2010 2011	
					Sciences	•	ngdom)		ourgh		
10.	Details of Employment	:	#	Name and	Address of		Designation	on	Perio		
					llege, Univers		Associate			th-Year) 2018 – Nov. 2021	
									<b>A1</b> /	2006 Nov. 2010	
			•	of Delhi, D	elhi		Professor				
			•	Hindu Colle Delhi, Delh	-	-	Assistant Professor		Aug -	Nov 2006	
			•	Deshbandl University		Lecturer		Nov 2004 – April 2005			
			•	Kirori Mal			Lecturer		Aug – Sep 2004		
				University	of Delhi, Delh	i					
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11.	Areas of Teaching	:	#		jects Ir	nstit.					
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		-	Biolo Biot Gen Deve	Biology, ecular ogy, Animal echnology, etics, elopmental ogy, Ecology	Ramjas College, University of Delhi	Nov 2000 Date		UG	ewsletter2021.p df Faculty Award (2018) for valuable academic contribution
			Biolo	ecular ogy, Animal echnology	Hindu College, University of Delhi	Aug 2000 Nov 2000	6 – ember	UG	
			Biolo	elopmental ogy, Cell And ecular	Desh- bandhu College, University of Delhi		ember 4-April 5	UG	
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13.	Membership of Professional Societies. List positions as	: 1	1.	Member (Ann	Society, UK				r Ecological Restoration
	office bearers of any such bodies	2	2.	Member (Life of Microbiolo (AMI)	e), Association gists of India	5. E	ditorial B	oard Men	nber, Biosphere Journal
		3	3.	Executive Cor (Board) Mem Soil Contamir Research (INS	ber, Indian nation	Mic		y, 3 Biotec	ırnals - Indian Journal of h, Frontiers in

14.	Award	s & Recognitions	1.	Indian National Academy (INSA Award 2021		3.		under UK week adv	(IERI pro	hampionship, oject, to do one- aining in e, UK (2015)
			2.	Faculty Develop Program- Unive fellowship for p (Bioinformatics) University of Ed (2010-11)	rsitas21 ursuing MS ) at	4.		the Youn delegatio Innovatio Scientists Science a People's	g Scient on to Chi on tour f hosted nd Tech Republi	versity of Delhi in ist Indian ina under China for Indian Young by Ministry of inology of the c of China and india (September
15.	Publica	ation details:								
	S. No.	Authors	Title		Name of Journal (Impact Factor)	Vol	ume	Page	Year	DOI
	1.	Varunendra Singh Rawat, Jasleen Kaur, Sakshi Bhagwat, Manisha Arora Pandit, Charu Dogra Rawat* *Corresponding author	Drivers	ng Microbes as and Indicators in al Restoration	Restoration Ecology I.F. 3.4	e13	688		2022	https://doi.org/ 10.1111/rec.13 688
	2.	Manisha Arora Pandit, Saloni Gulati, Neeru Bhandari, Poonam Mehta Mehta, Roma Katyal, <b>Charu Dogra</b> <b>Rawat*</b> , Jasleen Kaur *Corresponding author	Strategi	able Management es and Biological in Apple Orchards	Plant Science Today	9 (2	)	443 - 453	2022	https://doi.org/ 10.14719/pst.1 547
	3.	Manisha Arora Pandit, Jitendra Kumar, Saloni Gulati, Neeru Bhandari, Poonam Mehta, Roma Katyal, Charu Dogra Rawat, Vachaspati Mishra, Jasleen Kaur	1 -	iological Control es for Plant ens	Pathogens I.F. 3.4	11 (	2)	273	2022	https://doi.org/ 10.3390/patho gens11020273
	4.	Shailly Anand, Sukanya Lal, Utkarsh Sood, Vipin Gupta,	Element	nabet of the cary Microbiology: d (Editorial)	Indian Journ of Microbiolog	61 (	4)	397- 400	2021	https://doi.org/ 10.1007/s1208 8-021-00987-7

	Gauri Garg Dhingra,		I.F. 2.46				
	Renu Solanki,						
	Jasvinder Kaur,						
	Roshan Kumar, Anjali						
	Saxena, Ankita Dua,						
	Charu Tripathi,						
	Chandni Talwar, <b>Charu</b>						
	Dogra Rawat,						
	Harpreet Kaur,						
	Helianthous Verma,						
	Jaspreet Kaur, Mansi						
	Verma, Mona Singh,						
	Princy Hira, Nirjara						
	Singhvi, Nitish Kumar						
	Mahato, Om Prakash,						
	Jaya Malhotra, Rup						
	Lal, Vipin Chandra						
	Kalia						
	Shilpi Nagar, Shalini	A review of toxicity and					
	Anand, Soumya	biodegradation of	Environmenta				https://doi.org
5.	Chatterjee, <b>Charu</b>	octahydro-1, 3, 5, 7-	l Technology	23	1017	2021	10.1016/j.eti.2
٦.	<b>Dogra Rawat</b> , Jyoti	tetranitro-1, 3, 5, 7-	& Innovation	23	50	2021	021.101750
	Lamba, Pramod	tetrazocine (HMX) in the	I.F. 5.26				021.101730
	Kumar Rai	environment					
	Monika Sharma,	Comparative proteomics					
	Durgesh Narain Singh,	unraveled the					
	Rohit Budhraja,	Hexachlorocyclohexane	Environmenta				https://doi.org
	Utkarsh Sood, <b>Charu</b>	(HCH) isomers specific	I Science and	28 (30) 43	1200		10.1007/s1135
6.	Dogra Rawat, Lorenz	responses in an	Pollution	41395	1300-	2021	6-021-13073-8
	Adrian, Hans Hermann	archetypical HCH	Research	41393			Advance Onlin
	Richnow, Yogendra	degrading bacterium	I.F. 4.22				Publication
	Singh, Ram Krishan	Sphingobium indicum					
	Negi, Rup Lal	B90A					
	Gauri Garg Dhingra,						
	Anjali Saxena, Aeshna						
	Nigam, Princy Hira,						
	Nirjara Singhvi, Shailly						
	Anand, Jasvinder Kaur,						
	Jaspreet Kaur, Ankita	Migraphial World: Dagas	Indian laws				
	Dua, Vivek Negi, Vipin	Microbial World: Recent	Indian Journal				https://d=:
7	Gupta, Utkarsh Sood,	Developments in Health,	of National biology	(1/2) 44	1 115	2024	https://doi.org
7.	Roshan Kumar,	Agriculture and	Microbiology	61 (2) 11:	1-115	2021	10.1007/s1208
	Sukanya Lal,	Environmental Sciences	I.F. 2.46				8-021-00931-9
	Helianthous Verma,	(Editorial)					
	Mansi Verma, Priya						
	Singh, Charu Dogra						
	Rawat, Charu Tripathi,						
	Chandni Talwar,						
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	Kumar Mahato, Om Prakash, Mona Singh, RC Kuhad, Yogendra Singh, Banwari Lal, Sunil Pabbi, Namita Singh, VC Kalia, Rup Lal						
8.	Helianthous Verma, Shekhar Nagar, Shivani Vohra, Shubhanshu Pandey, Devi Lal, Ram Krishan Negi, Rup Lal, Charu Dogra Rawat* *Corresponding author	Genome analyses of 174 strains of <i>Mycobacterium tuberculosis</i> provide insight into the evolution of drug resistance and reveal potential drug targets.	Microbial Genomics I.F. 5.53	https://do 0.1099/m 000542	•	2021	https://doi.org/ 10.1099/mgen. 0.000542
9.	Priya Singh, Princy Hira, <b>Charu Dogra</b> <b>Rawat</b> , Rup Lal, Utkarsh Sood	Genome-based reclassification of Amycolatopsis eurytherma as a later heterotypic synonym of Amycolatopsis thermoflava.	International Journal of Systematic and Evolutionary Microbiology I.F. 2.82	71(2)		2021	https://doi.org/ 10.1099/ijsem. 0.004642
10.	Roshan Kumar, Helianthous Verma, Nirjara Singhvi, Utkarsh Sood, Vipin Gupta, Mona Singh, Rashmi Kumari, Princy Hira, Shekhar Nagar, Chandni Talwar, Namita Nayyar, Shailly Anand, Charu Dogra Rawat, Mansi Verma, Ram Krishan Negi, Yogendra Singh, Rup Lal	Comparative Genomic Analysis of Rapidly Evolving SARS-CoV-2 Reveals Mosaic Pattern of Phylogeographical Distribution.	mSystems I.F. 6.49	5(4)	e0050 5-20	2020	https://doi.org/ 10.1128/mSyst ems.00505-20
11.	Helianthous Verma, Sonika Phian, Priya Lakra, Jasleen Kaur, Sanjukta Subudhi, Rup Lal, Charu Dogra Rawat* *Corresponding author	Human Gut Microbiota and Mental Health: Advancements and Challenges in Microbe- Based Therapeutic Interventions.	Indian Journal of Microbiology I.F. 2.46	60(4):	405- 419.	2020	https://doi.org/ 10.1007/s1208 8-020-00898-z
12.	Durgesh Narain Singh, Utkarsh Sood, Amit Kumar Singh, Vipin Gupta, Mallikarjun	Genome sequencing revealed the biotechnological potential of an obligate	Indian Journal of Microbiology I.F. 2.46	59(3)	351- 355	2019	https://doi.org/ 10.1007/s1208 8-019-00809-x

	Shakarad, Charu  Dogra Rawat*, Rup  Lal *Corresponding	thermophile <i>Geobacillus</i> thermoleovorans strain RL isolated from Hot					
13.	Charu Dogra, Daya Shankar Srivastava, Ashok Kumar	water spring  Protein-DNA array-based identification of transcription factor activities differentially regulated in skeletal muscle of normal and dystrophin-deficient mdx mice	Molecular and Cellular Biochemistry I.F. 3.39	312(1- 2)	17-24	2008	https://doi.org/ 10.1007/s1101 0-008-9716-6
14.	Vishakha Raina, Mrutyunjay Suar, Ajaib Singh, Om Prakash, Mandeep Dadhwal, Sanjay Kumar Gupta, Charu Dogra, Kirsten Lawlor, Sukanya Lal, Jan Roelof van der Meer, Christof Holliger, Rup Lal	Enhanced biodegradation of hexachlorocyclohexane (HCH) in contaminated soils via inoculation with <i>Sphingobium indicum</i> B90A.	Biodegradatio n I.F. 3.90	19(1)	27-40	2008	https://doi.org/ 10.1007/s1053 2-007-9112-z
15.	Charu Dogra, Susan L Hall, Nia Wedhas, Thomas A Linkhart, Ashok Kumar	Fibroblast growth factor inducible 14 (Fn14) is required for the expression of myogenic regulatory factors and differentiation of myoblasts into myotubes. Evidence for TWEAK-independent functions of Fn14 during myogenesis	Journal of Biological Chemistry I.F. 5.15	282(20)	1500 0-10	2007	https://doi.org/ 10.1074/jbc.M 608668200
16.	Charu Dogra, Harish Changotra, Nia Wedhas, Xuezhong Qin, Jon E Wergedal, Ashok Kumar	TNF-related weak inducer of apoptosis (TWEAK) is a potent skeletal musclewasting cytokine.	The FASEB Journal I.F. 5.19	21(8)	1857- 69	2007	https://doi.org/ 10.1096/fj.06- 7537com
17.	Poonam Sharma, Vishakha Raina, Rekha Kumari, Shweta Malhotra, <b>Charu Dogra</b> , Hansi Kumari, Hans-Peter E Kohler, Hans-Rudolf Buser, Christof Holliger, Rup Lal	Haloalkane dehalogenase LinB is responsible for $\beta$ - and $\delta$ -Hexachlorocyclohexan e transformation in Sphingobium indicum B90A.	Applied and Environmenta I Microbiology I.F. 4.79	72(9)	5720- 7	2006	https://doi.org/ 10.1128/AEM.0 0192-06

18.	Charu Dogra, Harish Changotra, Jon E Wergedal, Ashok Kumar	Regulation of phosphatidylinositol 3-kinase (PI3K)/Akt and nuclear factor-kappa B signaling pathways in dystrophin-deficient skeletal muscles in response to mechanical stretch.	Journal of Cellular Physiology I.F. 6.38	208	575– 585	2006	https://doi.or 10.1002/jcp.2 696
19.	Rup Lal, <b>Charu Dogra,</b> Shweta Malhotra, Poonam Sharma, Rinku Pal	Diversity, distribution and divergence of <i>lin</i> genes in hexachlorocyclohexanedegrading sphingomonads	Trends in Biotechnolog Y I.F. 19.53	24(3)	121- 30	2006	https://doi.or 10.1016/j.tibi ch.2006.01.00
20.	Charu Dogra, Harish Changotra, Subburaman Mohan, Ashok Kumar	Tumor necrosis factor-like weak inducer of apoptosis (TWEAK) inhibits skeletal myogenesis through sustained activation of Nuclear Factor-kappa B and degradation of MyoD protein.	Journal of Biological Chemistry I.F. 5.15	281(15)	1032 7-36	2006	https://doi.or 10.1074/jbc.ñ 511131200
21.	Nia Wedhas, Henry J Klamut, <b>Charu Dogra</b> , Apurva K Srivastava, Subburaman Mohan, Ashok Kumar	Inhibition of mechanosensitive cation channels inhibits myogenic differentiation by suppressing the expression of myogenic regulatory factors and caspase-3 activity.	The FASEB journal I.F. 5.19	19	1986- 1997	2005	https://doi.oi 10.1096/fj.05 4198com
22.	Mrutyunjay Suar, Andrea Hauser, Thomas Poiger, Hans- Rudolf Buser, Markus D Müller, Charu Dogra, Vishakha Raina, Christof Holliger, Jan Roelof van der Meer, Rup Lal, Hans-Peter E Kohler	Enantioselective Transformation of α- Hexachlorocyclohexane by the Dehydrochlorinases LinA1 and LinA2 from the Soil Bacterium Sphingomonas paucimobilis B90A.	Applied and Environmenta I Microbiology I.F. 4.79	71(12)	8514- 8518	2005	https://doi.or 10.1128/AEN 1.12.8514- 8518.2005
23.	Om Prakash, Mrutyunjay Suar, Vishakha Raina, <b>Charu</b> <b>Dogra</b> , Rinku Pal and Rup Lal	Residues of Hexachlorocyclohexane (HCH) Isomers from different Soil and water samples in Delhi and Adjoining Areas.	Current Science I.F. 1.1	87	101- 105	2004	https://www. tor.org/stable 24107982
24.	Charu Dogra, Vishakha Raina, Rinku Pal, Mrutyunjay Suar, Sukanya Lal, Karl- Heinz Gartemann,	Organization of <i>lin</i> genes and IS6100 among different strains of hexachlorcyclohexane degrading <i>Sphingomonas</i>	Journal of Bacteriology I.F. 3.49	186	2225- 2235	2004	https://doi.or 10.1128/jb.18 .8.2225- 2235.2004

	Christof Hollige Roelof van der Rup Lal		paucimobilis strai Evidence of natur horizontal transfe	al					
25	Rekha Kumari, Sanjukta Subuc Mrutyunjay Sua Gauri Dhingra, Vishakha Raina Dogra, Sukanya Jan Roelof van Meer, Christof Holliger, Rup La	ar, , <b>Charu</b> a Lal, der	Cloning and Characterization of genes responsible degradation of hexachlorocycloh isomers in Sphing paucimobilis strai	e for the exane	Applied and Environmenta I Microbiology I.F. 4.79	68	6021- 28	2002	https://doi.org/ 10.1128/aem.6 8.12.6021- 6028.2002
5. Tex	t Books, Book Chapt	ers, Mor	nographs, Editorshi	p of Specia	al Issues, Confid	ential Repo	orts.		
#	Authors in the same order  Sonika Phian, Book Chapter: Emerging			Author or Editor	Publisher, Pla	ice, Year		SBN	
1.	Sonika Phian, Shilpi Nagar, Jasleen Kaur and Charu Dogra Rawat* *Corresponding author	Issues a for Mic Remed Microb	and Challenges robes Assisted iation. In es and Microbial inology for Green	Author	Elsevier, 202	2		97803239 https://w evier.com /microbes microbial biotechno for-green remediati ik/978-0-3 90452-0 9 – acce	ww.els n/books s-and- - blogy- - on/mal 323-
2.	Charu Dogra Rawat* and Manisha Arora *corresponding author	Applica Anaero Anaero	nological tions of	Author	CRC Press (Ta Francis Group India Publish New Delhi; 20	o) and New ing Agency	V	97803676 https://w tledge.co erobes-ar Anaerobio Processes sh- Ranade/p	ww.rou m/Ana nd- C- i/Praka
3.	Shilpi Nagar, Anil Kumar Moola, Lakkakula Satish, Shalini Anand, Charu Dogra Rawat, Manikandan Ramesh, T. Senthil Kumar and B. D. Ranjitha Kumari	in Gene Plants I modern tools: A Policy I Genetic	hapter: Advances etically Modified by employing n biotechnological in update. In ssues in cally Modified st Edition	Author	Elsevier, Acad 2020	demic Pres	s;	9780128207802 https://www.els evier.com/books /policy-issues-in- genetically- modified- crops/singh/978- 0-12-820780-2	

SI. No.	Name of the Project/ Endowments, Chairs	Name of the Principal Investigator / Co-Investigator	Year of Award	Amount Sanctioned (Rs.)	Duration of the project	Name of the Funding Agency	Type (Governmen /Non- Government
ONG	OING						
1.	Ramjas SERB HCH Project  "Genetic Engineering of Bacillus subtilis to secrete Hexachlorocycloh exane (HCH) catabolic enzymes for the bioremediation of HCH contaminated dumpsite soils"	Dr. Charu Dogra Rawat (PI)	2022	26,41,760	2 years	Science and Engineering Research Board (SERB), Department of Science and Technology (DST)	Government
2.	Ramjas HCH Project  "Remediation and Reclamation of Hexachlorocycloh exane (HCH) dumpsite soils"	Dr. Charu Dogra Rawat (PI), Dr. Sukanya Lal (Co- PI)	2018	16,86,336	2 years + 1 year 6 months extension (further extension applied)	Department of Biotechnology (DBT)	Government
СОМ	IPLETED						
3.	DU-Innovation Project RC-307	Dr. Suman Sharma (PI) Dr. Charu Dogra Rawat (Co-PI)	2015	4, 50, 000	1 year	University of Delhi	Government
		Dr. Sandeep Kaushik (Co-PI)					

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#	Name of award lecture	Awarding Organization	Title	Place	Year
1.	Invited Speaker	International Conference on Mitigating Contemporary Environmental Issues by Sustainable approaches (ICMCESA- 2022) organized by Acharya Narendra Dev College, University of Delhi	Overcoming challenges in the sustainable remediation of Hexachlorocyclohexane (HCH) dumpsite soils	Virtual	2022
2.	Co-chair	6 <sup>th</sup> Annual International Conference of INSCR on "Microbes in sustainable Development" organized in	Session: Science & Society – A child-centric effort to promote microbial literacy	Virtual	2021

		association with the Department of Zoology (DU), Acharya Narendra Dev College (DU), Deen Dayal Upadhyaya College (DU), Gargi College (DU), Kirori Mal College (DU), PG Department of Zoology (MU), Maitreyi College (DU), Ramjas College (DU), Sri Venkateswara College (DU), C.M.P. College (AU), SGTB Khalsa College (DU), COCAS (PU) & PhiXgen Pvt. Ltd., Gurugram	Also presented - Inquiry, Inclusivity and InReach- the 3Is in M(I)crob(I)ology Educat(I)on		
3.	Invited Speaker	61st Annual International Conference of the Association of Microbiologists of India (AMI) and INSCR in association with TERI, DU, IARI and INSA	Overcoming challenges in microbe-assisted bioremediation — a genomic approach	Virtual	2021
4.	Chair	AMI and INSCR in association with TERI, DU, IARI and INSA	Session: AMI-INSCR Innovative Research (Faculty)	Virtual	2021
5.	Invited Speaker	The International Society for Microbial Ecology (ISME) - Southeast Asian Regional Symposium on Microbial Ecology (SARSME-2020)	Tessaracoccus flavus: a potential polyphosphate-accumulating organism	Tribhuvan University, Prithvi Narayan Campus, Pokhara, Nepal.	2020

#### 19. Statement on impact of research and innovation done on teaching:

Dr. Charu is the <u>Departmental Coordinator</u> of Department of Biotechnology (DBT), Govt. of India funded Star College project as well as the <u>Principal Investigator</u> of a multi-institutional DBT-funded technology development and SERB, DST-funded genetic engineering research projects. She has been <u>conducting one-month summer research trainings</u> and under her supervision many <u>undergraduate students</u> (from various college/institutes including our college) have been <u>trained in molecular microbiology techniques</u> and genomics/metagenomics analysis. Students have presented their work in international conferences and received prizes for their presentation. Through training, Dr. Charu aims to <u>inculcate scientific temper in students as well as expose them to practical research methodology</u> which will equip them with skill sets required to pursue scientific research later in their careers. <u>Students trained under her have been pursuing their PhDs at esteem research institutes such as, Indian Institute of Sciences (IISc), Bangalore, Delhi Technological University (DTU, formerly Delhi College of Engineering), University of Delhi in India as well as abroad. <u>Undergraduate students are also trained in scientific writing</u> and their work has been published in research journal such as Microbial Genomics (IF 5.2). Dr. Charu also encourages and guide students to write general articles and has <u>published articles</u> with the students in IndiaBioscience and Consortium of Educational Communication (CEC) newsletter which is read nationwide. Her <u>project-based learning approach</u> for practical exercises help students to have a <u>holistic and applicative understanding of various practical exercises</u> that are mentioned discretely in the syllabus.</u>

Dr. Charu employs research-based pedagogical tools and techniques for imparting learning. She incorporates elements of blended learning such as flipped classroom, synchronous and asynchronous learning etc. in her teaching that has impacted students positively. She conducts formal research studies to ascertain, for example, the impact of blended learning on student's learning and engagement or the impact of research-based pedagogical tool (RBPT) on student's conceptual understanding. Analysis of the data that she collects helps her to improve the process of knowledge dissemination for the

<u>benefit of the students</u> as well as sharing her findings with fellow colleagues helps <u>in improving the teaching-learning</u> <u>process at large.</u>

- 20. List of equipment designed and fabricated and/or papers published on education in journals/magazines with state/national/international circulation. (Can be accessed at the given links)
  - I. Monir Uddin Ahmed\*, Pankaj Dhaka\*, Charu Dogra Rawat\*, Heba Fawzy\*, Reshma V Menon\*, Aparajita Sen\* (\*contributed equally) (2022) Developing a Scientific Society by Strengthening Science Communication through Capacity Building. Policy brief accepted to be published in CSIR-Science Diplomacy.
  - 2. Charu Dogra Rawat and Gunwant Singh Atwal **(2021)** Alumni Student Mentoring A lighthouse on a stormy night. IndiaBioscience. <a href="https://indiabioscience.org/columns/education/alumni-student-mentoring-a-lighthouse-on-a-stormy-night">https://indiabioscience.org/columns/education/alumni-student-mentoring-a-lighthouse-on-a-stormy-night</a>
  - 3. **Research-based pedagogy tool (RBPT) resource package** on Green Mosquito Control, designed and developed as part of a Writers' Workshop conducted by Centre of Excellence in Science and Mathematics Education, IISER Pune. Available at <a href="http://www.iiserpune.ac.in/outreach/coesme">http://www.iiserpune.ac.in/outreach/coesme</a>
  - 4. Charu Dogra Rawat and Pranjal Gupta **(2020) Equitable Digital Education Blockers and Enablers**. IndiaBioscience. <a href="https://indiabioscience.org/columns/indian-scenario/equitable-digital-education-blockers-and-enablers">https://indiabioscience.org/columns/indian-scenario/equitable-digital-education-blockers-and-enablers</a>
  - 5. Charu Dogra Rawat **(2020)** Digital Literacy in the Midst of an Outbreak. IndiaBioscience. https://indiabioscience.org/columns/education/digital-literacy-in-midst-of-an-outbreak
  - Charu Dogra Rawat (2020) New Education Policy: Impact on digital Education In India. Article in Special Edition on New Education Policy 2020, Consortium for Educational Communication (CEC): An Inter-University Centre of University Grants Commission on Electronic Media Newsletter. <a href="http://cec.nic.in/cec/sites/default/publication/newsletter/CECNewsSept2020.pdf">http://cec.nic.in/cec/sites/default/publication/newsletter/CECNewsSept2020.pdf</a>
  - Charu Dogra Rawat and Varunendra Singh Rawat. (2020) Virtual Universities: Scope and Benefits. Article in special
    edition on Virtual Universities, Consortium for Educational Communication (CEC): An Inter-University Centre of
    University Grants Commission on Electronic Media Newsletter.
    <a href="http://cec.nic.in/cec/sites/default/publication/newsletter/CEC">http://cec.nic.in/cec/sites/default/publication/newsletter/CEC</a> NEWS JANUARY 2020.pdf
  - 8. Charu Dogra Rawat **(2018) Digital Education and its Impact on the Process of Teaching and Learning.** Article in Consortium for Educational Communication (CEC): An Inter-University Centre of University Grants Commission on Electronic Media Newsletter.
  - 9. IndiaBioscience has published her thoughts on teaching methodology, future of dissemination of educational material and expectations from educational policy makers. (<a href="https://indiabioscience.org/columns/education/talk-with-teachers-going-the-extra-mile">https://indiabioscience.org/columns/education/talk-with-teachers-going-the-extra-mile</a>)
- 21. Participating on Swayam, NPTEL platform, MOOC, or any other online portal (in developing a course, lectures, articles etc.)

Delivered more than 50 lectures that are live recorded at Consortium for Educational Communication (CEC): An Inter-University Centre of University Grants Commission on Electronic Media Delhi center and telecasted on the Vyas Higher Education Channel is dedicated to the students studying their degree courses in Universities and Colleges. The curriculum which is being followed is based on UGC model curricula and CBCS compliance. The lectures are made available at the CEC YouTube channel for convenient learning. https://www.youtube.com/user/cecedusat. Developed e-lesson for NME-ICT Zoology under the MHRD project.

22. Examination reforms brought about and if so, their impact on student progression?

**Associate Coordinator** for the conduction of **first online exam in 2010 for Environmental Sciences (ESIII)** for B. Sc. (Prog.) students of Ramjas College (Centre: Daulat Ram College, University of Delhi). This facilitated the conduction of online exams which has formed the framework for OBE run by the University during current times.

23. Participation in co-curricular, extra-mural, and outreach activities.

#### Research Internships Opportunities provided to Students

- 1. September-October 2021. Faculty Coordinator for the "MANAV Scientific Reading and Comprehension Self-Assessment Module (for students)", conducted by Project MANAV The Human Atlas Initiative.
- 2. **10**<sup>th</sup> June **19**<sup>th</sup> July, **2021.** Coordinator and supervisor, summer research internship for Ramjas College, University of Delhi students. **3 UG students worked on Scientific Writing project (output paper is communicated)**
- 3. **20**<sup>th</sup> **June 19**<sup>th</sup> **July, 2019.** Coordinator and Supervisor, Summer research internship for University of Delhi students held at Ramjas College, University of Delhi. **9 UG students worked on Molecular Microbiology project.** (under DBT Star College project)
- 4. **5**<sup>th</sup> **June 20**<sup>th</sup> **July, 2018.** Coordinator and Supervisor, Summer research internship for Ramjas College students held at Ramjas College, University of Delhi. **13 UG students worked on Molecular Biology and Genomics Projects**. (under DBT Star College Project)

#### Outreach Activities organized/conducted

- 1. **18**<sup>th</sup> April, **2022.** Conducted Microbiology Literacy Initiative an Outreach Program at Vanasthali Public School, Noida organized by Academy of Microbiological Sciences (AMSc) and Association of Microbiologists of India (AMI).
- 2. 17<sup>th</sup> September, 2021. Convener. Microsphere: An International Outreach Program organized on the occasion of International Microorganisms Day. Virtual mode. More than 900 school students pan-India participated.
- 3. **15**<sup>th</sup> **October 2018**. **Organizer. Bani School Innovation Camp III (BaSIC III)** under University of Delhi-INSA Outreach Program and DBT-Star College Project, Ramjas College, University of Delhi at GSSS Bani School, Bani, Himachal Pradesh.
- 4. **7**th March, **2018**. **Organizer**. **Bani School Innovation Camp II (BaSIC II)** under University of Delhi-INSA outreach program, Association of Microbiologists of India (AMI) and DBT-Star College Project, Ramjas College at GSSS Bani School, Bani, Himachal Pradesh. Reported at <a href="https://indiabioscience.org/news/2018/igniting-young-minds-basic-ii-2018-news?token=JK6">https://indiabioscience.org/news/2018/igniting-young-minds-basic-ii-2018-news?token=JK6</a> uKeeViw6aS5c-GciW7NePh5ZXzE6
- 5. **4-8**th **July, 2017. Coordinator, INSPIRE Science Internship Camp** sponsored by Department of Science and Technology, Government of India.
- 6. 23<sup>rd</sup> 24<sup>th</sup> December, 2016. Organizer. Bani School Innovation Camp (BaSIC) under Delhi University-INSA outreach program and DBT-Star College project Ramjas College, University of Delhi at GSSS Bani School, Bani, Himachal Pradesh.
- 7. Jury for 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> National Level Exhibition and Project Competition (NLEPC) held in 2013, 2014, 2015 and 2016 at Pragati Maidan (for 2 consecutive years), then IIT, Delhi and NPL New Delhi.

#### Teacher (Pedagogy) Trainings Conducted

- 1. 7<sup>th</sup> -12<sup>th</sup> October, 2021. Resource Person in 2<sup>nd</sup> Undergraduate Teachers' Workshop on "Understanding Public Health from an interdisciplinary perspective" organized by Delhi Effective Education & Pedagogy Cluster (DEEP-C) DRIIV.
- 20<sup>th</sup> -22<sup>nd</sup> August 2019. Subject Trainer and Expert in Life Sciences at the Regional Workshop on Research Based Pedagogical Tools held at Indian Institute of Science Education and Research Workshop (IISER), Pune.

- 3. 19<sup>th</sup> -20<sup>th</sup> November, 2018. Resource Person in Workshop on Research based Pedagogical Tools for teaching Physics Concepts at Parvatibai Chowgule College, Goa.
- 4. **23**<sup>rd</sup> **25**<sup>th</sup> **October, 2018. Resource person (Biology) and Lead trainer** in Research-based Pedagogical Workshop held at **Integral University, Lucknow** (under MHRD project to CoESME, IISER, Pune).
- 5. **10**<sup>th</sup> **12**<sup>th</sup> April, **2018. Resource person (Biology) and Lead trainer** in Research-based Pedagogical Workshop held at **Central University of South Bihar, Patna**. (under MHRD project to CoESME, IISER, Pune).
- 6. **17**<sup>th</sup> **19**<sup>th</sup> **November, 2017. Subject Trainer (Biology)** in Research Based Pedagogical Regional Workshop at **Banaras Hindu University (BHU), Banaras.** (under MHRD project to CoESME, IISER, Pune)
- 7. **6**<sup>th</sup> **9**<sup>th</sup> **October, 2017. Special invitee (observer)** to attend **STEM Teacher Training Workshop** Level 1 on research based pedagogical tools organized by Indian Institute of Science Education and Research (IISER), Pune and British Council of India at Raipur, Chhattisgarh.
- 8. **9**<sup>th</sup> **May and 18**<sup>th</sup> **-19**<sup>th</sup> **August 2017. Resource person and convener, RBPT workshop** organized at Khalsa College and Gargi College, **University of Delhi** in collaboration with COESME, IISER, Pune.
- 9. **31**st January, **2017. Undergraduate Science Teacher's Workshop** themed at developing scientific temper in students: tools and techniques under DBT-Star College Project, Ramjas College and IndiaBioscience. Included Lecture on "Biology education at UG level: issues & suggestions" by Dr. K. Muralidhar, Retired Professor, Department of Zoology, University of Delhi and Lecture on "Flipped classroom" by Dr. Urmi Bajpai, Assistant Professor, Acharya Narendra Dev College, University of Delhi.
- 10. **29**<sup>th</sup> **September 1**<sup>st</sup> **October, 2016. Resource person and member, organizing committee,** RAP A STEP: Regional workshop for Undergraduate Science Teachers to develop **Research Based Pedagogical Tools, Patiala** organized by Indian Institute of Science Education and Research (IISER), Pune.
- 11. 9<sup>th</sup> -10<sup>th</sup> June, 2015. Coordinator, organizer and resource person, Digital Literacy Teacher Training (DLTT) under DBT-Star College project held at Ramjas College, University of Delhi.

## Lectures/Seminars/Workshops Organized for the students

- 1. 8<sup>th</sup> March, 2022. Workshop on "Empowering Women through Entrepreneurship". Speakers: Dr. Vishakha Raina, Professor, KIIT School of Biotechnology, Odisha & Managing Director & Founder, Krea Foods & Beverages Pvt. Ltd.; Ms. Shifali Jain (Ramjas alumna), Co-founder & COO, Crib & Mr. Sunny Garg (Ramjas alumni), Co-founder & CEO, Crib (under Women Development Committee, Ramjas College)
- 2. **6**<sup>th</sup> **March, 2022. Wellness Workshop on "A journey from illness to wellness".** Speakers: Prof Bala Ganapathi, Head of the Department, Department of Philosophy, University of Delhi, & Dr Partha Patim Bose, Senior Consultant, (Pulmonologist) & President, SAANS foundation. (under Wellness/Counseling Unit, Ramjas College)
- 3. **26**<sup>th</sup> February, **2022.** Workshop on "Empowering Women through Financial Literacy". Speakers: Dr. Kiran Gupta, Professor of Law, University of Delhi Inheritance Rights of Women in India; Ms. Kalpana Kumari, Officer, Canara Bank, Delhi Circle General Banking and Schemes for Women (under Women Development Committee, Ramjas College)
- 4. **16**<sup>th</sup> **November, 2021. Webinar on "Cancer Prevention and Palliative Care"** organized by Wellness/Counseling Unit and NSS, Ramjas College and conducted by Dharamshila Cancer Foundation and Research Centre. (under Wellness/Counseling Unit, Ramjas College)
- 5. **3**<sup>rd</sup> **July, 2021. Session on "Guidance on Psychosocial Counseling and COVID helper Skills"** conducted by Mahatma Gandhi National Council of Rural Education (MGNCRE), Ministry of Education, Govt. of India. (under Wellness/Counseling

Unit)

- O4<sup>th</sup> March, 2021. Talk on Ecological Restoration delivered by Mr. Ramesh Venkataraman, Certified Ecological Restoration Practitioner (CERP) and a member of Board of Directors of Society for Ecological Restoration (SER) (Zoological Society 2020-21)
- 7. **03**<sup>rd</sup> **March, 2021. Launch of Alumni Student Mentorship Initiative (ASMI).** First activity icebreaker session "Meet the Seniors' in which alumni of Department of Zoology mentored the students. Reported at <a href="https://indiabioscience.org/columns/education/alumni-student-mentoring-a-lighthouse-on-a-stormy-night?token=JK6">https://indiabioscience.org/columns/education/alumni-student-mentoring-a-lighthouse-on-a-stormy-night?token=JK6</a> uKeeViw6aS5c-GciW7NePh5ZXzE6
- 8. **13**<sup>th</sup> February, **2021.** Workshop (virtually) on "Maintaining Healthy Lifestyle and Hygiene" exclusively for women students and staff. (under Women Development Committee) conducted by Dietician Alpana Verma, Dr. Anupama Gonjhu, resident obstetrics and gynecologist, Hindu Rao Hospital, Delhi and Dr. Kiran Raman Goyal, Consultant Obstetrics and Gynecologist at Sri Balaji Action Medical Institute, New Delhi. (under Women Development Committee).
- 9. **30**<sup>th</sup> January, **2021.** Holistic Well-Being Session conducted by Dr. Seema Midha, a happiness coach and psychotherapist, Ms. Pragati Jalan Surekha, a clinical psychologist and mental health expert and Ms. Sunaina Rekhi, a yoga and fitness expert and Ms. Preeti Singh, founder Sattva Nation. (under Wellness Counselling Unit in association with Sattva Nation)
- 25<sup>th</sup> January, 2021. Online session on Dragonfly awareness as a part of the 3<sup>rd</sup> Dragonfly Festival celebrated by WWF and BNHS (Bombay Natural History Society). Mr. Shubham Narwal, Volunteer at WWF conducted the session. (Zoological Society 2020-21)
- 11. **16**<sup>th</sup> January, **2021. Webinar on Women Laws and Rights** conducted by Dr. Sushila, Associate Professor, National Law University Delhi (NLUD), Research Director of Centre for Study of Consumer Law and Policy and the Projector Director, Chair on Consumer Law at NLUD. (under Women Development Committee)
- 12. **09**<sup>th</sup> **November, 2020. Webinar on "Applications of CRISPR and organoids for understanding the brain circuitry"** in the inaugural function of the Zoological Society of Ramjas College. Dr. Debojyoti Chakraborty, Senior Scientist at CSIR-Institute of Integrative Biology (IGIB) and his team member Ms. Riya Rauthan were the speakers. (Zoological Society 2020-21).
- 13. 03<sup>rd</sup> October, 2020. Webinar on "How to Read Scientific Literature?" and Introduction to MANAV The Human Atlas Initiative (<a href="https://manav.gov.in/">https://manav.gov.in/</a>) conducted by Dr. Anupma Harshal W., Consultant (Science Communication and Public Engagement), MANAV-The Human Atlas Initiative, IISER, Pune, Maharashtra, India. (under DBT-Star College project)
- 14. **25**<sup>th</sup> January, **2020.** Awareness session conducted by Delhi-NCT Area Food Safety Officer regarding food safety, hygiene and prevalence of anemia in women. (under Women Development Committee)
- 15. **25**<sup>th</sup> January, **2020.** SUDHA a poetry session themed, 'for and about women' by two national-level poets Dr. Anita and Dr. Aryan presented their compositions. (under Women Development Committee)
- 16. **29**<sup>th</sup> **August, 2019. Student Training Program on "Metagenomic Studies"** organized at Internal Quality Assurance Cell of Deen Dayal Upadhaya College in association with phiXgen Pvt Ltd.
- 17. **16<sup>th</sup>-17<sup>th</sup> September, 2019. Mental Health Workshop**. In collaboration with Wellness and Counseling Unit, Ramjas College. (under DBT-Star College Project). Reported at <a href="https://indiabioscience.org/columns/education/lessons-from-a-mental-health-workshop-in-an-undergraduate-college?token=JK6">https://indiabioscience.org/columns/education/lessons-from-a-mental-health-workshop-in-an-undergraduate-college?token=JK6</a> uKeeViw6aS5c-GciW7NePh5ZXzE6
- 18. 23<sup>rd</sup> February, 2019 & 12<sup>th</sup> March, 2019. Workshop on Hands-on computational biology for (meta) genomic analysis for the students of B.Sc. (H) Zoology and B. Sc. (P) Life Sciences at Ramjas College, University of Delhi. (under DBT- Star College Project).

- 19. 14th September, 2018. Lecture by Dr. Geeta Sahare, Secretary, Delhi University Women's Association (DUWA) and Dr. Atya Kapley, Scientist CSIR-NEERI and poster competition Preface to Utkarsh'18 an international conference on empowering and enabling women in science held at Ramjas College, University of Delhi (under DBT- Star College Project).
- 13<sup>th</sup> October, 2017. Workshop on Mental Health Awareness held at Ramjas College, University of Delhi, Delhi (under DBT-Star College Project).
- 21. **22**<sup>nd</sup> **January, 2016. Workshop on "DNA fingerprinting"** held at Hindu College, University of Delhi. (multi-college organization under Science Setu program)
- 22. **16**<sup>th</sup> October, **2015**. Talk on "A Global Journey Digital Literacy Skills for teachers" by David Hiddleston, Core & Essential Skills Educator, Edinburgh College, UK held at Ramjas College, University of Delhi (under Ramjas College Centennial Celebration)
- 23. **19**<sup>th</sup> **September, 2015. Workshop on 'Techniques in Biology'** for the Life Sciences students of Ramjas College, University of Delhi (under DBT-Star College project).
- 24. **04**<sup>th</sup> September, **2015**. Science Setu Program Launch Lecture delivered by Dr. Chandrima Saha (Director, National Institute of Immunology NII) on "Why Study Science?" held at Ramjas College, University of Delhi.
- 25. **13**<sup>th</sup> March, **2015**. Lecture on 'Radiation injuries and Recent updates on Development of Medical Bioshields from Himalayan plants' by Dr. Madhu Bala, Senior Scientist-F, Microbiology Department, INMAS, DRDO Tiimarpur held at Ramjas College, University of Delhi (under DBT-Star College project).
- 26. **13**th March, **2015**. Lecture on 'Say NO to Tobacco' by Dr. Charu Garg, Radiation Oncologist Consultant, Max Super Specialty Hospital, Saket, Delhi held at Ramjas College, University of Delhi (under DBT-Star College project).
- 27. **16**<sup>th</sup> **18**<sup>th</sup> August, **2013.** Workshop on Introduction to Bioinformatics for the students of Ramjas College (under DBT-Star College Project)
- 28. **11**<sup>th</sup> **13**<sup>th</sup> October **2011. Workshop on Basic Techniques in Biotechnology** for the students of Department of Zoology, Ramjas College (under DBT-Star College Project)

#### **Curriculum Designing/Upgradation activities**

- 2019 Coordinator, Learning outcomes-based curriculum framework (LOCF) for B.Sc. Applied Life Science with Agrochemicals and Pest Management degree, University of Delhi. Molecular Biology and Developmental Biology paper. <a href="http://du.ac.in/du/uploads/Revi\_syll\_19082019/19082019\_Zoology\_B.%20Sc.%20(Prog.)%20ALS%2031.07.2019%20(1).pdf">http://du.ac.in/du/uploads/Revi\_syll\_19082019/19082019\_Zoology\_B.%20Sc.%20(Prog.)%20ALS%2031.07.2019%20(1).pdf</a>
- 2019 Member, Learning outcomes based curriculum framework (LOCF) for B.Sc. Zoology degree, University of Delhi.
   Molecular Biology, Computational Biology papers.
   http://du.ac.in/du/uploads/Revi syll 19082019/19082019 B.%20Sc.%20(Hons.)%20Zoology.pdf
- 3. **2015** Member, Syllabus committee for B. Sc. (H) Zoology CBCS Molecular Biology, Developmental Biology, Computational Biology papers, University of Delhi, Delhi <a href="http://du.ac.in/du/index.php?page=cbcssyllabus">http://du.ac.in/du/index.php?page=cbcssyllabus</a>
- 4. **2013** Member, Syllabus up-gradation committee, Four Year Undergraduate Program syllabus for Bioinformatics paper of B. Sc. (H) Zoology, University of Delhi.

# Papers on education/science selected/presented

- 1. Paper presented on Women in Science at International Conference Utkarsh' 2018 International Conference Empowering & Enabling Women in Science organized by CSIR-NEERI held on 30<sup>th</sup> October, 2018.
- 2. **Selected for presentation** "Research-Based Pedagogical Tool for Deep Content Understanding and Development of Research Skills in Undergraduate Students" at the **25th Annual ASM Conference for Undergraduate Educators** (July 26-29, **2018**) at Austin, TX, USA.
- 3. Oral presentation (paper titled, "Blended learning, predominantly with inclusion of digital tools, improves undergraduate students' understanding and engagement a pilot study." at International Conference on the theme Aligning Education Systems to the Challenges of the Future held at Shyama Prasad Mukherji College, University of Delhi, Delhi from 8<sup>th</sup> 10<sup>th</sup> November, 2017.
- 4. **Oral presentation** (paper titled, 'Research Based Pedagogical Tool re-designing pedagogy' at **International Conference on the theme Aligning Education Systems to the Challenges of the Future** held at Shyama Prasad Mukherji College, University of Delhi, Delhi from 8th 10th November, **2017**.
- Oral presentation, Paper titled, "Development of Blended Learning Lesson Plans for Transforming Traditional Class Room Instruction in Higher Education" at 8<sup>th</sup> National Teachers' Science Congress organized by the National Council for Science & Technology Communication (NCSTC), Department of Science & Technology, Government of India and held at IISER, Pune during 17<sup>th</sup>-19<sup>th</sup> December, 2015.

#### Other Lectures/Talks/Courses Delivered

- 1. **25**<sup>th</sup> March, 2022. Delivered e-talk in the webinar titled, "Implementation of NEP 2020 Issues and challenges" organized by Jagannath International Management School (JIMS), Vasant Kunj.
- 2. 8<sup>th</sup> March, 2022. Invited Guest Speaker session for PYPX group of Genesis Global School Noida. Title of the talk- Scientific discoveries can impact human life.
- 3. 17<sup>th</sup> February, 2022. Delivered e-talk, titled, "Digital education through the lens of NEP 2020" IndiaBiostreams webinar series by IndiaBioscience. Recording available at <a href="https://www.youtube.com/watch?v=4pnSul\_fx3k">https://www.youtube.com/watch?v=4pnSul\_fx3k</a>
- 4. 21st October, 2021. Delivered Invited e-talk, titled, "Digital education in the 'new normal' IndiaBiostreams webinar series by IndiaBioscience. Recording available at <a href="https://www.youtube.com/watch?v=cLxna-SI400">https://www.youtube.com/watch?v=cLxna-SI400</a>
- 5. 12th March, 2021. Invited lecture in one-month free CSIR-UGC Life Science Lecture Series conducted by phiXgen Pvt.Ltd.
- 6. **28**<sup>th</sup> **February, 2020.** Invited guest speaker session for students of Genesis Global School, Noida on the occasion of "National Science Day". Title of the talk Women in Science.
- 7. **11**<sup>th</sup> October, **2019**. Delivered invited talk, titled, "Women in Science Entrepreneurship Success stories & examples" at One Day Workshop on "Entrepreneurship ideas to action (El-A-2019): Workshop for Enhancing Female Entrepreneurship" held at M D University, Rohtak, Haryana co-funded by Erasmus+ programme of the European Union.
- 8. **15**<sup>th</sup> July, **2019.** Delivered invited talks titled, "Live Video Lecturing Opportunities & Challenges" and "Tools for Econtent development" in National Faculty Development Program on "MOOCs and E-Content Development" organized by Deen Dayal Upadhaya College, University of Delhi jointly with SWAYAM An Initiative of MHRD and Consortium for Educational Communication (CEC).
- 9. **27th April, 2019.** Delivered invited talk, titled, "Women in Science Entrepreneurship Success stories & examples" at One Day Workshop on "Entrepreneurship ideas to action (El-A-2019): Workshop for Enhancing Female Entrepreneurship" held at M D University, Rohtak, Haryana co-funded by Erasmus+ programme of the European Union.

- 10. 26<sup>th</sup> -27<sup>th</sup> September, 2018. Oral Presentation Charu Dogra Rawat, Helianthous Verma, Rashmi Sharma, Priya Singh and Rup Lal. Comparative Genome Analysis Reveals Potential of *Tessaracoccus flavus* as a Polyphosphate Accumulating Organism to be employed in Enhanced Biological Phosphorous Removal Process. Oral Presentation at Young Scientist Colloquium, 3<sup>rd</sup> Indian Soil Contamination Network Research (INSCR) International Conference IIC-2018 held at KIIT (Deemed to be University), Bhubaneswar, Odisha.
- 11. 2018. Resource person, Developmental Biology, University of Delhi (DU) Pre-entrance Summer School.

#### Administrative Responsibilities in the College

- 2022 Convener, College Magazine Committee
- 2002 Project Coordinator, DBT- Star College Project
- 2021 Nodal Officer, College Social Media (Twitter handle).
- 2020 NAAC Criteria 3 Convener.
- 2020 Nodal Officer, Wellness & Counselling Unit.
- 2020 Member, Internal Quality Assurance Cell (IQAC).
- 2019 22 Convener, Women Development Committee (WDC).
- 2014 21 Coordinator (Zoology), DBT Star College Project.
- 2017 -18 Administrative Head (Teacher in-charge) of the Central Computer Laboratories, Ramjas College.
- 2015 16 Convener, Admissions Committee of the College.
- 2015 -16 Teacher Coordinator, Science Setu program between National Institute of Immunology (NII) and Ramjas College.
- 2014 16 Convener, Academic Standards Committee (Science).
- 2012 14 Administrative Head (Teacher in charge) of the Department of Zoology.

Time-to-time: Member of various Staff Council Committees (Hostel Committee, Sports committee, Building Maintenance and Purchase Committee, Monitoring Committee, Student Information System (SIS), New Teacher Posts Committee (NTPC), etc.) and delivered other College/University duties such as Examination Superintendent, Head & additional Examiner, Paper setter etc.

### **Continuous Professional Development**

- 1. **29**<sup>th</sup> **March, 2022.** Teaching CRISPR-Cas Genome Editing to Undergraduates. Organized by **Wiley Team** and delivered by Cheryl Patten, author of the textbook Molecular Biotechnology: Principles and Applications of Recombinant DNA, 6th edition.
- 2. 23<sup>rd</sup>- 25<sup>th</sup> February, 2022. Online International Conference on Science and Society organized by IQAC, Miranda House, University of Delhi, Delhi.

- 3. **28**<sup>th</sup> **December, 2021.** International webinar on 'Post COVID challenges and opportunities for the chemist' organized by **Indian Science Congress (Delhi Chapter) and Department of Chemistry, University of Delhi.**
- 4. **4**<sup>th</sup> **& 11**<sup>th</sup> **December, 2021.** Workshop titled, 'Participatory Science Advice for Policy Making' organized under the funding from **INGSA-Asia Grassroots Science Advice Promotion Awards.**
- 5. **2<sup>nd</sup>- 6<sup>th</sup> August, 2021.** Workshop, titled, 'Effective Education for Long-term Sustainable Solutions to the Problems of Air Pollution' organized by **Delhi Effective Education & Pedagogy Cluster (DEEP-C)-DRIIV.**
- 6. **28**th July, **2021.** Webinar on 'Impact of Mediation on Physical & mental Health' organized by **Department of Botany**, **Ramjas College, University of Delhi.**
- 7. **11**th June, **2021.** JoVE webinar. Education 4.0 : Paradigm shift in Hybrid Learning. Organized by **JoVE- The Journal of Visualized Experiments.**
- 8. **5**<sup>th</sup> June, **2021.** International webinar on topic "REIMAGINE. RECREATE. RESTORE. TOGETHER" on the occasion of World Environment Day organized by **NEEV- a social educational initiative of IIT alumni and Indian Science Technology and Engineering facilities Map (I-STEM) Supported by Office of the Principal Scientific Adviser, Govt. of India.**
- 9. 5<sup>th</sup> June, 2021. International Dialogue on Ecological Restoration organized by Dept. of Environmental Sciences, M. L. Sukhadia University, Udaipur & Agrawal Kanya Mahavidyalay, Gangapur City, Rajasthan along with 40 partner associates.
- 10. 22<sup>nd</sup> March, 2021. Orientation cum Training Program on Twitter organized by University of Delhi.
- 11. **26**<sup>th</sup> **September 2**<sup>nd</sup> **October, 2020.** Webinar Series "NAAC's Assessment Criteria for Accreditation" organized by Hansraj College, University of Delhi under PARAMARSH, a UGC scheme for mentoring NAAC accreditation aspirant institutions to promote quality assurance in higher education.
- 12. **02**<sup>nd</sup> **17**<sup>th</sup> **July, 2020.** Two Weeks Faculty Development Programme on "ADVANCED CONCEPTS FOR DEVELOPING MOOCS" organized virtually by Teaching Learning Centre, Ramanujan College, University of Delhi sponsored by MHRD PMMMNMTT.
- 13. 22<sup>nd</sup> 28<sup>th</sup> June, 2020. Science Leadership Workshop organized by Central University of Punjab, Bathinda.
- 14. **08**<sup>th</sup> **14th June, 2020**. One Week Faculty Development Programme on "**Open Source Tools for Research**" organized virtually by Teaching Learning Centre, Ramanujan College, University of Delhi sponsored by MHRD PMMMNMTT.
- 15. 20<sup>th</sup> April 06<sup>th</sup> May, 2020. Two-Weeks Faculty Development Programme on "MANAGING ONLINE CLASSES and CO-CREATING MOOCS" organized virtually by Teaching Learning Centre, Ramanujan College, University of Delhi sponsored by MHRD PMMMNMTT.
- 16. **23**<sup>rd</sup> **24**<sup>th</sup> **January, 2020.** International Summit on **Women in STEM –"Visualizing the Future: New Skylines"** held at India Habitat Centre, New Delhi.
- 17. **30<sup>th</sup> March, 2019.** Orientation Workshop on "Effective Communication: Impressive Delivery" organized by Consortium for Educational Communication (CEC), UGC (NSC) Campus, New Delhi.
- 18. **20**<sup>th</sup> **23**<sup>rd</sup> January, **2019.** RBPT Writer's workshop for STEM Teachers. (Level 3) held at IISER organized by Department of Biotechnology (Govt. of India), British Council and CoESME, IISER, Pune.
- 19. 5<sup>th</sup> 8<sup>th</sup> October 2018. National Teachers' Science Congress at Indian International Science Festival held at Indira Gandhi

Pratishthan, Lucknow organized by Ministry of Science and Technology & Ministry of Earth Sciences, Govt. of India.

- 20. **23**<sup>rd</sup> **25**<sup>th</sup> April, **2018.** Management and Leadership Workshop in Preparation for the India One Health Tabletop Exercise held at New Delhi, India organized by Sandia National Laboratories, USA.
- 21. **15**<sup>th</sup> **22**<sup>nd</sup> **January, 2018.** National symposium-cum-Faculty Development Program on "Genome editing Tools and **Applications**" held at Miranda House, University of Delhi under D.S. Kothari Centre for Research and Innovation in Science and Education, Miranda House, University of Delhi.
- 22. **26**<sup>th</sup> **28**<sup>th</sup> **September 2017**. **INSCR-International Conference (IIC-2017) and Workshop** held at University of Delhi, Delhi organized by Indian Soil Contamination Network (INSCR) and International Society for Microbiology (ISME).
- 23. 1st 4th March, 2017. STEM Pedagogy Workshop for Undergraduate Science Teachers (Level 2) held at Indian Institute of Science Education and Research (IISER) Pune organized by Centre for Science and Mathematics Education (CoESME), IISER, Pune. Co-sponsored by British Council, UK.
- 24. **22**nd **September, 2016**. Workshop on **Microbial Genomics and Metagenomics** held at Department of Zoology, University of Delhi organized by Indian Soil Contamination Research (INSCR), Association of Microbiologist of India (AMI) and Indian National Science Academy (INSA).
- 25. **10**<sup>th</sup> **12**<sup>th</sup> March, **2016**. **STEM Pedagogy Workshop for Undergraduate Science Teachers (Level 1)** held at Indian Institute of Science Education and Research (IISER) Pune, organized by Centre for Science and Mathematics Education (CoESME), IISER, Pune. Co-sponsored by British Council, UK.
- 26. 13<sup>th</sup> October 04<sup>th</sup> November, 2015. Refresher course in Environmental studies/Earth Sciences (ID), Centre for Professional Development in Higher Education (CPDHE) University of Delhi sponsored by University Grants Commission (UGC), Govt. of India.
- 27. **14th 20th July, 2015. Advance Training in Digital Literacy** at Edinburgh College, Edinburgh, UK under UKIERI funding to Campus of Open Learning, University of Delhi and Edinburgh College, UK.
- 28. **17**<sup>th</sup> **19**<sup>th</sup> February, **2015**. **D-LITE** (Digital Literacy and Innovation for Tomorrow's Education) Course, Centre for Professional and Technical Training, Campus of Open Learning, University of Delhi under UKIERI (UK India Education & Research Initiative) project.
- 29. **09**<sup>th</sup> **30**<sup>th</sup> **December 2014**. **Refresher course in Life Science**, Centre for Professional Development in Higher Education (CPDHE), University of Delhi sponsored by University Grants Commission (UGC), Govt. of India.
- 30. 6<sup>th</sup> 7<sup>th</sup> September 2012. Attended The Academic Congress: Enabling the Young: Redefining the Education held at University of Delhi.
- 31. **2010 2011** Faculty Training Program, **MS in Bioinformatics** at University of Edinburgh, UK (sponsored by University of Delhi).

#### **General Articles published**

 Charu D. Rawat (2016). "Where there is skill, there are many ways"- On the importance of skill development in undergraduate students. IndiaBioscience. <a href="https://indiabioscience.org/columns/education/where-there-is-skill-there-are-many-ways">https://indiabioscience.org/columns/education/where-there-is-skill-there-are-many-ways</a>

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