# Completion Report (31/08/2020 to 29/02/2024)

# Department of Biotechnology

- 1. Name of the College: K. N. Govt. P G College, Gyanpur, Bhadohi
- 2. Name of Coordinator, designation, Address, Phone nos.- **Dr. Rashmi Singh**, Assistant Professor Department of Botany, 9415447808

S.N.	Department	Name of coordinator	Designation	Mobile no.
1	Botany	Dr. Rashmi Singh	Assistant Professor	9415447808
2	Chemistry	Dr. Abhimanyu Yadav	Assistant Professor	8517866497
3	Physics	Dr. Kalpana Awasthi	Assistant Professor	8418957246
4	Zoology	Mr. Ratnesh Soni	Assistant Professor	9415153338

3. (A) Assessment duration: 31/08/2020 to 29/02/2024

(B) Duration in years :3.6 Years

(C)Extension period if any: 6 months (31.08.2023 to 29.02.2024)

4. Details of Departments Supported

S.N	Name of	Courses (B.Sc./M.Sc./PG	Regular Faculty members
	Department	Diploma, certificate etc) offered	Total, with Ph.D. and without Ph.D
1	Botany	B.Sc. and M.Sc.	Total: 07; Ph.D.: 07; without Ph.D.: 00
			Dr. Rashmi Singh, Ph.D., NET
			Dr. R.K. Pandey, Ph.D.,NET
			Dr. Saumya Mishra, Ph.D., SLET
			Dr. Suman Gupta, Ph.D.
			Dr. Shefali Singh, Ph.D, NET
			Dr. Ravi Kumar Yadav, Ph.D., NET
			Dr. Gita Yadav, Ph.D
2	Chemistry	B.Sc. and M.Sc.	Total: 12; Ph.D.: 08; without Ph.D.: 04
			Dr. V.K. Yadav, Ph.D., NET
			Dr. Abhimanyu Yadav, Ph.D., NET
			Dr. Rajneesh Dwivedi, Ph.D
			Dr. Arvind Kumar Pandey, Ph.D, NET
			Mr. Dheerendra Kumar, NET
			Dr. Siddharth Barnwal, Ph.D, NET
			Dr. Deepali Jaiswal, Ph.D, NET
			Dr. Shikha Mehta, Ph.D, NET
			Dr. Jyoti Tiwari, Ph.D, NET
			Mr. Nikhil Kumar Singh, NET
			Ms. Jyoti Maurya, NET
			Mr. Amit Kumar Sharma, NET
3	Physics	B.Sc. and M.Sc.	Total: 09; Ph.D.: 04; without Ph.D.:05
			Dr. Kalpana Awasthi, Ph.D., GATE
			Dr. Priyanka Srivastava, Ph.D.
			Mr. M.K. Vishwakarma, M.Sc., NET
			Dr. S.P. Mishra, Ph.D.
			Dr. Sadanand Singh, Ph.D
			Mr. Ashish Verma, NET
			Mr. Akhilesh Kumar, NET
			Mr. Jais Kumar, NET
			Mr. Dhanajay Gaur, NET
4	Zoology	B.Sc. and M.Sc.	Total: 05; Ph.D.: 02; without Ph.D.:03
			Dr. Anju Verma, Ph.D., NET
			Mr. Ratnesh Soni, M.Sc., NET
			Dr. Deepak verma, Ph.D., NET
			Mr. Vivek Verma., NET
<u> </u>			Ms. Aaknksha Kushwaha, NET

- 5. Number & Date of Advisory committee meeting held: 01, 21/03/2022 (Annexure II)
- 6. Qualitative improvements due to DBT support. Please highlight 5 salient points (within 500 words).
- With the DBT Support, Departments organized minor projects as well as interdisciplinary workshops. Department of Botany organizes minor project on green synthesis of silver nanoparticle Using Mushroom, Department of Physics on Preparation of graphene oxide using agro waste i.e. rice husk.
- The field visits were conducted to research institutes under this scheme, students got exposure to newer techniques during their institutional visit. Since the students are from rural area, due to this scheme they attended such field trips and got academic and industrial exposure. The visit enhances their curiosity in research oriented studies. The visit to the Central Instrumentation Facility, IIT(BHU) Varanasi was organized by chemistry department, Visit to Birbal Sahni Institute of Palaeobotany and CIMAP (Lucknow) by Botany Department, Department of Physics, University of Allahabad, Prayagraj and Department of Biochemistry, Lucknow University, Lucknow by Department of Zoology.
- First time hands on training were carried out in such a large scale which develops critical thinking skills, real-world experience and knowledge in the students. All the departments were organized the hands on training programme for UG students. (Appendix –I)
- Due to DBT Star college scheme, the faculties got an opportunity to organize workshops, winter school/ summer school and invite the guest speakers for the students and faculty which provide a broad academic exposure to them. The guest lectures on various topics have enriched the knowledge of the faculty and students (Appendix –I)
- Outreach Activities were organized with this support to nurture school education. (Appendix-I)
  - 7. Any Novel aspect introduced or planning to introduce during the Scheme duration.

There was no concept of organizing winter school/summer school before the implementation of this scheme. After procuring new instruments from this scheme, now minor research projects at undergraduate level are introduced. Both these activities orient the students towards research.

Lessons learnt / difficulties faced/suggestions if any, in implementation of the programme and utilization of DBT grant. (Max 3 points within 300 words).
 As we don't have any dedicated section of accounts in our College, change in transaction portal for grant affect the scheme in my college. We were not able to consume the grant in time frame.

#### 9. Key performance indicators

S. no	Indicator	Pre	re-support					During/After Support							Rem arks			
1	No. of students admitted		Total =908				Total =1445											
			M= 506 F=402				M=5	<b>78</b>			F=867							
		SC- 48	ST- 00	OBC- 263	G - 19 5	SC- 22	ST- 00	OBC- 219	G 16 1		ST 00	OBC 284	G 250	SC 36	ST 00	OBC 465	G 366	
2	No. of students passing out (%) Students Admitted/passing out (pass %)			,	93.′	7 %	,				,	•	97	.2	•	•		
3	Drop-out rates				15	5%							89	%				

4	No. of students opting for MSc	100	150	
5	Average marks	70	75	
6	No. of hands-on experiments being conducted	00	16 (Appendix-I, 1)	
7	No. of new experiments introduced	00	19 (Appendix-I, 2)	
8	Publications (scopus indexed) /patents, if any.	35	47 (Appendix-I, 3)	
9	Training received by faculty	24	33 (Appendix-I, 4)	
10	Exhibitions/seminars /training courses conducted	00	12 (Appendix-I, 7)	
11	Books/journals subscribed from grants	400	471 (Appendix-I, 11)	
12	Outreach activities (Popular lectures)	00	05 (Appendix-I, 9)	
13	Colleges mentored to apply for DBT Star College grants	00	00	
14	Invited lectures	00	12 ((Appendix-I, 10)	

- 10. Details of colleges / schools mentored during the Star Scheme Tenure (Name of college / school; class / standard; No. of students benefited; whether any mentored college applied under Star College Scheme, if yes what was the outcome.
- 1. Vibhuti Narayan Government Inter College, Gyanpur, Bhadohi- Number of Students benefitted=50
- 2. Woodard Public School, Bhadohi- Number of Students benefitted= 60
- 3. Keshav Prasad Mishra Govt. Girls Degree College- Number of Students benefitted= 50
- 11. Details of increase in the faculty generated resources viz extramural research grants from other funding agencies to strengthen the Star College Scheme efforts.

The grant received under DBT Star College Scheme strengthen Undergraduate laboratory and as the student learn new practical, we faced challenge for postgraduate science laboratory. So we have applied for DST-FIST and received grant of Rs.1.17 crore (Annexure-). The advance instrument purchased under this scheme maintained the momentum of research activity at Post graduate level.

12. SOPs developed, lab manuals created and uploaded on website or submitted to DBT.

## 13. Self evaluation

Department	*Objective (as stated in proposal)	% achieved	Reasons for underachievement / If achieved, state in quantitative metrics
Chemistry	11. Organized invited lectures	90	1.8
	12. Field visit	100	2.0
	13. Hands on training, Quiz and poster	70	1.7
	14. training for laboratory staff.	50	1.0
Physics	• Invited lectures	100	2.0
	<ul> <li>Workshops</li> </ul>	80	1.8
	Hands on training	100	2.0
	• Field Visit	100	2.0
	<ul><li>Interdisciplinary Project</li><li>Workshop for supporting staff</li></ul>	60	1.6
	• Winter School	90	1.9
	<ul> <li>Essay Competition and Quiz</li> </ul>	100	2.0
	Competition	100	2.0
Botany	Invited lectures	90	1.9
	<ul><li>Workshops</li></ul>	60	1.6
	Hands on training	100	2.0
	• Field Visit	100	2.0
	Interdisciplinary Project	60	
	<ul> <li>Workshop for supporting staff</li> </ul>	100	1.6 2.0
	• Winter School	100	
	• Essay Competition/ Science		2.0
	Exhibition and Quiz Competition	100	2.0
Zoology	• Invited lectures	50	1.0
	<ul><li>Workshops</li></ul>	100	2.0
	Hands on Training	100	2.0
	• Field Visit	100	2.0
	• Essay Competition/ Science	60	1.8
	Exhibition and Quiz Competition		

11. Details of the procured equipment (as per submitted asset certificate) which would be retained by the college after completion of the project for future research and academics as Annexure-I with request letter for the retention of procured equipment.

## Details of Capital Assets Acquired During the Period

(Financial figures given in this CAAC are shown in lakhs)

S. No	Name of Equipment/ Asset	Sanctione d Cost	Quantit y Procure d	Actual Cost (Actual figure, not to roundoff)	Date of Placing order	Date of Receiving Equipment	Payment Voucher No. with Date (Copy of payment voucher(s) may please be enclosed)	Balance to be reimbursed [Provide reason(s) for fluctuation in price (if any)]
-	1	2	3	4	5	6	7	8
				nctioned Equi Department of		:1		
a.	UV lamp with chamber & optional accessories	10.0	01	00.21800 00.02600	10/03/21	18/03/2021		
b.	PTFE magnetic stir bar		25	00.10500	10/03/21	18/03/2021		
C.	Digital Potentiomet er		03	00.40500	10/03/21	18/03/2021	BP-2020-	
d.	Flame photometer digital		03	01.95000	10/03/21	18/03/2021	21-7	
e.	Thermostat complete set up		01	00.47500	10/03/21	18/03/2021		
f.	Calorimeter complete set up		05	00.49000	10/03/21	18/03/2021		
g.	Viscometer		140	00.38500	10/03/21	18/03/2021		
h.	Laboratory borosilicate Dessicator		10	01.12500	10/03/21	18/03/2021		

i.	Micropipett e 0.5 mL, 1 mL	12	00.54000	10/03/21	19/03/2021		
j.	Vacuum pump	1	00.47000	10/03/21	19/03/2021		
k.	Saturated Calomal electrode	2	00.04800	10/03/21	19/03/2021	BP-2020-	
l.	Bright Platinum electrode	2	00.12400	10/03/21	19/03/2021	<u>21-10</u>	
m.	Automatic sprayer	15	00.26250	10/03/21	19/03/2021		
n.	Wheatstone bridge	2	00.47000	10/03/21	19/03/2021		
О.	Electronic weighing machine	2	00.24400	10/03/21	19/03/2021		
p.	Stalagmomet er 25 cm	160	00.49600	10/03/21	19/03/2021		
q.	RD bottle 25 mL	160	00.12800	10/03/21	19/03/2021		
r.	Laboratory Thermometer	30	00.03300	10/03/21	19/03/2021		
S.	Distillation unit (3 Ltr) Double stage	1	00.48000	10/03/21	20/03/2021	BP-2020- 21-8	
	Total		Rs. 08.47450				
	CGST@9%+ SGST@9%		01.52541				
Grar (Dep	nd Total partment wise)		Rs. 9.99991				

S. No	Name of Equipment/ Asset	Sanctione d Cost	Quantit y Procure d	Actual Cost (Actual figure, not to round off)	Date of Placing order	Date of Receiving Equipment	Payment Voucher No. with Date (Copy of payment voucher(s) may please be enclosed)	Balance to be reimbursed [Provide reason(s) for fluctuation in price (if any)]
	1	2	3	4	5	6	7	8
				nctioned Equi		et		
	Connector 1			Department c		10/02/2021	<u> </u>	
a.	Spectrophoto meter single beam (UV/VIS)		01	1.77500	10/03/21	19/03/2021		
b.	Western Blotting Apparatus Mini (8 X 7 cm Gel) Cassette with all accessories	10.0	02	00.75000	10/03/21	19/03/2021	BP-2020- 21-3	
C.	Laboratory microscopes		32	02.99200	10/03/21	19/03/2021		
d.	Laboratory Microscope with Camera (Magnus Trinocular Microscope with MagCam DC-5		01	01.90000	06/03/21	20/03/2021	BP-2020- 21-2	
e.	Micropipett e tips (50µl)		05 pkt	00.06725	06/03/21	20/03/2021		
f.	Electrophor esis Mini Power Supply (50V, 100V, 150V,		3	00.46200	10/03/21	22/03/2021		

lance to
be
mbursed

S.	Name of	Sanctione	Quantit	Actual Cost	Date	Date of	Payment	Balance to				
No	Equipment/	d Cost	у	(Actual	of	Receiving	Voucher	be				
	Asset		Procure	figure, not	Placin	Equipment	No. with	reimbursed				
			d	to	g		Date	[Provide				
				roundoff)	order		(Copy of	reason(s) for				
							payment	fluctuation in				
							voucher(s)	price (if any)]				
							may					
							please be					
							enclosed)					
	1	2	3	4	5	6	7	8				
	Sanctioned Equipment/Asset											
	1		Sai	nctioned Equi	pment/A	sset						
			Sai	nctioned Equi								
a.	Digital pH		Sai									
а.	Digital pH meter		Sai	Department of		У	BP-2020-					
a. b.	• 1		1 1	Department of		У	BP-2020- 21-6					
	meter		1 1 1	Department 00.16000		19/03/2021	BP-2020- 21-6					
b.	meter Drier		1 1 1	Department 00.16000 00.02190		19/03/2021 19/03/2021						
b.	meter Drier Magnetic		1 1 1	Department 00.16000 00.02190		19/03/2021 19/03/2021						

	T	I					, , , , , , , , , , , , , , , , , , , ,
e.	Chromatogr aphy paper		1pkt	00.09000	20/03/2021		
f.	Visible		1	00.68000	20/03/2021	1	
1.			'	00.00000	20/03/2021	DD 2022	
	Spectrophot					BP-2020-	
-	ometer DNA			00 17000	20/02/2021	<u>21-5</u>	
g.	Plant DNA	10.0	2	00.17800	20/03/2021		
	isolation Kit			00.07.000	00/00/000	4	
h.	Stage		2	00.07600	20/03/2021		
	Micrometer					]	
i.	Double		1	00.68000	20/03/2021		
	Distillation						
	Unit						
j.	Binocular		04	02.27200	23/03/2021		
	laboratory						
L	microscope						
k.	Microscope		01	01.95000	23/03/2021		
	with image					BP-2020-	
	analysing					<u>21-4</u>	
	software					<u> </u>	
1.	Ganong's		50	00.18900	23/03/2021	1	
	photometer,				-		
	Borosilicate						
	glass						
m.	Wilmott's		60	00.22680	23/03/2021	1	
'''	bubbler,			33.22300	25, 55, 2521		
	Borosilicate						
	glass						
n.	Ganong's		53	00.20034	23/03/2021	1	
'''	respirometer		) )	00.20034	23/03/2021		
	respirometer						
	, Borosilicate						
	glass						
_	0		01	00.17950	23/03/2021	1	
Ο.	Turbidity		UI	00.1/930	23/03/2021		
-	Chromotogr		01	00.20000	22/02/2021	-	
p.	Chromatogr		01	00.28800	23/03/2021		
	aphy						
	chamber						
	with jar			00.1.5500	22/02/2021	Á	
q.	Luxmeter,		02	00.16700	23/03/2021		
	50,000 Lux					]	
r.	Portable		01	00.17500	23/03/2021		
	autoclave						
S.	Centrifuge		01	00.26800	23/03/2021		
	with stepless						
	speed						
	control, with					1	

	digital speedometer							
t.	Arc Auxanometer		04	00.07260		23/03/2021		
u.	Clinostat		04	00.05280		23/03/2021		
V.	Incubator		01	00.20350		23/03/2021		
W.	Hot Air oven		01	00.20790		23/03/2021		
	Total			08.47134				
CGS SGS	ST ((9%)+ ST (9%)			01.52484				
Gra (Dep	nd Total partment wise)			09.99618 Paid: <b>999617.00</b>				
		Т	T	T	Т		T	
S. No	Name of Equipment/ Asset	Sanctione d Cost	Quantit y Procure	Actual Cost (Actual figure, not	Date o Placing order	Receiving	Payment Voucher No. with	Balance to be reimbursed
			d	to roundoff)		t	Date (Copy of payment voucher(s)	[Provide reason(s) for fluctuation in price (if any)]
							may please be enclosed)	
	1	2	3	4	5	6	7	8
			Sa	nctioned Equi	•			
	· - ·	T	T	Department of	1		T	_
a.	Curie Temperature Apparatus		1	00.56500	16/03/2	1 20/03/21		The amount
b.	Maxwell's needle setup		5	00.28000	16/03/2			remaining from other
C.	Bending of beam	10.0	4	00.42800	16/03/2		BP-2020-	department (Rs.
d.	Viscosity setup		2	00.14800	16/03/2	1 20/03/21	21-09	00.09313)
e.	Telescope		1	00.32500	16/03/2 <sup>-</sup>	1 20/03/21		were transferred
f.	Nodal slide		3	00.70500	16/03/2			to Physics
g.	Sonometer apparatus		5	00.38750	16/03/2	1 20/03/21		Department
h.	Plank's constant		2	00.42000	16/03/2	1 20/03/21		for purchasing
i.	Diode Laser Kit		2	00.32000	16/03/2	1 20/03/21		of equipment.

j.	Liquid lens	1	00.78000	16/03/21	20/03/21	BP-2020-	
	apparatus			, ,	, ,	<u>21-11</u>	
k.	p-n junction diode	8	00.47600	16/03/21	20/03/21		
l.	Four probe	01	00.21500	16/03/21	23/03/21		
	setup						
m.	Stefan	02	00.14000	16/03/21	23/03/21		
	constant						
	apparatus		00.22.500			-	
n.	Bar pendulum	04	00.23600	16/03/21	23/03/21	BP-2020-	
	with stop					<u>21-12</u>	
	watch					<u> </u>	
0.	Surface	02	00.08450	16/03/21	23/03/21		
	tension setup			, , , ,	-,,		
p.	Travelling	02	00.47000	16/03/21	23/03/21		
	microscope						
q.	Polarimeter	02	00.49000	16/03/21	23/03/21	]	
r.	Melde's	03	00.73500	16/03/21	23/03/21		
	experiment					]	
S.	p-n-p	08	00.55600	16/03/21	23/03/21		
	transistor					_	
t.	Zener diode	05	00.33500	16/03/21	23/03/21		
u.	Hybrid	05	00.45750	16/03/21	23/03/21		
	parameter						
	Total		08.55350				
CGS	```		01.53963				
SGS	ST (9%)						
Grar	nd Total	Rs.					
(Dep	partment wise)		10.09313				

Prof. Ramesh Chandra Yadav

(Principal)

**PRINCIPAL** 

K.N. Govt. P.G. College Gyanpur (Bhadohi)-221304 Dr. Rashmi Singh

(Project Co-ordinator)
Project Coordinator

DBT - Star College Scheme K.N. Govt. P.G. College Gyanpur (Bhadohi)-221304

# Appendix-I

# 1. Details of hands on training programme

Dates	Details of training programme	Practical demonstrated / training conducted by	Class and no. of Beneficiaries
	Department: Zoolo	gy	
08/03/2021	How to handle Microscope	Dr. Shubha Srivastava Mr Ratnesh Soni	B.Sc. I (80)
08/03/2021		Dr Anju Verma Dr. Awadesh Singh Yadav	B.Sc. I (80)
09/03/2021	Demonstration of a compound microscope in biological sciences	Dr. Awadesh Singh Yadav Dr Anju Verma	B.Sc. II (60)
09/03/2021		Dr. Shubha Srivastava Mr Ratnesh Soni	B.Sc. II(40)
10/03/2021	To study the parts and uses of a compound microscope in biological sciences	Mr. Ratnesh Kumar Soni Mr. P. C. Gupta	B.Sc. III (40)
9/02/2022- 10/02/2022	Workshop on Hematology	B.Sc. II (160) 80+80	
19/02/2022	Workshop on Micometry	Mr. Ratnesh Kumar Soni	B.Sc. I (180) 60+60+60
5/02/2022- 07/02/2022	Workshop on Bioinstrumentation: Principal & Application	Dr. Akanksha Kushwaha	B.Sc. III (75)
4/08/2023	Permanent slide preparation	Dr. Deepak Verma, R. Soni	B.Sc. II Sem (65)
5/8/2023- 6/08/2023	Qualitative analysis of Carbohydrate, protein and fat	Dr. Akanksha Kushwaha R. Soni	B.Sc. II Sem (184)
24/06/2023	Sequence analysis by using BLAST	Dr. Deepak Verma, R. Soni	B.Sc. IV Sem (80)
12/08/2023	Recording of BP using sphygmomanometer	Dr. Vivek Verma	B.Sc. II Sem (90)
	Department: Botar	ny	I .
12/03/2021	Handling and use of Microscope	Dr. Saumya Mishra Dr. Suman Gupta	B. Sc. I (80+80)
14/03/2021	Preparation of herbaria and herbarium Mr. Ranjeet Singh techniques Dr. Ravindra Pandey		B.Sc. III (80)
25/10/2021- 31/10/2021	Instrumentation of Biological Tools	Dr. Saumya Mishra	B.Sc.I (85+85+85)
19/02/2022- 20/02/2022	Experiments of Plant Physiology	Mr. Neeraj Kumar Goswami	B.Sc.II (80+80)

23/02/2022- 24/02/2022	BGA as Biofertilizer	Dr. Suman Gupta	B.Sc.I (70+70)	
27/03/2023	Hydroponics	Dr. Ravi Kumar Yadav	B.Sc. IIIrd Sem (70)	
05/08/2023	Separation of Amino Acids and Plant by Paper Chromatography	t Pigment	Dr. Shefali Singh	B.Sc. IV th Sem (70)
16/10/2023- 17/10/2023	Plant Tissue Culture Technique		Dr. Ravindra Pandey Dr. Ravi Kumar Yadav	B.Sc. Vth Sem (90)
16/12/2023	Bioinformatics- Biological Data Ana	lysis	Dr. Ravi Kumar Yadav and Dr. Shefali Singh	B.Sc. Vth Sem (60)
	Denartme	nt: Chemis		(00)
17/03/2021	Departme		. Nirala, Dr. Abhimanyu	B.Sc. I (50)
	Viscosity Measurement	Yadav		
17/03/2021	The students were able to know the percentage of unknown	Dr. Abhir Tiwari	nanyu Yadav, Dr. Madhu	B.Sc. I (50)
18/03/2021	composition of two miscible liquids which depends on the rate of flow	Dr. Abhir Tiwari	nanyu Yadav, Dr. Madhu	B.Sc. I (50)
18/03/2021	of liquid through viscometer.	Mr. H. K. Yadav	Nirala, Dr. Abhimanyu	B.Sc. I (50)
24/03/2021	pH Measurement: Effect of contamination on pH of		nanyu Yadav, Ayyub	B.Sc. II (50)
24/03/2021	drinking water by measuring the pH of water from different places such		nanyu Yadav, Ayyub	B.Sc. II(50)
25/03/2021	as well, pond and tap water etc.		nanyu Yadav, Ayyub	B.Sc. II(50)
25/03/2021			nanyu Yadav, Ayyub	B.Sc. II (50)
8/02/2022- 9/02/2022	Principle of Chromatography and Paper Chromatography Separation techniques	Dr. Deepa	ali Jaiswal d Kr Pandey	B.Sc.II (100) 35/batch
19/02/2022- 21/02/2022	Hands on Training Workshop on Potentiometric titration: Principle and Applications Titration through potentiometer	Dr. Om P Dr . N. K	rakash Yadav, . Singh	B.Sc.III (60) 30/batch
10/08/2023	To determine of Hardness of Water	Dr. Om P Dr. Dhire	rakash ndra Kumar	B.Sc. Ist Sem (120)
24/02/2023	Hands on training Programme: Preparation of <i>m</i> -dinitrobenzene, <i>p</i> -nitroacetanilide	Dr. Deepa	B.Sc. IIIrd Sem (32)	
11/08/2023	Hands on Training to determine the concentration of KMnO4 by colorimetrically	Dr. Sidha Dr. Amit	B.Sc. IInd Sem (70)	
10/01/2024	Hands on Training Workshop on Conductometric titration: Principle and Applications	Dr. Shikh Dr. Jyoti		B.Sc. IInd Sem (90)

	Department: Physics	}	
13/03/2020	Experiments on Laser-I batch (During the session the formation of interference and	Dr. Priyanka Srivastava	B.Sc. II(30)
15/03/2021	Assembling of Electronics Circuits on Breadboard (The students known the parts of the scientific components)	Mr. M.K. Vishwakarma Dr. Priyanka Srivastava	B.Sc. III(45)
16/03/2021	Assembling of Electronics Circuits on Breadboard (The students learnt how to join the circuit on the bread board using components)	Mr. M.K. Vishwakarma	B.Sc. III(30)
16/03/2021	Experiments on Laser-II (Demonstration of formation of interference and diffraction patterns)	Dr. Priyanka Srivastava	B.Sc. II (35)
11/02/2022	Wave Formation using CRO (Hands on training)	Mr. M.K. Vishwakarma	B.Sc. III(30)
30/01/2022- 1/02/2022	Foundations of Quantum Mechanics (Online mode)	Mr. Akhilesh Kumar & Mr. Jais Patel	B.Sc.II (100)
08/06/ 2023	Moment of Inertia of flywheel & Newton's second law of motion	Dr. Ritu Dhingra Associate Professor Department of Physics, Maitreyi College, South Campus University of Delhi, New Delhi	B.Sc. II Sem. (55)
09/06/2023 2023	Ballistic Pendulum & Projectile Motion	Dr. Poonam Juneja Associate Professor Department of Physics, Maitreyi College, South Campus University of Delhi, New Delhi	B.Sc. II Sem (67)
05/06/ 2023	Black Body Radiation: Determination of Stefan's Constant & Ohm's Law	Dr. Prajwalit Shikha Assistant Professor Department of Physics, Maitreyi College, South Campus University of Delhi, New Delhi	B.Sc. II Sem (60)
13/10/ 2023	Half and Full Wave Rectifier	Dr. Poonam Juneja Associate Professor Department of Physics, Maitreyi College, South	B.Sc. IV Sem (50)

<del>,</del>	
Campus	
University of Delhi,	
New Delhi	

2. List of	New Practical introduced in different departments							
Department	Details of Experiments							
Physics	To determine the energy band gap of semiconductor material using four probe							
	setup							
	To determine the frequency of a.c. mains using sonometer							
	Formation of interference, diffraction and slight width determination using dieda learn setup.							
	diode laser setup.  Preparation of panomaterial by using agrowaste							
	<ul> <li>Preparation of nanomaterial by using agrowaste</li> <li>To find out the refractive index of liquid (Hg)</li> </ul>							
	To find out the refractive index of liquid (Hg)     Different ways formation using CRO							
	Different wave formation using CRO  To Contact the state of the s							
	To find out the resolving power of prism  To find out the formula of a major with Multi-American Multi-Ame							
	To find out the frequency of ac mains using Melde's experiment  To find out the great lead to file and in the great i							
	To find out the wavelength of laser light using transmission grating  To determine the society of six all all forms the state of differential and the second s							
Chamiatur	To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the width of single slit from the study of diffraction pattern  To determine the slit from the s							
Chemistry	To determine the percentage composition of a given mixture by viscosity method.  To determine the strangth of HCl by titrating it against standard NeOH solution.							
	To determine the strength of HCl by titrating it against standard NaOH solution conductometrically.							
	Preparation of Copper tetra ammine complex							
	Potentiometric titration							
	Potentiometric titration     Separation of amino acids							
	<ul> <li>separation of anniho acids</li> <li>preparation of soaps</li> </ul>							
	• formation of crystal							
	Hands on Training to determine the concentration of KMnO4 by colorimetrically							
	• Conductometric titration							
	To determine of Hardness of Water							
	• Preparation of <i>m</i> -dinitrobenzene, <i>p</i> -nitroacetanilide							
	pH metric titration							
Botany	Preparation of culture medium and isolation of soil, water and air microflora.							
	Measurement of chlorophyll concentration in diseased and healthy plants							
	To measure the rate of respiration							
	Differentiation between monosaccharides and disaccharides							
	Protein estimation							
	Isolation of essential oils							
	Isolation of Plant DNA							
	Preparation of hoagland medium and aqueous culture							
	Separation of amino acids by paper chromatography							
	Preparation of Explant and culture technique							
	Measurement of RQ value of different seeds through Ganong's respirometer							
	Preparation of mitotic and meiotic slides							
Zoology	Isolation and Separation of DNA							
	Blood group typing							
	Measurement of microbes							
	Quantitative estimation of sugar and Protein							

- Microtomy
- Polyacrylamide gel electrophoresis
- Thin layer Chromatography and Column Chromatography

#### 3. Publication of faculty

#### **Department: Botany**

- A brief analysis of Zinc efficiency Mechanism in Plants
  - **Ranjit Singh**, Int. J. of Disaster Recovery and Business Continuity (ISSN: 2005-4289 IJDRC) Acceptance 26/01/2021
- Biocontrol efficacy of Trichoderma species for control of collar rots of chickpea induced by Sclerotium rolfsii
  - **Ranjit Singh**, Int. Journal of Disaster Recovery and Business Continuity (ISSN: 2005-4289 IJDRC)Acceptance 22/02/2021
- Book Chapter: Ecological Stability and Pest Management
   Ranjit Singh In Book: Environmental Aspect of Alternative Energy Resource Editors: Dr.
   Madhu Tiwari, Dr. Abhimanyu Yadav, ISBN: 978-93-89657-43-2, Publisher: Bharti
   Publications, New Delhi (2020)
- Algal biofuels: A Sustainable Source of Alternative Energy,
   Suman Gupta In book: Environmental Aspect of Alternative Energy Resource Editors: Dr. Madhu Tiwari, Dr. Abhimanyu Yadav, ISBN: 978-93-89657-43-2, pp 126-130; Publisher: Bharti Publications, New Delhi (2020)
- Algal Secondary Metabolites
   Suman Gupta In book: Green Initiative and Sustainable Development; ISBN 978-81942503-Learning Media Publication318-320 (2020)
  - Ravi Kumar Yadav, Nishant Singh, Manish Kumar Singh, Jyotsana Raghuvanshi and Zeba Azim. 2024. Green synthesis of nano iron oxide using *Emblica officinalis* L.fruit extract and its impact on growth, chlorophyll content and metabolic activity of *Solanum lycopersicum* L. Journal of applied biology and biotechnology. Vol. X(XX), 1-9. DOI. 10.7324/JABB.2024.165651.
    - Ravi Kumar Yadav, Nishant Singh, Manish Kumar Singh and Zeba Azim. 2023. Role of green synthesized nano iron oxide in alleviating the cadmium toxicity in Brassica oleracea var.italica seedlings. Plant Nano Biology. Vol 6. https://doi.org/10.1016/j.plana.2023.100055.
    - Ravi Kumar Yadav, Nishant Singh, Manish Kumar Singh, Jyotsana Raghuvanshi and Zeba Azim. 2023. Green synthesis of nano zinc oxide using *Phyllanthus emblica* 1. Fruit extract and its impact on growth, pigment content and antioxidant enzyme activity of *brassica oleracea var italica*. Biochem. Cell. Arch. Vol. 23, No. 2. https://doi.org/10.51470/bca.2023.23.2.000.
    - Rashmi Singh, Madhu Shastri, A. K. Singh and P. N. Dongre. 2023. Approaches towards integrated disease management of sheath blight disease of corn. Current Agriculture Research Journal. Vol 11(3). https://doi.org/10.12944/CARJ.11.3.08
    - Rashmi Singh, Madhu Shastri, A. K. Singh and P. N. Dongre. 2023. Sheath blight disease and its bio management. Journal of Asiatic Society of Mumbai. Vol 97 (4) 133-138.
    - Rashmi Singh, Madhu Shastri, A. K. Singh and P. N. Dongre. 2022. Study of Disease severity of sheath blight symptoms of Corn in Purvanchal, (U.P.), India. NIU International Journal of Human Rights. vol 9 July (I) 64-70

#### **Books**

#### **Author-Rashmi Singh**

- 1. Microbiology and Plant Pathology. 2022. A Text Book. Krishna Publication. ISBN: 978-93-91152-61-1.
- 2. Archegoniate and Plant Architecture. 2022. A Text Book. Krishna Publication: ISBN No.: 978-93-91152-29-1.
- 3. Economic Botany, Ethnomedicine and Phytochemistry. 2023. A Text Book. Krishna Publication: ISBN No.; 978-93-94511-93-4

#### **Department: Chemistry**

 Book Chapter: Carbon and Transition Metal two Dimensional Quantum Dots: New Era of Material Science, Editors: Dr. Mridula Tripathi, Dr. Kalpna Awasthi and Dr. Aarti Publisher: NOVA Publications, USA(communicated) (2020)

#### **Edited Book**

- Environmental Aspect of Alternative Energy Sources Editors: **Dr. Madhu Tiwari**, **Dr. Abhimanyu Yadav**, ISBN: 978-93-89657-43-2, Publisher: Bharti Publications, New Delhi (2020)
- Renewable Energy Sources: An Assessment in Environment Scenario, Editors: **Dr. Abhimanyu Yadav, Dr. Madhu Tiwari**, ISBN: 978-81-949793-0-2; Publisher: Bharti Publications, New Delhi (2020)
- Air Quality Index; **Hement Kumar Nirala**; Book chapter in Renewable Energy Sources: An Assessment in Environment Scenario, **Editors: Dr. Abhimanyu Yadav, Dr. Madhu Tiwari,** ISBN: 978-81-949793-0-2; pp.178-188, Publisher: Bharti Publications, New Delhi (2020)
- Mishra A, Jaiswal A, **Sharma AK**, Pandey YK, Singh J, Singh J. 2023. A Visible-light-triggered & rhodamine-b catalyzed eco-friendly synthesis of benzopyrano [2, 3-c] pyrazoles. Catalysis Letters. 2023 Jan 26:1-0. DOI: 10.1007/s10562-023-04279-1
- Jaiswal A, Sharma AK, Jaiswal S, Mishra A, Singh J, Singh J, Siddiqui, I.R. 2023. Visible lightinduced eco sustainable synthesis of quinolines catalysed by Eosin Y. J. Heterocyclic Chem. DOI: 10.1002/jhet.4653
- **Prakash O**, Tiwari S, Maiti P. 2022. Fluoropolymers and their nanohybrids as energy materials: application to fuel cells and energy harvesting. ACS omega. (7-39):34718-40.
- **Prakash O**, Bihari S, Tiwari S, Prakash R, Maiti P. 2022. Dehydrohalogenated poly (vinylidene fluoride)-based anion exchange membranes for fuel cell applications. Mat. Today Chemistry. (23-1):100640.
- Singh AP, **Prakash O**, Kumar S, Shukla A, Maiti P. 2022. Poly (lactic acid-co-glycolic acid) assustained drug delivery vehicle for melanoma therapy. Mat. Today Comm. (31):103661.
- Bhardwaj R, **Prakash O**, Tiwari S, Maiti P, Ghosh S, Singh RK, Maiti P. 2022. Efficient herbicide delivery through a conjugate gel formulation for the mortality of broad leaf weeds. ACS omega. (7-23):19964-78
- Kanaujiya VK, Tiwari V, Baranwal S, Srivastava V, Kandasamy J. 2022.

Denitrosation of aryl-N-nitrosamines via trans-nitrosation strategy using ethanethiol and p-toluenesulfonic acid under mild reaction conditions. Synlett, AAM.

- Jaiswal D, Tiwari J, Singh S, Singh J, Singh J. 2021. Visible-light-mediated decarboxylative thiocyanation of cinnamic acids: an efficient photocatalytic approach to the synthesis of (e)- vinyl thiocyanates. Cat. Lett.. (151): 1738-1744.
- Yadav PK, **Prakash O**, Ray B, Maiti P. 2021. Functionalized polythiophene for corrosion inhibition and photovoltaic application. J. Appl. Poly. Sci.. 138(44):51306.

#### **Department: Physics**

• Impact of Functionalized Multi-Walled Carbon Nanotubes on Growth of Tomato Plant (*Solanum lycopersicum* L.)

**Kalpana Awasthi**, Dheeraj Kumar Tripathi and Rajani Srivastava, Journal of Experimental Biology and Agriculture, Science 8(**2020**) 469-478.

• Environmental Pollution Management Using 2D Carbon Nanomatrial: Graphene

Kalpana Awasthi and Seema Awasthi

Book chapter in Renewable Energy Sources: An Assessment in Environment Scenario Editors: Dr. Abhimanyu Yadav, Dr. Madhu Tiwari, ISBN: 978-81-949793-0-2,pp145-156; Publisher: Bharti Publications, New Delhi (2020)

- Hydrogen Energy: A Clean and Green Fuel
  - T. P. Yadav and Kalpana Awasthi

Book Chapter in Environmental Aspect of Alternative Energy Sources Editors: Dr. Madhu Tiwari, Dr. Abhimanyu Yadav, ISBN: 978-93-89657-43-2; pp.30-38 Publisher: Bharti Publications, New Delhi (2020)

- Investigations on Exotic Forms of Carbon: Nanotubes, Graphene, Fullerene, and Quantum Dots, Mahe Talat, Kalpana Awasthi, Vikas Kumar Singh, O.N. Srivastava
   Book Chapter in Functionalized Nanomaterials I: Fabrications; Editors: Vineet Kumar ,Praveen Guleria, Nandita Dasgupta, Shivendu Ranjan, ISBN: 9780815370413;pp.125-132 Publisher: CRC Press Taylor & Francis group (2020)
- Indian Energy Crisis

#### Priyanka Srivastava

Book chapter in Environmental Aspect of Alternative Energy Sources Editors: Dr. Madhu Tiwari, Dr. Abhimanyu Yadav, ISBN: 978-93-89657-43-; pp.66-67 Publisher: Bharti Publications, New Delhi (2020)

Waste Management for Safe Environment Challenges and Opportunities
 Manoj Kumar Vishwakarma, Arun Kumar Kushwaha and Surendra Kumar SinghYadav
 Book chapter in Environmental Aspect of Alternative Energy Sources Editors: Dr. Madhu Tiwari,
 Dr. Abhimanyu Yadav, ISBN: 978-93-89657-43-2; pp.196-211 Publisher: Bharti Publications, New Delhi (2020)

#### **Books**

- Bio-organic and Medicinal Chemistry Editors: S. Goyal, D. Pandey, P.P. Bhattacharya, D.Kumar, S. Yadav, Ranvir Singh, V.K.Yadav, Publisher: Krishna Prakashan, Meerut ,ISBN No. 78-93-91152-76-5 (2022).
- Fundamental of Chemistry, Editors: S. Goyal, D. Pandey, P.P. Bhattacharya, D. Kumar, S. Yadav, Ranvir Singh, **V.K.Yadav**, Publisher: Krishna Prakasha Meerut, ISBN No. 978-93- 91152-76-5 (2022).
- Chemical Dynamics and Coordination Chemistry, S. Goyal, D. Pandey, P.P.

Bhattacharya, D. Kumar, S. Yadav, Ranvir Singh, **V.K.Yadav**, Publisher: Krishna Prakashan, Meerut, ISBN No.978-93-91152-76-5(2022).

#### **Department: Zoology**

- Book Chapter: An Insight into Coronavirus Disease 2019 (Covid-19)
   P.C. Gupta In Book: A Global Pandemic of the 21<sup>st</sup> Century. In: Socio-Economic impact of COVID-19 on Indian Economy, Ed. Archana Singh, ISBN: 978-93-89234-80-0; pp.92-104 Publisher: NB Publication, Ghaziabad (U.P.), India, (2021)
- Book Chapter: Diabetes mellitus (Madhumeh): A Life-Style Associated Threat to Male Fertility in Modern Society
  - **P. C. Gupta** In Book: Renewable Energy Sources an Assessment in Environmental Scenario, Ed. A. Yadav & M. Tiwari, ISBN: 978-81-949793-0-2; pp. 97-106. Publisher: Bharti Publications, New Delhi (**2020**)
- Book Chapter: Water Pollution and Its Impact on the Human Health
   Ratnesh Kumar Soni In Book: Renewable Energy Sources an Assessment in Environmental
   Scenario. Ed. A. Yadav & M. Tiwari, Bharti Publications, New Delhi, India, 2020. (ISBN: 978-81-949793-0-2)
- Book Chapter: Role of Vitamin A in Immunity and Infection
   Ratnesh Kumar Soni In Book: Emerging Trends in Research Dimensions. Ed. R.C. Tripathi & B. Mishra, Namya Press, Delhi, India, 2020. (ISBN: 978-81-948090-0-3)
  - Kushwaha A, Thakur MK. Suv39h1 Silencing Recovers Memory Decline in Scopolamine-Induced Amnesic Mouse Model. Mol Neurobiol. 2023 Aug 26. doi: 10.1007/s12035-023-03570-x. PMID: 37626270.
  - Verma, Vivek et al. "Impact of a Single Episode of Different Intensity of White Light Pulse at Night on Masking Response in the Diurnal Mammal, Funambulus pennantii." Chronobiol Med. 2023;5(3):108-116
  - Malviya S.J. and Soni R. (2023): Revolutionizing Tomato Jassid (Amrasca biguttula biguttula) Control: A Synergistic Approach with Eco-friendly Botanicals and Precision Chemicals. Annals of Natural Sciences, Vol. 9[4]: December, 2023: 1-12.

#### 4. Training received by faculty

**Dr. Kalpana Awasthi**: Faculty development programme on Teachers in NEP2020: Role Awareness, Orientation, Challenges and Response, organized by MGKVP Varanasi and Hari Singh Gour Vishwavidyalaya, Sagar (March 17-23, 2021).

**Dr. Priyanka Srivastava :**Faculty development programme on Teachers in NEP2020: Role Awareness, Orientation, Challenges and Response, organized by MGKVP Varanasi and Hari Singh Gour Vishwavidyalaya, Sagar (March 17-23, 2021).

#### Mr. P. C. Gupta

- Two Week Online Interdisciplinary Refresher Course on Blended Learning & Flipped Classroom from Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching in collaboration with GNIOT (March 08-21, 2021). (Grade A)
- One week Faculty Development Programme on ACADEMIC WRITING. Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education PMMMNMTT. (February 18-24, 2021) (Grade A).

• Five days Faculty Development Programme on Research and Career. Vimala College (Autonomous) Thrissur, Kerala (supported by DBT-STAR College Scheme, Government of India) (October 19-21, 2020).

#### Mr. Ratnesh Kumar Soni

• One week Faculty Development Programme on ACADEMIC WRITING. Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education PMMMNMTT.(February18-24, 2021) (Grade A).

#### Mr. H.K. Nirala

- One week Faculty Development Programme on ACADEMIC WRITING. Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education PMMMNMTT.(February18-24, 2021) (Grade A).
- Two week Faculty Development Programme on Research Methodology Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education PMMMNMTT.(October 01-15, 2000)
- Two week Faculty Development Programme Advanced Concept for Developing MOOCS Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education PMMNMTT( July 02-17,2000).
- **Mr. Manoj Kumar Vishwakarma:** Refresher Course in Physics, organized by Teaching Learning Centre Ramanujan College, University of Delhi, New Delhi, 09 -23 June, 2023.
- **Dr. Jais Kumar:** Faculty Induction Programme organized by Human Resource Development Centre (HRDC) Aligarh Muslim University, Aligarh, 12 July to 17 August 2023.
- **Dr. Akhilesh Kumar:** Faculty Induction Programme organized by Human Resource Development Centre (HRDC) Aligarh Muslim University, Aligarh, 01 November to 05 December 2022.
- **Dr. Dhananjay Kumar Gaur**: Refresher Course on Environmental Studies organized by Human Resource Development Centre (HRDC) Aligarh Muslim University, Aligarh 16-29 August 2023.
- **Dr. Ashish Varma:** Refresher course in Physics, organized by Teaching Learning Centre Ramanujan College, University of Delhi, New Delhi, 28 July -11 August, 2022.
- **Dr. Ashish Varma:** Refresher course in Physics, organized by Teaching Learning Centre Ramanujan College, University of Delhi, New Delhi, 27 February -13 March, 2023.
- **Dr. Ashish Varma:** Refresher Course in "Managing Online Classes & Co- creating MOOCS, organized by Teaching Learning Centre Ramanujan College, University of Delhi, New Delhi, 11 25 November, 2023.
- **Dr. Ravi Kumar Yadav.** Workshop on Basic techniques of HPLC and it's application in research. Organized by Centre of Biotechnology, Nehru science Centre, University of Allahabad. 29-30 August 2022.
- **Dr. Ravi Kumar Yadav.** Lichens in an ecosystem. Organized by NBRI, Lucknow. 6-7 February 2023.
- **Dr. Ravi Kumar Yadav.** Refresher Course in Botany, organized by Teaching Learning Centre Ramanujan College, University of Delhi, New Delhi, 29 July-13 August, 2023.
- **Dr. Ravi Kumar Yadav.** Basic Training Program in Nano Science and Technology. Organized by Centre for Nano Science and Engineering, Indian Institute of Science, Banglore. 20-22 June 2022.
- **Dr. Ravi Kumar Yadav.** Professional Development Programme on Implementation of NEP-2020 for university and college teachers. Organized by IGNOU. 17-25 October 2022.

- **Dr. Rashmi Singh.** Refresher Course in Botany, organized by Teaching Learning Centre Ramanujan College, University of Delhi, New Delhi, 29 July-13 August, 2023.
- **Dr. Rashmi Singh.** Professional Development Programme on Implementation of NEP-2020 for university and college teachers. Organized by IGNOU. 21-31 December 2022.
- **Dr. Shefali Singh.** Refresher Course in Botany, organized by Teaching Learning Centre Ramanujan College, University of Delhi, New Delhi, 29 July-13 August, 2023.
- **Dr. Shefali Singh.** Professional Development Programme on Implementation of NEP-2020 for university and college teachers. Organized by IGNOU. 21-31 December 2022.
- **Dr. Shefali Singh.** Basic Training Program in Nano Science and Technology. Organized by Centre for Nano Science and Engineering, Indian Institute of Science, Banglore. 20-22 June 2022.
- Dr. Dhirendra Kumar. FIP. 1/9/2022 to 28/9/2022. Jamia Millia Islamia, New Delhi
- **Dr. Nikhil Singh**. FIP. 1/9/2022 to 28/9/2022. Jamia Millia Islamia, New Delhi
- **Dr. Om Prakash**. FIP. 1/9/2022 to 28/9/2022. Jamia Millia Islamia, New Delhi
- **Dr. Deepali Jaiswal**. FIP. 1/11/2022 to 29 /11/2022. Jamia Millia Islamia, New Delhi
- Dr. Shikha Mehta. FIP. 1/11/2022 to 29 /11/2022. Jamia Millia Islamia, New Delhi
- Dr. Jyoti Maurya. FIP. 1/11/2022 to 05/12/2022. Aligarh Muslim University, Aligarh
- Dr. Siddharth Barnwal. FIP. 15/11/2023 to 19/12/2023. Aligarh Muslim University, Aligarh
- Dr. Amit kumar Sharma. FIP. 15/11/2023 to 19/12/2023. Aligarh Muslim University, Aligarh
- **Dr. Rajneesh Diwedi**. FIP. 15/11/2023 to 19/12/2023. Aligarh Muslim University, Aligarh
- Dr. Arvind Pandey. FIP. 15/11/2023 to 19/12/2023. Aligarh Muslim University, Aligarh
- **Dr. Jyoti Tiwari**. FIP. 12/07/2023 to 17/08/2023. Aligarh Muslim University, Aligarh
- Dr. Nikhil Singh. Refresher Course. 04/08/2023 to 08/08/2023. Jamia Millia Islamia, New Delhi
- **Dr. Anju Verma-** Interdisciplinary refresher course in Sustainable Development and Climate Change organized by UGC-HRDC, University of Allahabad, 23 February-08 march, 2023.

#### • Dr. Deepak Verma-

Professional Development Programme on "Implementation of NEP 2020 for University and College Teachers" held from 05 December 2022 – 13 December 2022.

-UGC Sponsored Online Faculty Induction Programme, Organised by Aligarh Muslim University, Aligarh 06 February - 14 March 2023.

#### • Dr. Vivek Verma-

Faculty Induction Programme conducted by Jawaharlal Nehru University held from 9th January 2023 to 6th February 2023 and obtained A grade only

UGC Approved Short Term Professional Development Programme on Professional Development Programme on 'Implementation of NEP 2020 for University and College Teachers' held from 07th to 15th October, 2022.

#### • Dr. Akanksha Kushwaha-

Participated in Faculty induction program from Feb 6 to March 14, 2023, held in online mode at HRDC-AMU, Aligarh.

Attended professional development program on Implementation of NEP 2020 for University and college teachers from Nov 7 to Nov 16, 2022 through SWAYAM organised by IGNOU.

5. Details of institutes/ field visit organized during first year

Institute   detail	Visiting	Training	Training mang	ger ( Name	Date	Class	No. o	f Organizer
Collection and indentification of native fishes   Collection and culture techniques of native fishes   College, Gyanpur, Bhadohi   College, Gyanpur, Bh	_	_					Benef-	
Local visit   Collection and identification of native fishes   Local visit   Collection and identification of native fishes   Local visit   Collection and identification of insect pests of cultivated crops   Institute Visit of placebase in college, Saidabad, Allahabad   Saidabad, Allahabad, All			8	,			iciaries	
Collection and principal, Govt. P. G. College, Gyanpur, Bhadohi dentification of native fishes		L	Den	artment: Zo	ology			
and identification of local insects of Gyanpur  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Dr. R. K. Tiwari, Retired Principal, Govt. P. G. College. Saidabad, Allahabad, Singh Yadav  College. Saidabad, P. G. College. Saidabad, Allahabad illi Illi  Department of Zoology, University of Allahabad or Illi Illi  Situative visit of histochemistry of cultivated detail of electron detail of electron and carbon dative detail of electron and carbon dating.  Department: Chemistry  Central Students visited the central Dr. Ashish 23/03/2021 B.Sc. 60 Dr.	Local visit	Collection				R Sc	150	Dr. Awadesh
Identification of local insects of Gyanpur   Dr Anju Verma, Assistant and identification of native fishes   Collection, and culture techniques of native fishes   Collection and culture techniques of native fishes   Collection and culture techniques of native fishes   College, Gyanpur, Bhadohi   Dr. R. K. Tiwari, Retired Prof., K. N. Govt. P. G. College, Gyanpur, Bhadohi   Collection and culture techniques of native fishes   Collection and culture techniques of native fishes   College, Gyanpur, Bhadohi   College, Gyanpur, Bhadohi   Dr. R. K. Tiwari, Retired Prof., K. N. Govt. P. G. College, Gyanpur, Bhadohi   Dr. R. K. Tiwari, Retired Prof., Govt. P. G. College, Saidabad, Allahabad   Principal, Govt. P. G. College, Saidabad, Allahabad   Crops   College, Saidabad, Allahabad   Crops   College, Saidabad, Allahabad   Crops   College, Saidabad, Allahabad   Crops   College, Saidabad, Allahabad, Prayagraj   Dr. Saidabad,	Zocar visit			,			150	
Collection and culture techniques of native fishes   College, Gyanpur, Bhadohi   III   Students visited the central   Dr. Ashish   Dr.					2021	1		_
Local visit				Sardabad,				1 ada v
Collection and identification of native fishes			Tillallabad					
Collection and identification of native fishes								
and identification of native fishes  Local visit  Collection, identification and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and culture techniques of native fishes  Local visit  Collection and cidentification of insect pests of cultivated crops  Department of Zoology, University of Allahabad, Prayagraj  Department of Juniversity of Lucknow  BS Institute visit of Palaeoscience, Lucknow  BS Institute of Palaeoscience clectron microscope and carbon dating.  Department of Zoology, University of Sem  BS Institute of Collection and carbon dating.  Department of Zoology, University of Cancer  BS Institute Visit of Palaeoscience clectron microscope and carbon dating.  Department Students visited the central Dr. Ashish   23/03/2021   B.Sc.   60   Dr.    Sudents visited the central Dr. Ashish   23/03/2021   B.Sc.   60   Dr.    Sudents visited the central Dr. Ashish   23/03/2021   B.Sc.   60   Dr.	Local visit		Dr Aniu Verma	Δecietant	15/03/	R Sc	100	Ratnech
Identification of native fishes	Local visit		· ·				100	
Collection, identification and culture techniques of native fishes   College, Gyanpur, Bhadohi   Soni   S			·		2021	11		
Collection, identification and culture techniques of native fishes			Conege, Gyanpu	ii, Bilauoiii				Som
Collection, identification and culture techniques of native fishes   College, Gyanpur, Bhadohi   College, Gyanpu								
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Local visit   College, Gyanpur, Bhadohi   College, Gyanda   College, Gyanpur, Bhadohi   College, Gyanpur, Bhadohi   College, Gyanpur, Bhadohi   College, Gyanpur, Bradit   College, Gyanpur, Gyanpur, Bradit   College, Gyanpur, Gyanpur, Bradit   College	Local visit	,			13/03/ 2021		00	
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identification of insect pests of cultivated crops  Department of Zoology, University of Allahabad, Prayagraj  Department of with Biochemistry University of Lucknow  BS Institute Working of Palaeoscience of Lucknow  The palaeoscience of Lucknow  The palaeoscience of Lucknow  BS Institute of Palaeoscience of Lucknow  The palaeoscience of Lucknow  The palaeoscience of Palaeoscience of Palaeoscience of Allahabad, Prayagraj  Department of BS Institute of Palaeoscience of Carbon dating.  The partment of Palaeoscience of Palaeoscienc	Local visit				22/03/ 2021		00	
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Central Students visited the central Dr. Ashish 23/03/2021 B.Sc. 60 Dr.		Guillig.	Dena	rtment• Cha	mistry	1	l	
	Central	Students visit				B Sc	60	Dr
INSTRUMENTAL FRACTILY AND THEY WERE ADJE TO FRITMAR FOR THE FIRST FRACTION AND THE FAMILIANS	Instrumentati			Kumar	25,05,2021	III		Abhimanyu
on Facility, know the basic concept, Singh,  Yaday		•	•					•

IIT(BHU) Varanasi	practical problems and demonstration of Instrumentation in X-ray diffraction technique; Ion chromatography; X-ray photoelectron; spectroscopy; Optical, Atomic force, Scanning electron and Transmission electron microscopy; HNMR and CNMR; FTIR and BET.	Mr. Nirmal Malik, Mr. Vinay Sharma, Operators					
IIT(BHU) Varanasi	Institute visit in Central Instrumentation Facility			B.Sc. Vth Sem	60	Dr. Dhirendra Kumar Dr. Nikhil Kumar Singh Dr. Sidharth Baranwal	
Y 1'		artment of Bo		D.C.		<b>D</b>	
Indian Institute of Vegetable Research, Varanasi	Demonstration of various biochemical techniques, lab to land application of various techniques	Dr. Chandrsekh ar Reddy	27/11/2021	B.Sc. I, B.Sc. II and B.Sc. III	60	Dr. Ravindra Pandey	
Local Visit	The students visited nearby agricultural field and collected many plant diseases.		31/01/2023	B.Sc. IIIrd Year	60	Dr. Rashmi Singh	
Birbal Sahni Institute of Palaeobotany, Lucknow	By visiting this institute students were being able to understand the process of fossilization. Also they understand the scope of palaeobotany		13/07/2023	B.Sc. IInd Sem	40	Dr. Ravindra Pandey	
CIMAP, Lucknow	The student visited the park and know about various medicinal plants, extraction unit for essential oils.		14/07/2023	B.Sc. IVth Sem	40	Dr. Saumya Mishra	
Department of Physics							
Hydrogen Energy Centre and Laser and Spectroscopy Laboratory, BHU, Varanasi	The students got know about preparation of metal hydride, storage of hydrogen and its testing. They also saw X-ray diffraction and TEM instruments.	Dr. T.P. Yadav, Dr. Anchal Srivastava	14/03/2022	B.Sc. III	30	Dr.Priyanka Srivastava and Dr. S.P. Mishra	

Department	Visit to electronics & optics	18/06/	B.Sc.	33	Dr.	S.P.
of Physics,	lab and Spectroscopy	2023	IV		Mishra	
Allahabad	research lab		Sem		Dr.	A.
University,					Varma	
Prayagraj						

# 6. Details of organized workshops and winter school

Worksh op/ Winter school	Торіс	Date	Onli ne/ offli ne	Lectures delivered (Resource person Name & affiliation)	Class and no . of Benef- iciaries	Organizer
Worksh op	Operation & Utility of Advanced Electronics Devices	12/03 /2121	Off- line	Advancements in semiconductors: Dr. R.K. Yadav, Deptt. of Physics, Dr, SPM Degree College, Bhadohi Luminescence and Its Applications: Dr. Manoj Kumar Prajapati,	B.Sc. III & B.Sc. I 65	Dr. S.P. Mishra & Mr. M.K. Vishwakar ma
Worksh op	Biological Pesticides	24/03 /2021	Off- line	Use of biological pesticides instead of chemical pesticides (Speaker: Dr. Maya Yadav; Dr. SPM Govt. Degree College, Bhadohi	80	Mr. Ranjit Singh
Winter School	Collection and Identification of Plant Pathogen	2/02/ 2022- 10/02 /2022	Offli ne	Local plant disease were collected, samples taken to the lab and with Image analysing camera, pathogen were identified.	B.Sc.III	Dr. Rashmi Singh
Winter School	Experimental Physics	18/02 /2022 - 24/02 /2022	offlin e	Determination of frequency of a. c. mains using sonometer. Determination of centre of gravity by bar pendulum, To find the value of moment of Inertia of flywheel, modulus of rigidity by Maxwell needle and determination of young modulus by bending of beam.	B.Sc.I	Mr. Akhilesh Kumar, Mr. Jais Kumar
Worksh op	Operation & Utility of Advanced Electronics Devices	12/03 /2121	Off- line	Advancements in semiconductors: Dr. R.K. Yadav, Deptt. of Physics, Dr, SPM Degree College, Bhadohi Luminescence and Its Applications: Dr. Manoj Kumar Prajapati,		
Worksh op	Biological Pesticides	24/03 /2021	Off- line	Use of biological pesticides instead of chemical pesticides (Speaker: Dr. Maya Yadav; Dr. SPM Govt. Degree College, Bhadohi		

Winter	Collection and	2/02/	Offli	Local plant disease were	
School	Identification of	2022-	ne	collected, samples taken to the	
	Plant Pathogen	10/02		lab and with Image analysing	
		/2022		camera, pathogen were	
				identified.	
Winter	Experimental	18/02	offlin	Determination of frequency of	
School	Physics	/2022	e	a. c. mains using sonometer.	
		-		Determination of centre of	
		24/02		gravity by bar pendulum, To	
		/2022		find the value of moment of	
				Inertia of flywheel, modulus	
				of rigidity by Maxwell needle	
				and determination of young	
				modulus by bending of beam.	

#### 7. Quiz- Poster Competition/ science exhibitions details

The poster competition on the topic "Advances in Chemistry" was organized for B.Sc. I, II and III students by Department of Chemistry

<b>Quiz</b> 12/03/2021	Name and Class of Winners
Chief Guest: Dr. P. N. Dongre, Principal	First Position: Rinki Yadav, B.Sc. II, Manisha Singh,
K.N. Govt. P.G. College, Gyanpur, Bhadohi	B.Sc. III, Muskan Kannaujiya B.Sc. I, Ujala Maurya, B.Sc.
<b>Organizers:</b> Hemant Kumar Nirala, Dr.	I ;Ujala Maurya, B.Sc. I; Nitu, B.Sc. I; Juhi Dwivedi, B.Sc.
Vinod Kumar Yadav, Dr. Abhiamnyu	II; Mujaif Hussain B.Sc. I
Yadav, Ayyub Ahmad	Second Position: Dolly Singh, B.Sc. I; Shraddha Pathak,
	B.Sc. II; Kashma Singh, B.Sc. II; Seema Bind, B.Sc. II;
	Khushbu Dubey, B.Sc. II; Sonal Dubey, B.Sc. II; Sachin
	B.Sc. II
	<b>Third Position:</b> Ankit Tiwari, B. Sc. III; Raju Pal, B.Sc.
	III; Vikash Yadav, B.Sc. III; Prabhat Tripathi, B.Sc. II;
	Suraj Kumar Rawat, B.Sc.; Akash Maurya, B.Sc. II;
	Pawan Kumar, B.Sc. II
<b>Poster</b> Advances in Chemistry	First: Sachin, B.Sc. II; Anamika Pandey, B.Sc. I;
15/03/2021	Second: Surabhi Malviya, B.Sc. III
Chief Guest: Dr. R. N. Sharma, Principal,	Third: Swati Mishra, B.Sc. II
Govt. Degree College, Dhanapur, Chanduli	
Organizers: Hemant Kumar Nirala, Dr.	
Vinod Kumar Yadav, Dr. Abhiamnyu	
Yadav, Ayyub Ahmad	

# Quiz, poster, Essay and Science Exhibition was organized under Science week to celebrate National Science Day from 22/02/2022 to 28/02/2022

N 02  2022
Name and Class of Winners
First Position: Rehana Bano, B.Sc.III
Second Position: Vivek Maurya, B.Sc.III
Third Position: Shivam Tripathi, B.Sc. III
-
First: Bushra Anjum, B.Sc.I
Second: Avisha Pandey, B.Sc.I
Third: Esha Dubey, B.Sc.I
First: Roli, B.Sc.I
Second: Nidhi Yadav, B.Sc.II

Organizers: Dr. Kalpana Awasthi	Third: Muskan Kannaujiya, B.Sc.II
Science Exhibition	First: Sakshi Maurya, B.Sc.III
26/02/2022	Second: Prabhat, B.Sc.II
organizers: Mr. Ravi Kumar Yadav	Third: Aakash Maurya B.Sc.III

	Physics									
Activity	Date	Programme details	Class and no. of Beneficiaries	Organizers						
National Energy	14 Dec.	Essay, poster,	B.Sc.	Dr. S. Singh						
Conservation	2022	presentation	(88)	Dr. A.Kumar,						
Day-2022				Dr. A. Varma						
				Dr. J. Kumar						
Birth Anniversary	31 Dec.	Online Physics	B.Sc. III	Dr. K. Awasthi						
of Padam Shree	2022	Quiz	(60)							
Prof. O.N.										
Srivastava		_		5 65 101						
National Science	28 Feb.	Essay,	B.Sc.	Dr. S.P. Mishra						
Day -2023	2023	presentation	(40)	Dr. A. Kumar						
National	12 May	Essay	B.Sc. IV Sem	Dr. P.						
Technology Day- 2023	2023		(40)	Srivastava						
World	6 June 2023	Online Quiz	B.Sc.	Dr. A. Varma						
Environment Day			(140)							
-2023										
Birth Anniversary	13 Oct.	Essay	B. Sc.	Dr. K. Awasthi						
of Dr. APJ Abdul	2023		(30)	Dr. P.						
Kalam		<u> </u>		Srivastava						
	Ι	Botany								
Activity	Date	Programme details	Class and no. of Beneficiaries	Organizers						
Know your Indian	24th	Quiz	B.Sc.	Dr. Rashmi						
Scientist	February	Competition	(50)	Singh						
Contribution	2023									
Importance of	18 May	Exhibition	B.Sc. III	Dr. Saumya						
Medicinal Plants	2023		(60)	Mishra and Dr.						
				Ravindra						
				Pandey						
World	6 June	Poster and	B.Sc.	Dr. Ravi Yadav						
Environment Day -2023	2023	Slogan	(80)							
World Ozone Day	16	Science	B.Sc.	Dr. Rashmi Singh						
	Sept.2023	awareness play	(30)							
Birth Anniversary	13 Oct.	Quiz	B. Sc.	Dr. Geeta						
of Dr. APJ Abdul	2023	Competition	(60)	Yadav						
Kalam				Dr. Shefali						
				Singh						

Zoology							
Quiz Competition	25 May	Quiz	B.Sc.	Ratnesh Kumar			
for U.G. Students	2023	Competition	(75)	Soni			

# 8. Project work details:

S.N.	Details of Project	Class and no	
		of Beneficiaries	
	Department: Zoology		
1	Project work involving collection/identification of local insects of Gyanpur	B.Sc. I (100)	
2	Project work involving local visit for collection/identification of native fi	B.Sc. II (180)	
3	Project work involving local visit for collection/identification and culture techniques of native fishes	B.Sc. III(100)	
4	Project work on collection and identification of insect pests of cultivated crops	B.Sc. III (80)	
5	Biochemical analysis of Gyanpur Hariharnath pond	B.Sc. III (20)	
6	seasonal variability of phyto and zooplankton of Gyanpur hariharnath pond	B.Sc. I (20)	
7	Morphogenetic trait variations among the population of Bhadohi district.	B.Sc. IV (20)	
	Department: Botany	. ,	
1	Project work in Plant physiology (Transpiration rate, Photosynthesis rate and respiration rate)	B.Sc. II (80)	
2	Project work in Plant diseases management (Late blight of Potato, Red rot of sugarcane and stem gall of coriander)	B.Sc. III (80)	
3	Project work in Plant physiology (Transpiration rate, Photosynthesis rate and respiration rate)	B.Sc. II (80)	
4	Project work in Plant diseases management (Late blight of Potato, Red rot of sugarcane and stem gall of coriander)	B.Sc. III (80)	
5	Isolation of Soil Bacteria and their identification	B.Sc. I (10)	
6	Studies on River Pollution of District Bhadohi	B.Sc. V (10)	
	Department: Physics	. /	
1	Characteristics of p-n junction	B.Sc. III (20)	
2	Basic features of transistors and characteristics of p-n-p transistor	B.Sc. III (05)	
3	Working principle of field effect transistor	B.Sc. III (10)	
4.	Theory of Lorentz Transformation	B.Sc. III (25)	
5.	<ol> <li>Simple Audio Amplifier</li> <li>Body Touch Sensor</li> <li>Wireless Power Transfer System</li> <li>Electric Motor</li> <li>IR Sensor Module</li> <li>Full Wave Rectifier</li> <li>Security Device</li> <li>Tesla Coil</li> <li>Automatic on-off bulb</li> </ol>	B. Sc. II (80)	
6	Preparation of graphene oxide using agro waste i.e. rice husk	B.Sc. III (10)	
7	Impact of graphene oxide on plant growth	B.Sc. V (10)	

8	8 Laser induced scattering in leaf extract in organic medium						
9	Assembling of electronic devices on bread board	B.Sc. V (10)					
	Chemistry						
1	Hardness of Water and It's Determination	B.Sc. III (60)					
	Interdisciplinary Project						
Botany-	separation of amino acids and plant pigments by paper chromatography	B.Sc. IV					
Chemistry		(60)					
Physics-	pH-metric titration: Principle and Applications	B.Sc. III					
Chemistry		(90)					

### 9. Outreach activities:

S.No.	Target Audience	Topic	Date	No .of beneficiary
1.	Faculty Members	Smart use of Online Platform during Covid	26/11/2021	46
2.	Supporting Staff	Lab Safety measures	27/01/2022	25
3.	Rural Area People	Mushroom Production Technology	13/11/2021	38
4.	Rural Area People	Food Nutrition and Health	21/02/2022	54
5.	School students (9 <sup>th</sup> to 12 <sup>th</sup> standard)	Understanding Science through Experiments	17/02/2022	51
6.	Laboratory Staff Training	Preservation of collected materials	01/02/2023	05
7.	Supporting Staff	Lab Safety measures	08/12/2023	06
8.	School students (11th standard)	Science Laboratory Visit	16/05/2023	54
9.	Other College Students	Hands on Training in some Life Science Experiments	12/10/2023	52
10.	Faculty and Students	Guest Lecture on Intellectual Property Rights	23/02/2023	80

# 10. Details of invited lectures (Online/offline mode) organized:

Resource Person	Designation &Affiliation	Lecture Topic	Date and time	Platfor m (Online /offline)	Class	No. of Bene ficia ries	Organizer
		Depart	ment: Botar	ıy			
Dr. Santosh	Assistant	Isolation and	31/03/	Online		50	Mr Ranjit Singh
Kumar	Professor,	culture of	2021				
Singh	Department of	microbes					

	Botany, MM Govt. Degree College, Dhanupur, Hadiya						
Dr. P. N. Dongre	Principal, K. N. Govt. PG College, Gyanpur Bhadohi	What is Science?	14/12/ 2021	Offline	B.Sc.	90	Dr. Rashmi Singh
Dr. Rajesh Kumar	Senior Food Analyst, Food Safety and Drug Administration, Lucknow	Food Safety Measures	28/01/ 2022	Online	B.Sc. I, II and III	218	Dr. Rashmi Singh
Dr. Balendra Singh	Scientist C DBT, New Delhi	Environmental Biotechnology: Challenges and Solution	31/01/2 022	Online	B.Sc. I, II and III	170 (120 onlin e + 50 offlin e)	Mr. Ravi Kumar Yadav
Dr. Indresh Kumar Pandey	Assistant Professor, Dr. Shivanand Nautiyal Govt. P. G. College, Karnprayag, Chamoli, Uttarakhand	Millets: The miracle superfood; Opportunities for the Entrepreneurship	04/03/2 023	Online	B.Sc.	115	Dr. Ravi kumar Yadav and Dr. Shefali Singh
Dr. Prabhat Srivastava	Assistant Professor, K S saket P. G. College, Ayodhya, U.P.	Hydroponics: A method to grow plant in aqueous medium	27/03/ 2023	Offline	B.Sc. IVth Sem	60	Dr. Ravi kumar Yadav and Dr. Shefali Singh
Dr. U. N. Tripathi	Regional Director, IGNOU, Varanasi	Bio-risk and Bio- safety management	29/04/ 2023	Offline	B.Sc.	80	Dr. Rashmi Singh
Dr. Bhagat S. Bhakuni	Assistant Professor,Deptt. of Chemistry, Kirori Mal College, University of Delhi	Beat the Plastic Pollution With Solution	05/06/2 023	Online	B.Sc.	80	Dr. Rashmi Singh
Dr. D. P. Singh	Principal Scientist, ICAR	Biological Data analysis	16/12/ 2023	Offline	B.Sc. III and Vth Sem	60	Dr. Rashmi Singh
		Departmen			1		
Dr. Situ	Assistant	Impact of	06/03	Online	B.Sc.	92	Dr. Madhu

Rani Patre	Professor, Department of Electronics and Communication Engineering National Institute of Technology, Rourkela	Innovative Wireless Communication in Current Era	2021, 3:00 PM		I, II & II		Tiwari, Dr. Abhimanyu Yadav
Dr. Vinita	Assistant Professor, Department of Chemistry, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur	Importance of Innovation in Medical Diagnosis and Treatment	07/03/ 2021, 3:00 PM	Online	B.Sc. I, II & II	97	Dr. Madhu Tiwari, Dr. Abhimanyu Yadav
Dr. Gopal Ji	Assistant Professor, Department of Mechatronics Centre for Advanced studies, APJAKTU, Lucknow	Innovation as Necessity in Current Scenario	08/03/ 2021 11:00 AM	Online	B.Sc. I, II & II	87	Dr. Madhu Tiwari, Dr. Abhimanyu Yadav
Dr. Preeti Verma	Scientist, National Research Laboratory for Conservation of Cultural Property Aliganj, Lucknow	Need of Innovation in Steel Industry	09/03/ 2021, 12:00 PM	Online	B.Sc. I, II & II	92	Dr. Madhu Tiwari, Dr. Abhimanyu Yadav
Dr. Bhagat Singh Bhakuni	Assistant Professor, Department of Chemistry, KM College, University of Delhi	Innovation in the Field of Energy Production	10/03/ 2021 11:00 AM	Online	B.Sc. I, II & II	96	Dr. Madhu Tiwari, Dr. Abhimanyu Yadav
Dr. Bhagat Singh Bhakuni	Assistant Professor, Department of Chemistry, KM College, University of Delhi	Cyber Safety	01/12/2 021	Online	B.Sc. I, II & II	200	Dr.Abhimanyu Yadav
Dr. Suverna Trivedi	Visiting Scholar, School of Chemistry, University of California, Berkeley, CA	Catalyst: Basics to Modern Uses	06/12/2 021	Online	B.Sc. I, II and III	250	Dr. Abhimanyu Yadav

	USA-94707						
Prof P. K. Dutta	Professor (HAG) Motilal Nehru National Institute of Technology Allahabad	Polymer Spectacular world of macromolecule molecule	08/05/2 023	Online	B.Sc.	90	Dr. Abhimanyu Yadav
Dr. Prakash Chandra	Assistant Professor, Department of Chemistry, Bundelkhand University Jhansi	Fluorescent spectroscopy and its Applications	28/06/ 2023	Offline	B.Sc.	84	Dr. Abhimanyu Yadav
Dr. Ajay Verma	Assistant Professor, Department of Chemistry University of Allahabad, Prayagraj	Overview of spectroscopic techniques used in the organic synthesis	28/06/ 2023	Offline	B.Sc.	84	Dr. Abhimanyu Yadav
		Departme	ent: Physic	rs			
Dr. Rajani Srivastava	Assistant Professor, Environmental Science (Environment-al Technology), Institute of Environment & Sustainable Development, RGSC, BHU, Mirzapur, India	Green Building :Building the Future with Intention	18/03/ 2021 11.30 AM	Online Google meet	B.Sc. III	32	Dr. Kalpana Awasthi
Dr. Sanjeev Rathore	Assistant Professor, Department of Physics., Government Degree College, Badaun	Electronics Made Simple	20/03/ 2021 05.00 PM	Online Google meet	B.Sc. III/ B.Sc. I	48	Mr. M.K. Vishwakarma
Dr. Kalpana Patel	Assistant Professor, SRM Institute of Science and Technology, Delhi-NCR Campus,	Semiconductors and its Basics	22/03/ 2021 01.00 PM	Online Google meet	B.Sc.	45	Dr. Kalpana Awasthi

	Modinagar, Ghaziabad						
Dr. Ranjan Kumar Singh	Professor, Spectroscopy section, Department of Physics, India	Basics of Laser and It's Applications	25/03/ 2021 12.00 noon	Online Google meet	B.Sc.	30	Dr. Priyanka Srivastava
Prof. R.S. Tiwari	Deptt. of Physics BHU Varanasi	X-ray Diffraction	14/06/2 021	Online	B.Sc. III	60	Dr. Kalpana Awasthi
Prof. S. Sairaman,	Engineering Physics, Florida Polytechnic University, USA	Hydrogen Energy: The Global Alternative Solution for Sustainable Planet	13/11/2 021	Online	B.Sc. III	55	Dr. Kalpana Awasthi
Dr. Seema Awasthi	SRA- CSIR, New Delhi School of Physics, Hydrabad University ,Hydrabad	Crystal X-Ray Diffraction	04/02/2 022	Online	B.Sc. III	100	Dr. Kalpana Awasthi
Prof. K.N.Uttam	Department of Physics, University of Allahabad	Green Energy Sources: Future Energy Source	26/02/2 022	Offline	B.Sc. I, II and III	75	Mr. Ashish Verma
Dr. T. P. Yadav	Associate Professor, Department of Physics, Allahabad University, Prayagraj	Importance of Hydrogen Energy in Near Future	18/05/ 2023	Online	B.Sc. IV Sem + Rese arch Scho lars	(60)	Dr. K. Awasthi
Dr. Mridula Tripathi	Associate Professor, Department of Chemistry, CMP Degree College, Prayagraj	Nanotechnology : A Future Aspects	20/05/ 2023	Offline	B.Sc. +M. Sc. II Sem.		Dr. S. P. Mishra & Dr. A. Kumar
Dr. Rohit Ranjan Shahi	Assistant Professor Department of Physics, Central University of South Bihar,	High Entropy Alloys for Materials for Energy Applications	14/12/ 2023	Online	B.Sc. V Sem	(70)	Mr. M.K. Vishwakarma & Dr. A. Kumar

	Gaya						
Department: Zoology							
Dr. R. K. Tiwari	Associate Prof. & Retired Principal, Govt. P. G. College, Saidabad, Allahabad	SILK WORM CULTURE	26/03/ 2021 11.00 am	Offline	B.Sc. III	60	Mr. P.C. Gupta
Prof. U.C. Srivastava	Former Emeritus Prof. of Zoology UoA,Allahabad Treasurer and Council Member NASI	Antioxidant-A boon for the life of Human Being	03/02/2 022	Online	B.Sc. I, II and III	204	Mr. Ratnesh Kumar Soni
Prof. M. Singaravel	Department of Zoology,Institute of Science BHU,Varanasi - 221005	Innate and Learned Behaviour	11/02/2 022	Online	B.Sc. I, II and III	216	Mr. Ratnesh Kumar Soni
Prof. Abhay Kumar Pandey,	Department of Biochemistry University of Allahabad	Redox regulation: an important key to healthy life	12/02/2 022	Online	B.Sc. I, II and III	140	Mr. Ratnesh Kumar Soni
Prof. Ramesh Chandra	Department of Neurobiology University of Maryland Baltimore, USA	Altered Mitochondrial dynamics in brain reward circulatory in cocaine addiction	31 July 2023	Offline	B.Sc. III Sem.	65	Dr. Deepak Verma

# 11. Books/ Journals Subscribed from the grant

Department	S. No.	Name of the Book	Author	Number
	1.	Plant Breeding	B. D. singh	01
	2. Microbiology Dubey and Maheshwari		Dubey and Maheshwari	01
	3.	Cell Biology	Verma	01
	4.	Microbiolgy	Arora	01
	5.	Bioinformatics	Bayevaus	01
	6.	Biostatistics	Prasad	01
Botany	7.	Organic Evolution	Rastogi	01
Botany	8.	Biotechnology	Dubey	01
	9.	Cell and Molecular Biology	Gupta	01
	10.	Plant Tissue Culture	Rajdan	01
	11.	Gene X	Krebs	01

	12.	Biophysics	Pranav Kumar	02
	13.	Biotechnology	Pranav Kumar	01
	14.	Angiosperm	B.P. Pandey	01
	15.	Plant Pathology	B.P. Pandey	01
	16.	Ecology and Environment	Singh	01
	17.	Economic Botany	Jordan	01
	18.	Invertebrate Zoology	Jordan Verma	02
	19.	Chordate Zoology	Jordan Verma	02
	20.	Chordate Embryology	Verma	02
Zoology	21.	Cell Biology	Veer Bala Rastogi	02
	22.	Genetics	Veer Bala Rastogi	02
	23.	Cell Biology and Genetics	Verma and Agarwal	01
	24.	Principles of molecular biology	Veer Bala Rastogi	01
	25.	Zoology NEP IV Sem	Arya	05
	26.	Zoology NEP III Sem	Agarwal	03
	27.	Organic Chemistry	Morrison	01
	28.	Organic Chemistry	Bruice	01
	29.	Organic Chemistry Vol.1	Finar	02
	30.	Organic Chemistry Vol.2	Finar	02
Chemistry	31.	A guide book for mechanism of Organic Chemistry	Sykes	01
	32.	Inorganic Chemistry Principle of Structure and reactivity	Huheey	01
	33.	Inorganic Chemistry	Miessler	01
	34.	UGC CSIR Chemical Science	Rakesh	01
	35.	Fundamentals of Chemistry Vol.II	Jagdamba	01
	36.	NEP Math, Physics and Newtonian Mech. I SE		02
Physics	37.	NEP Physics		02
	38.	Fund. Of modern physics		01
	39.	Optics		01
	40.	Thermal Physics		01
	41.	Advance Quantum Mechanics		01
	42.	Classical Mechanics		01
	43.	Elements of Spectroscopy		01
	44.	Ess. Las. And Non linear optics		02
	45.	Hand Book of Electronics		02
	46.	Mathematical Physics		01
	47.	Relativistic Mechanics		01

48.	Solid State Physics		01
49.	Statistical Mechanics		01
50.	Principles of Electronics	V. K. Mehta	01
51.	Nuclear Physics	Tayal	02
52.	Atomic and Mol.Spectra	Rajkumar	01
		Total	71

Prof. Ramesh Chandra Yadav

(Principal)

PRINCIPAL

K.N. Govt. P.G. College Gyanpur (Bhadohi)-221304

Dr. Rashmi Singh

(Project Co-ordinator)
Project Coordinator

DBT - Star College Scheme K.N. Govt. P.G. College

Gyanpur (Bhadohi)-221304

#### Annexure-1

Date: 06/08/24

To Dr. Garima Gupta Scientist 'F' Unit Head and In-charge Department of Biotechnology Ministry of Science and Technology Room No.510, Block-3, CGO Complex Lodhi Road, New Delhi-110003

#### SUB: Request for retention of asset acquired during the project

Respected Madam

We are very grateful for providing opportunity to work under this prestigious DBT Star College Scheme. This scheme helps our students a lot in gaining experiential learning. All the four Departments, Botany, Zoology, Physics and Chemistry acquired assets during this project. These assets are highly beneficial for our students, and we want to continue the momentum of new learning gained by this scheme.

As the duration of the project is over, we request you kindly grant permission to retain assets acquired during this project.

Prof. Ramesh Chandra Yadav

(Principal)

PRINCIPAL

K.N. Govt. P.G. College Gyanpur (Bhadohi)-221304

(Project Co-ordinator)
Project Coordinator DBT - Star College Scheme

K.N. Govt. P.G. College Gyanpur (Bhadohi)-221304

### **Photo Gallery Department of Botany**



Workshop on Bioinstrumentation



## पौधों में लगने वाले रोग के विषय में दी जानकारी



कटोडर गांव में बुधवार को रोग से ग्रसित पौधा एकत्रित करते केएनपीजी के विद्यार्थी। कोआर्डिनेटर डा. रश्मि सिंह ने छात्र-ज्ञानपुर | संवाददाता

काशी नरेश राजकीय स्नातकोत्तर महाविद्यालय में वनस्पति विज्ञान के विद्यार्थियों ने बुधवार को पौधों में लगने वाले रोग के विषय में अध्ययन को करे स्थानों पर भ्रमण किया खेतों से रोग ग्रसित पौधों को लेकर विद्यार्थी कालेज के प्रयोगशाला में आए।

छात्राओं सग चकटोडर व जारें इसार कई गांव में आगण किया। रोग से ग्रसित पौधों को लेकर विद्यार्थी प्रयोगशाला में चले आए। डा. रिश्म सिंह ने बताया कि सरसों व पानी में उगने वाले ऐसे पौधों को एकत्रित किया गया जो कई बीमारी से ग्रसित थे। रोग से प्रभावित पौधों को विद्यार्थी प्रयोगशाला में अध्ययन करेंगे।

Winter School on Plant Disease Collection and Identification



Hands on Training in laboratory instruments



# Hands on Training Plant Physiology Experiments





Hands on Training in Plant Physiology Experiment



Interdisciplinary workshop on Herbal Cosmetics

### छात्रों के लिये साइंस विलेज फेस्टिवल व शैक्षणिक भ्रमण कार्यक्रम का आयोजन

प्रोक्षियको सारामार्थी (एसएन्यक्री) । उर्हाव । व्यक्ति । व्यक्ति । व्यक्ति । व्यक्ति । प्रकारित । प्रकारित । व्यक्ति । व्यक्ति । प्रकारित । व्यक्ति । व्यक्ति । व्यक्ति । प्रकारित । व्यक्ति । व्यक



Field Visit to Indian Institute of Vegetable Research, Varanasi

### **Department of Zoology**



### Workshop on Micrometry and Hematology



## विवज में विजेताओं का हुआ सम्मान



**BIO-QUIZ** 

Amar Ujala 25/02/2022 जंतु विज्ञान के छात्रों ने

किया विजिट





**Educational Visit** 









Workshop on Maintenance of Laboratory Equipment for supporting staff

### **Photo Gallery Department of Physics**





Hands on Training on Wave Formation using CRO

Winter School on Experimental Physics

Seven Days Winter Sch.



Field Visit to Hydrogen Energy Centre, Laser and Spectroscopy Laboratory, BHU, Varanasi





Interdisciplinary workshop on Crystal Growth

# Photo Gallery Department of Chemistry



Hands on Training on Chromatography





Workshop on Handling of Laboratory Reagent for supporting staff



Educational Visit

### **Photo Gallery- Outreach Activity**





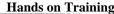
### **Training on Lab Safety Measures for supporting staff**



### **Outreach Activity for School students**



# Photo Gallery for the activities organized under DBT Star College Scheme (2023-24) BOTANY Hands on Training





### **Interdisciplinary Workshop**









**Minor Research Project** 







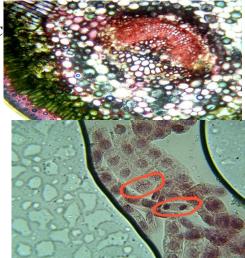
**Educational Visit** 











### **Physics**







### Virtual Lab Experiments Online Lecture Cum Hands on Training



### **Educational Visit**



Workshop



**Invited Lecture** 



Winter School



**Minor Research Project** 

### Photo Gallery for the activities organized under DBT Star College Scheme Chemistry

### Hands on Training









### **Guest Lecture**







### **Interdisciplinary Workshop**







### Workshop







### Field Visit



# Photo Gallery for the activities organized under DBT Star College Scheme $\frac{Zoology}{Hands\ on\ Training}$















### Workshops















**Guest Lecture** 



### Field Visit



### **Outreach Activities**

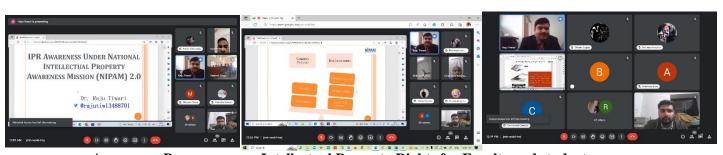


**Lab Visit By School Students of Bhadohi District** 

## <u>Hands on Training session organized for Keshav Prasad Govt. Girls Degree College, Aurai, Bhadohi, U.</u>P.



**Staff Training** 



Awareness Programme on Intellectual Property Rights for Faculty and students

### **Exhibitions/Quiz/Poster/ Science Play**





**World Ozone Day** 



**National Energy Conservation Day** 



**Exhibition on Medicinal Plants** 



**Quiz Competition** 



**World Environment Day** 

### प्रशिक्षण में विद्यार्थियों ने जाना पौधों के रंग व द्रव्य की विशेषता



केएनपीजी कालेज के वनस्पति विभाग में प्रशिक्षण लेते विद्यार्थी • जागरण

संवाद सहयोगी, ज्ञानपुर (भदोही): केएनपीजी कालेज ज्ञानपुर वनस्पति विज्ञान एवं रसायन विज्ञान विभाग में शनिवार क्रोमैटोग्राफी विषय पर हेंड्स आन ट्रेनिंग का आयोजन हुआ। मुख्य अतिथि राजकीय महाविद्यालय चुनार मीरजापुर के प्राचार्य डा.पीएन डोंगरे ने कहा कि ऋोमैटोग्राफी एक रासायनिक शुद्धिकरण विधि हैं, जो रंगीन पदार्थी अलग करती है। पेपर क्रोमैटोग्राफी में अणुओं के विभिन्न आकार के आधार पर वर्णक को अलग किया जा सकता है। हर कोई जानता है कि पत्तियों में क्लोरोफिल होता है जो हरा होता है लेकिन पीधों में वास्तव में अन्य वर्णक अणओं की एक विस्तृत श्रृंखला भी होती है। कार्यऋम की ट्रेनर डा. शेफाली सिंह दीपाली जायसवाल व हा. विद्यार्थियों को इसकी सैद्वांतिक जानकारी दी। दोनों ट्रेनर प्रतिभागियों को इसकी प्रयोगात्मक क्रिया विधि सिखाई। कार्यक्रम का शुभारंभ प्राचार्य प्रो. रमेशचंद वादव द्वारा मां सरस्वती की मृतिं पर माल्यापंण के साथ किया गया।

### **News Paper Coverage**



### राष्ट्रीय विज्ञान दिवस पर प्रश्नोत्तरी में अंजली प्रथम

जानपुर, संवाददाता। काशी नरेश राजकीय स्नातकोत्तर महाविद्यालय तज्कीय स्नातकोत्तर महाविद्यालय के वनस्पति विद्यान विभाग में कुकार को राष्ट्रीय विद्यान दिवस रर प्रश्नेत्तरी प्रतियोगिता का आयोजन किया गया। इसमें डीबीटी टार कालेज के तहत आयोजित रिक्षा में छात्र-छात्राओं ने प्रतिमाग

स्नातकोत्तर

किया गया।

हाइड्रोपोनिक

कृषि की दी

ज्ञानपुर। काशी नरेश राजकीय

सोमवार को डीबीटी स्टार कार्यक्रम

के तहत वनस्पति विभाग की ओर

से हाइडोपोनिक्सः फार्मिंग इन वाटर

विदाउट मॉइल पर एक दिवसीय

हैंडस ऑन ट्रेनिंग का आयोजन

मुख्य अतिथि पीजी कॉलेज

अयोध्या के डॉ. केएस साकेत ने

हाइड्रोपोनिक कृषि के बारे में

बताया। कहा कि इस विधि से

केवल पानी और न्युट्रिएंट्स का

उपयोग करते हुए उत्पादन किया जा

सकता है। उन्होंने हाइड्रोपोनिक

कृषि के तकनीकी पहल्ओं की

जानकारी दी। हैंडस ऑन ट्रेनिंग

सेशन में छात्र-छात्राओं ने प्लास्टिक

वॉटल का दुबारा इस्तेमाल करते हुए न्यूट्रिएंट मीडियम बनाकर पौधों को

उगाने की विधि सीखी। मुख्य अतिथि का प्राचार्य प्रो. पीएन डोंगरे

ने स्वागत किया। डॉ. रवि कुमार

यादव, डॉ. प्रभात श्रीवास्तव, डॉ.

रश्मि सिंह आदि रहे। संवाद

महाविद्यालय

ù

### समाचार सार



केएनजीपीजी कालेज से शैक्षणिक भ्रमण पर लखनऊ जाते विद्यार्थी व शिक्षक 🏽 जाग्ररण

शैक्षणिक भ्रमण पर रवाना हुए केएनपीजी कालेज के विद्यार्थी ज्ञानपुर (भदोही) : काशी नरेश राजकीय रनातकोत्तर महाविद्यालय ज्ञानपुर के बीएससी वनस्पति व जंतु विज्ञान प्रथम व चतुर्थ सेमेस्टर के छात्र–छात्राओं को गुरुवार को दो दिवसीय शक्षणिक भ्रमण पर लखनऊ ले जाया गया। महाविद्यालय परिसर से सुबह पूरे उत्साह के साथ 40 विद्यार्थी बस से रवाना हुए। छात्र– छात्राओं को अन्य शैक्षणिक संस्थानों का भ्रमण कराकर ज्ञानवर्धन व नई तकनीक की जानकारी देने के उद्देश्य से भ्रमण कार्यक्रम आयोजित किया गया। नेतत्व कर रही डा. रश्मि सिंह ने बताया कि प्रथम दिन गुरुवार को लखनऊ विश्वविद्यालय के बायों कमेस्ट्री लैब में वहां चल रही प्रायोगिक गतिविधियों के साथ आधुनिक उपकरणों आदि के बारे में जानकारी दी गई। दूसरे दिन भी कई संस्थानों में भ्रमण कराया जाएगा । डा . रवींद्र पांडेय, डा . रवि यादव, डा . सौम्या मिश्रा, डा . आकांक्षा कुशवाहा व धमेंद्र मालवीय व अन्य थे।

### औषधीय पौधों को संरक्षित करने की जरूरत



## रपेक्ट्रोस्कोपी के महत्व व विभिन्न सिद्धांतों पर चर्चा



कार्यशाला में जानकारी देते डा.अभिमन्यु यादव । जागरण

काशी नरेश राजकीय स्नात्कोत्तर काशा नररा राजकात्र स्वारास्य महाविद्यालय ज्ञानपुर में रसायन विज्ञान विभाग की और से स्पेक्टोस्कोपिक तकनीक विषय पर पांच दिवसीय कार्यशाला का शुभारंभ गुरुवार को किया गया।

शुभारंभ करते हुए प्राचार्य डा. पीएन डोंगरे ने छात्र-छात्राओं को कार्यशाला में मिलने वाली जानकारी को पूरे मनोयोग से समझने के लिए प्रेरित किया। संचालक हा विपाली जायसवाल ने कार्यशाला की रूपरेखा पर प्रकाश डाला। कोसं कोआर्डिनेटर हा. अभिमन्य यादव ने पांच दिनों

संवाद सहयोगी, ज्ञानगुर (भदोही) : में होने वाले सभी व्याख्यान एवं कार्यशाला के विषय की जानकारी दी। वनस्पति विभाग की विभागाध्यक्ष हा. रश्मि सिंह ने विद्यार्थियों को इस प्रकार के आयोजनों से लाभान्वित होने के लिए प्रोत्साहित किया। डा. अयुब अहमद ने स्पेक्ट्रोस्कोपी के महत्व एवं विभिन्न सिद्धांतों पर प्रकाश डाला। आधुनिक युग में स्पेक्ट्रोस्कोपी के उपयोगिता को विस्तार से समझाया। आभार डा. विनोद कुमार यादव ने जताया। डा. ओमप्रकाश, हा. निखिल सिंह, अमित शर्मा, हा. रजनीश द्विवेदी व अन्य थे।

### प्रयोग से तथ्यों को समझने में होती है आसानी



प्राचार्य ख.पीएन खेगरे व शिक्षक 🏶 जन्नरण

संवाद सहयोगी, ज्ञानपुर (भदोही) : तथ्यों को प्रयोग का आधार मिलता है तथ्यों उन्हें समझने में आसानी होती है। काशी नरेश राजकीय स्नातकोत्तर महाविद्यालय ज्ञानपुर में वनस्पति विज्ञान विभाग की और से आयोजित सात दिवसीय समर स्कूल कार्यक्रम के समापन पर मंगलवार को प्राचार्य डा. पीएन डोंगरे ने यह बार्ते कहीं। इस तरह के आयोजनों को छात्र-

इस तरह के आयाजना का छात्र-छात्राओं के लिए उपयोगी बताया। कोर्स कोआर्टिनेटर डा. रिश्म सिंह ने कहा समर स्कूल पौधों में सम्यटोलाजिकल और नाजी में स्वयतिशास्त्रकार आर्थ उत्तम कर हा आरामाः हिस्टोलाजिक वा। ब्रीएससी द्वितीय द्वा. त्वींद्र कुमार पाँडेय व द्वा. सेमेस्टर के 70 छात्र-छात्राओं ने मिश्रा व अन्य प्राध्यापक थे।

प्रतिभाग किया। हा. शेफाली सिंह अत्तर्भाग क्रिक्ष । डा. राग्तरा । सह व डा. रविकुमार यदव ने प्रशिक्षक की भूमिक निगई। रिगेट्ट प्रस्तुर्तकरण में डा. रोग्कलों ने बताया कि इस छात्र-छात्राओं ने कुछ पौधों के तने में होने वाली असामान्य द्वितीय वृद्धि व कोशिका में होने वाले समसूत्री विभाजन का प्रयोगत्मक अध्ययन किया। विशेष अतिथि भौतिक विज्ञान के असिस्टेंट प्रोफेसर डा. एसपी मिश्र ने कहा कि डीबीटी स्टार कालेज स्कीम के अंतर्गत आयोजित हो रहे कार्यक्रम ने ग्रामीण परिवेश के बच्चों में विज्ञान के प्रति अभिरुचि उत्पन्न की है। प्रतिभागी छात्र-छात्राओं को प्रमाण पत्र दिया गया डा. रवींद्र कमार पांडेय व डा. सौम्या

## विद्यार्थियों को बताए गए नैनो पदार्थ के उपयोग

ज्ञानपुर, संवाददाता। काशी नरेश राजकीय स्नातकोत्तर महाविद्यालय में शनिवार को नैनोटेक्नोलाजी की उपयोगिता पर पद्मश्री ओएन श्रीवास्तव मेमोरियल व्याख्यान का आयोजन किया गया। इसमें विद्यार्थियों को प्रकृति में विद्यमान नैनो पदार्थ के उपयोग के बारे में जानकारी दी गई। भौतिक विज्ञान में भारत सरकार बायोटेक्नोलाजी विभाग नई दिल्ली के सौजन्य से डीबीटी स्टार कालेज स्कीम के तहत हुए कार्यक्रम में बीएससी चतुर्थ व द्वितीय सेमेस्टर के विद्यार्थी उपस्थित रहे।

रसायन विज्ञान विभाग के डा. मृदुल

 छाञों को शोध के लिए किया गया प्रेरित

केएनपीजी कालेज में शनिवार को व्याख्यान

उपयोग के बारे में बताया। प्रकृति में विद्यमान नैनो पदार्थ की उपलब्धता का जिक्र किया। नैनो टेक्नोलाजी के क्षेत्र में हो रहे शोध के बारे में पकाश डालते हुए स्टूडेंट्स को इस दिशा में रिसर्च करने को प्रेरित किया। कोऑर्डिनेटर डा. कल्पना अवस्थी ने प्रो. ओएन श्रीवास्तव द्वारा दिए गए कार्य व विज्ञान क्षेत्र में योगदान की जानकारी दी। डा. श्रीप्रकाश मिश्र. डा. अखिलेश कुमार रहे।

### रसायनों का प्रयोग करते समय जानकारी जरूरी

ज्ञानपुर। काशी नरेश राजकीय स्नातकोत्तर महाविद्यालय में शनिवार को डीबीटी स्टार स्कीम के तहत वनस्पति विभाग में बायो रिस्क एंड बायो सेफ्टी मैनेजमेंट विषय पर व्याख्यान का आयोजन किया गया। मुख्य वक्ता क्षेत्रीय निदेशक इग्नू डॉ. यूएन त्रिपाठी ने प्रयोगशाला में कार्य करते समय बरती जाने वाली सावधानियों की जानकारी दी। कहा कि रसायनों का प्रयोग करते समय सही जानकारी का होना आवश्यक है। जिससे अच्छे परिणाम संग सुरक्षा बनी रहे। भौतिक विज्ञान विभाग की डॉ. कल्पना अवस्थी, जंतु विज्ञान विभाग के डॉ. रत्नेश सोनी, डॉ. दीपाली सहित अन्य विभागों के विभागाध्यक्षों ने भी जरूरी जानकारी साझा की। इस मौके पर जितेंद्र मौर्या, रविंद्र कुमार पांडेय, प्रतीक उपाध्याय आदि रहे। संवाद



केएनपीजी के जंतु विज्ञान विभाग में प्रशिक्षण में शामिल छात्र-छात्राएं। संवाद

### विद्यार्थियों को बताया ब्लास्ट का प्रयोग

ज्ञानपुर। काशी नरेश राजकीय स्नातकोत्तर महाविद्यालय में सोमवार को डीबीटी स्टार कॉलेज स्कीम के तहत सिक्वेंस एनालिसिस बाय यूजिंग ब्लास्ट विषय पर प्रशिक्षण का आयोजन किया गया। बीएससी चतुर्थ सेमेस्टर के छात्र-छात्राओं ने

प्रोग्राम कोऑर्डिनेटर डॉ. रश्मि सिंह ने सरस्वती प्रतिमा पर माल्यार्पण कर प्राधाम काआाडन्दर डा. रास्मा लिङ न सरस्वता प्राताम पर माल्यापण कर सुभारंभ किया। उन्होंने स्कीम के महत्व को समझाया और इस प्रोग्राम के सफलता के लिए शुभकामनाएं दों। जातु विज्ञान विभाग के डा. दीपक वर्मा ने छात्र- छात्राओं को बताया कि ब्लास्ट का प्रयोग करके विभिन्न जीव जातियों में पाए जाने वाले प्रोटीन और न्यूब्लियोटाइड अनुक्रम का अध्ययन कर सकते हैं। इस मौके पर डा. रिलेश कुमार सोनी, विवेक वर्मा, डॉ. आकांक्षा कुशवाहा, अंजनी कुमार सहित अन्य रहे। संवाद

## प्रयोगों से विज्ञान को बनाएं रुचिकर

विद्यार्थियों ने कानरा महाविद्यालय में देखी प्रयोगशाला

भदोही जागरण

इसम् प्रतः री चै गई। वर्ष डा. पीएन डॉगरे ने कहा कि के अध्ययन को प्रयोगों के से सचिकर और ज्ञानकार्यक ज सकता है। कार्यक्रम

केएनमें जी कारोज के भौतिकी विभाग में आयोजित कार्यशाला में चाराचन देते प्राचार्य क प्रीपन जैनरे + कारपण

## स्पेक्ट्रोस्कोपी **लैब में मिला प्रशिक्षण** छात्राओं को प्रायोगिक विधि से दी पादप कार्य की जानकार्र असायन विज्ञान विभाग के डा. मुद्रल

ज्ञानपुर, संवाददाता। काणी नरेश राजकोब स्वातकोत्तर मार्गिक्यालय के भीतिक विज्ञान सार्गा जीवती टर्सा कालेज के क्लीम परियोजना के तात इंटर्सीयूर्ट्यालन विजिट पुरुवास के विज्ञानियों ने इलाहाबाद शुनिवार्सिटों में जी विजि कर सेव्हाटकोती थी कर्मे विजिट कर प्रीशकाण हासिल किया। बोध्यस्त्री हिल्ला स्वातकार क्लिया बोध्यस्त्री हिल्ला स्वातकार क्लिया।

विद्याधियां ने हाइड्राजन एनजी व लंजर के उपयोग को समझा विश्वविद्यालय में बने प्रयोगशाला में पहुंचे छात्र-छात्राओं संग प्रोफेसर व विशेषज्ञों ने अनुभव साझा किया। छात्रों ने महान वैज्ञानिक मेचनाथ शाह द्वारा बनाए गए संस्कृत रिकाक करने वाले उपकरण को देखा साथ ही आज के आधुनिक



इलाहाबाद विश्वविद्यालय के स्पेक्ट्रोस्कोपी प्रयोग हासिल करते केएनपीजी के विद्यार्थी।

टेक्निक्स के बारे में जानकारी हासिल की। यूनिबर्सिटी के एसोसिएट प्रोफेसर डा. टीपी यादव का निकट भविष्य में

इस मौके पर डा. कल्पना अवस्थी डा. श्रीप्रकाश मिश्र, आशीष वर्मा थे।

### राजकीय महाविद्यालयों के विद्यार्थियों को डीबीटी स्टार कालेज स्कीम से प्राप्त सविधा से लाभान्वित करने के

संबाद सहयोगी, ज्ञानपुर : काशी नरेश राजकीय स्नातकोत्तर महाविद्यालय ज्ञानपुर में वनस्पति विज्ञान विभाग की ओर से डीबीटी स्टार कालेज स्कीम के अंतर्गत केशव प्रसाद राजकीय महिला महाविद्यालय औराई के स्नातक विज्ञान वर्ग के विद्यार्थियों के लिए कार्यशाला का आयोजन किया गया। इसमें छात्राओं को पादप कार्यकी से संबन्धित प्रयोगात्मक विधि से दी गई। जानकारी

प्राप्त क्षावया स लामान्यत करन क उद्देश्य से आयोजित कार्यक्रम का शुभारंभ प्राचार्य प्रो. रमेशचंद यादव ने मां सरस्वती की प्रतिमा पर माल्यापंण प्रयोगात्मक सुविधा से वंचित अन्य

करके किया। डा. घनश्याम मिश्र ने छात्राओं को अनुसंधान से जुड़ने के लिए ग्रेरित किया। पौधों में होने वाले वास्पोत्सर्जन, प्रकाश संश्लेषण, श्वसन की प्रक्रिया को डीबीटी स्टार कालेज स्कीम के अंतर्गत ऋय किए

गए उपकरणों की मदद से प्रयो में दैनिक जीवन में इस पदार्थ के करके डा. शेफाली सिंह व डा. गीता यादव ने दिखाया। छात्राओं ने से पौधों में पाये जाने वाले वर्णको को अलग करने की विधि व स्पेक्ट्रोफोटोमीटर की सहायता से क्लोरोफिल की मात्रा का अनुमान लगाया। वनस्पति विज्ञान की प्रयोगशाला में उपलब्ध की प्रयोगशाला में उपलब्ध आटोक्लेब, डबल डिस्टिलेशन यूनिट व इमेज अनलयजिंग माइक्रोस्कोप की जानकारी डा. रवि यादव को-आर्डिनेटर डा.रश्मि सिंह ने दी।

### Link of the some programme organized Under DBT Star College Scheme

- 1. https://youtu.be/A4Uyex483vY
- 2. <a href="https://streetbuzz.co.in/newsapp/view/post:392492">https://streetbuzz.co.in/newsapp/view/post:392492</a>
- 3. <a href="https://streetbuzz.co.in/newsapp//view/post:396857">https://streetbuzz.co.in/newsapp//view/post:396857</a>
- 4. <a href="https://youtu.be/5YnkbuNLpPo">https://youtu.be/5YnkbuNLpPo</a>
- 5. https://youtu.be/9EopYCBqFZ4
- 6. <a href="https://youtu.be/w1cPzdyI7RU">https://youtu.be/w1cPzdyI7RU</a>
- 7. <a href="https://youtu.be/M3uDBoUvcEM">https://youtu.be/M3uDBoUvcEM</a>
- 8. <a href="https://youtu.be/NGPI6aZuri0">https://youtu.be/NGPI6aZuri0</a>
- 9. <a href="https://youtu.be/cE\_yI-pSxLg">https://youtu.be/cE\_yI-pSxLg</a>
- 10. <a href="https://youtu.be/VEJsOI9x\_x8">https://youtu.be/VEJsOI9x\_x8</a>
- 11. <a href="https://youtu.be/IAhdDIgIzsc">https://youtu.be/IAhdDIgIzsc</a>
- 12. https://youtu.be/23vf8qVkQFw
- 13. https://youtu.be/053uyF8c1dU
- 14. <a href="https://youtu.be/9GCTyHiT2KQ">https://youtu.be/9GCTyHiT2KQ</a>
- 15. https://youtu.be/HcaT8fPBLF4
- 16. https://youtu.be/fzYdqfNhop0?si=p0McutMnL\_j3yQWU
- 17. https://youtu.be/uuboDjkxOFk?si=4u0yKrHrczdO73oq
- 18. https://youtu.be/XHXm400gDI0?si=gtdyK-OPNlndRMBx
- 19. https://youtu.be/F71N1DTvApY
- 20. https://youtu.be/VrnsTmrn6fM
- 21. <a href="https://youtu.be/0sBaUT2aazM">https://youtu.be/0sBaUT2aazM</a>

Project Co-ordinator Principal