


Department of Physics, S.S.J.Govt.P.G.College Syalde, Almora

Uttarakhand

ANNUAL STUDENT AND DEPARTMENTAL REPORT 2022-23

Name of Institution	S.S.J.Govt.P.G.College Syalde, Almora
Address	Village- Goldhar, Post Office Syalde
State	Uttarakhand
District	Almora
City	Almora
Pin Code	263661
Email	principalsyalde@gmail.com
Head (Principal of Institution)	Dr. D.C.Pant
Image	
Mobile Number	8218501378
Year of establishment	2011
Govt. Order No.	1322/xxiv(7)/42(1)/2009
Hilly region	Yes

The department of physics was established in the year 2010 with the B.Sc. program. The department was established with the aim to provide quality education to the students coming from remote hill areas with diverse socio-economic background. The department was started by Dr. Birendra Singh in the year 2018. At present Dr. Tara Bhatt is the head of the department. Every efforts are made in the deptt. to cater to the need of students. There is a central library where there are sufficient books of physics. The deptt. has a well equipped laboratory with a good number of instruments for undergraduate classes. The department organizes various curricular and extracurricular activities for the students to bring out their talents.

UG Physics Programmes offered in the Department

S.No.	Programme	Recognition No.	Year of Recognition	Sanctioned Intake (No. of students)	
1.	B.Sc Physics	Rajagya no./G.s./edu/A1-40/2010	2010	40	

Result Awaited									
Pass									
%									
Fail									
%									
Drop Out									

TABLE 2 : B.Sc. IInd year - No Students (NIL)

TABLE 3 : B.Sc. IIIrd Year ANNUAL PHYSICS

	MALE				FEMALE				TOTAL
	GEN	SC	ST	OBC	GEN	SC	ST	OBC	
Enrolled	02	-	-	-	-	-	-	-	02
Appeared in exam									
Result Awaited									
Pass									
%									
Fail									
%									
Drop out									

Structure of Annual Departmental Council

Designation of Council	Name of member of council	Class	Type of Selection	Date of Election	Remarks
President	Miss Chandrakala Khati	B.Sc. 3 rd year	By Election	18 th Nov 2022	
Secretary	Miss Neetu	B.Sc. 2 nd year	By Election	- Do -	
Joint Secretary	Mr Bhasker Rikhari	B.Sc. 1 st sem	By Election	- Do -	
Class Representative	Ms Deepa Manral	B.Sc. 3 rd year	Unanimous	- Do -	
- Do -	Ms Sheetal	B.Sc. 1 st sem	Unanimous	- Do -	

PANEL VISIT

On 23rd August 2022 there was a panel visit regarding the infrastructure and the apparatus of the department. The following members were present-

1. Prof. Anil Joshi (Convener)
2. Prof. B.C.Tewari (Member)
3. Dr. Pushpesh Pande (Member)
4. Mr. Goyal (Ex. Eng.PWD Ranikhet)





Activities and competitions organized by the Departmental committee , results and pictures :

Department organized solo and group singing competition on 3rd dec 2022

Solo singing- 1st – Sheetal Bangari

2nd – Babita

3rd - Neetu



Quiz Competition held on 10th December 2022

1st – Team A



2nd- Team C



3rd – Team B



Poster competition on the topics 1. Environment and 2. Blood donation held on 17th December 2022. The winners are-

- | | |
|-------------------------|-----------------|
| 1. Km Chandrakala Khati | 1 st |
| 2. Km Rashmi | 2 nd |
| 3. Km Lata Joshi | 3 rd |

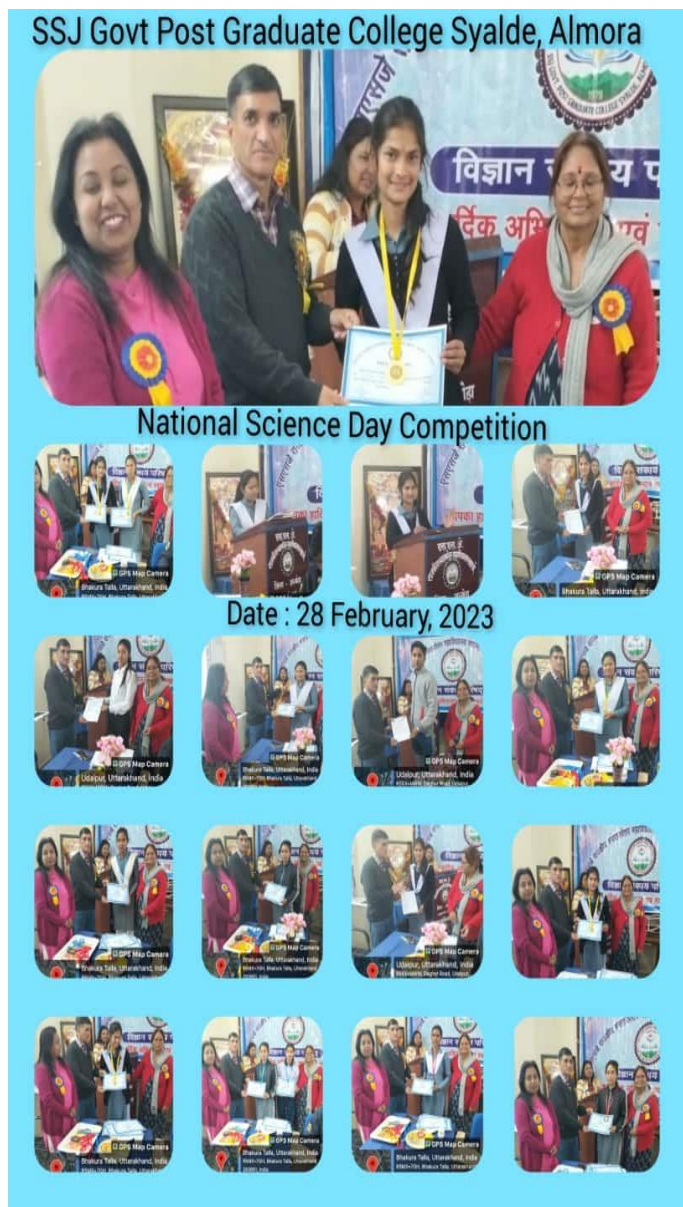





Essay writing competition on the topic “ **Contribution of G-20 in ICT**” Was organized on **25th Feb 2023**. The winners are-

Km Chandrakala Khati	1 st
Km Deepa Manral	2 nd
Km Babita Adhikari	3 rd

National science day was celebrated on **28th feb.2023** to honour our Nobel laureate **Dr Chandrashekhar Venkat Raman**. The chief guest was the Principal of our college Dr D.C.Pant and all the staff members and students of science department were present in the function. The winners were rewarded.



Faculty profile and achievements :

Name	Dr Tara Bhatt
Image	
Designation	Assistant Professor
Qualification	M.Sc., Ph.D., B.Ed.
Email	Tarabhatt0511@gmail.com
Contact No.	9410515990, 8218498064
Date of joining in Higher Education	8 th oct 2001 as visiting Lecturer and regularized on 18 th March 2013
Teaching Experience	22 years

Research Guidance :

S. No.	Name of Student	Title of Ph. D/M. Phil	Year of Award
1	Tarun Pant	Study of molecular interaction in binary liquid mixture of N, N-Dimethylacetamide (DMAc) with various substituted anilines using ultrasonic and spectroscopic methods.	pursuing
2	Utkarsh Vidyarthi	Study of molecular interaction in binary liquid mixtures of carbon disulphide with solvents of different polarities.	pursuing
3	Hema	Ultrasonic study of molecular interaction in ternary liquid mixtures.	Awarded (March 2023)
4	Pratibha Arya	Study of molecular interaction in ternary liquid mixture using ultrasonic and spectroscopic methods.	pursuing

Details of Seminar/Conference/Workshop/Orientation/Refresher Courses:

S. No.	Title	Dates	Organizing Institute
1	Orientation Course	26/9/13 – 21/10/13	HRDC Nainital
2	Refresher Course on “Human Rights”	20/07/22-02/08/22	AMU, Aligarh
3	Short Term Professional Development Programme on ‘Implementation of NEP 2020 for University and College Teachers’	09/09/2022 To 17/09/2022	UGC approved Conducted by IGNOU, New Delhi
4	Invited talk in National Seminar on ‘Recent Advances in Multifunctional Materials’	17, 18 Dec. 2022	Deptt. of Physics, M.L.K.(PG) College, Balrampur (UP)
5	Refresher Course on “Environmental Science”	08/11/16-28/11/16	HRDC Nainital
6	Refresher Course on “Ethics, Spirituality and Yoga”	10/03/18-30/03/18	HRDC Nainital
7	Short term Course on “Value Education”	13/10/16-19/10/16	HRDC Nainital
8	Workshop on “Developing Synergy between Information, Communication Technology and Academics”	25/03/17-31/03/17	MBGPG College, Haldwani
9	Workshop on Research Methodology	04/12/17-24/12/17	MBGPG College, Haldwani
10	Seminar on Yoga, Naturopathy and Holistic Health	23/08/16-28/08/16	Govt. PG College, Khatima and UOU Haldwani
11	Workshop on Facilities of UGC-DAE Consortium for Scientific Research	05/04/16-07/04/16	HRDC Nainital
12	Seminar on “Intellectual Property Rights in Higher Education”	04/04/16	MBGBG College, Haldwani
13	Seminar on Indian Culture Prospects and Challenges	28/03/16-29/03/16	MBGPG College, Haldwani
14	International Seminar on Role of E-Learning in Quality Education	23/02/15-24/03/15	Govt. PG College, Kashipur
15	Seminar on Recent Development in Physics and Prosperity in Solar Physics-Space Sciences	27/12/14-28/12/14	MBGPG College, Haldwani
16	Seminar on “Environmental Globalization and Quality of Life”	02/12/14-03/12/14	SBS Govt. PG College, Rudrapur

17	Workshop on Technology Enhanced Learning	21/08/14-23/08/14	Amrapali Institute of Technology, Haldwani
18	Science Conclave on Renaissance of Science in Uttarakhand	23/07/14-30/07/14	MBGPG College, Haldwani
19	Science Conclave on Recent Trends in Material Science and Nano Structures	03/01/12-04/01/12	Govt. PG College, Rudrapur
20	Workshop of Red Ribbon Club	11/03/10-13/03/10	MBGPG College, Haldwani
21	National Seminar on Yoga, Mental Health and Society	23/05/09-24/05/09	MBGPG College, Haldwani
22	Workshop on Prohibition of Pre-natal determination of Sex Fetus	25/03/09	MBGPG College, Haldwani
23	Seminar on Recent Trends in Fluorescence Spectroscopy and its Application	01/12/15-03/12/15	DSB Campus, Nainital
24	National Seminar on Development in Electronic Industry and Environmental Balance	03/10/96-04/10/96	BARC, Bombay at DSB Campus Nainital
25	National Seminar on Science in Ancient India	12/10/91-16/10/91	DSB Campus Nainital
26	Workshop on Lasers in Chemical and Biological Sciences	15/12/88-23/12/88	IIT, New Delhi

Research Publications

S. No.	Author(s)	Research paper Title	Name of Journal	Volume	Page	Year with ISSN	Citation
1.	Himani Tewari, Charu Chandra Dhaundiyal, Tara Bhatt, Hema	4f-4f Spectral study and calculation of Energy Interaction Parameters for Interaction of Nd ³⁺ with different solvents.	Chemistry Africa			October 2022 https://doi.org/10.1007/s42250-022-00518-x	
2.	Hema, Tara Bhatt, Pratibha Arya, Charu Ch. Dhondiyal, Himani Tiwari and Kamal Devlal	Structural and vibrational study of molecular interaction in a ternary liquid mixture of benzylamine, ethanol and benzene	Structural Chemistry	33	207-218	2022 https://doi.org/10.1007/s11224-021-01832-9	

3.	C. C. Dhondiyal, H. Tiwari, T. Bhatt, Hema, D. K. Upreti & B. Sanwal	Study of emission and optical interaction in the UO_2-Nd system doped in zinc phosphate glass	Indian Journal of Physics	96	575-581	2022 https://doi.org/10.1007/s12648-021-02007-2	
4.	Hema, Tara Bhatt, Tarun Pant, Charu Ch. Dhondiyal and Himani Tiwari	Computational and experimental study of molecular interaction in a ternary liquid mixture of cyclohexylamine+ethanol+benzene	Indian Journal of Chemistry -Section A (IJCA)	60A	1072-1080	2021	
5.	Hema and Tara Bhatt	Study of Molecular Interaction in a Ternary Liquid Mixture of n-hexane, ethanol and benzene	Materials Today: Proceedings	47(8)	1590-1597	2021 https://doi.org/10.1016/j.matpr.2021.04.264	3
6.	Charu Chandra Dhondiyal, Himani Tiwari, Tara Bhatt, Hema, Deepak Kumar Upreti & Bhawna Sanwal	Study of optical interaction between UO^{2++} and Ho^{3+} in zinc phosphate glass	Indian Journal of Pure & Applied Physics (IJPAP)	59(1)	5-10	2021	
7.	Hema, Tara Bhatt, Tarun Pant, Charu Ch. Dhondiyal, Meenakshi Rana, Papia Chowdhury, G. C. Joshi, Pratibha Arya, Himani Tiwari	Computational study of the intermolecular interactions and their effect on the UV-visible spectra of the ternary liquid mixture of benzene, ethanol and propylene glycol	Journal of Molecular Modeling	26 (268)	1-12	2020 https://doi.org/10.1007/s00894-020-04533-y	4
8.	Hema and Tara Bhatt	Comparative thermo-acoustic study of ternary mixture of polar and nonpolar solvents with benzene and ethanol system	SN Applied Sciences	2 (43)	1-8	2020 DOI: 10.1007/s42452-019-1777-5	4
9.	Hema, Tara Bhatt, Tarun	Ultrasonic study of effect of	Asian journal of	32 (1)	167-173	2020 DOI: 10.1423	3

	Pant, Charu Ch. Dhondiyal and Himani Tiwari	temperature and concentration on molecular interaction in ternary liquid mixture (propylene glycol +benzene+ethanol)	chemistry			3/ajchem.2020.22341	
10.	Tarun Pant, Hema, Tara Bhatt, Charu Ch. Dhondiyal	Study of intermolecular interactions in binary liquid mixtures of N,N-dimethylacetamide with chloroform using Scaled Particle Theory (SPT)	International Journal of Science and Research (IJSR)	8 (6)	1459	2018, ISSN:2319-7064	
11.	Tarun Pant, Hema, Tara Bhatt, Charu Ch. Dhondiyal	Comparative study of theoretical ultrasonic velocities of binary liquid mixture containing Dimethyl Acetamide (DMAC)and chloroform at different temperatures T=300 K, 303 K	Pramana	9 (6)	1796	2019, ISSN: 2249-2976	
12.	Tara Bhatt, C.C. Dhondiyal, G.C. Joshi, Hema, Tarun Pant, Himani Tewari	Ultrasonic, volumetric and viscometric study of molecular interaction in aqueous NaCl Solution.	International Journal for Research in Applied Science and Engineering Technology	6 (XI)	384	2018, 2321-9653	
13.	Tarun Pant, Hema, Tara Bhatt, C.C. Dhondiyal	Volumetric, viscometric and ultrasonic study of binary liquid	International Journal for	6 (XI)	181	2018, 2321-9653	

		mixture of N, N-Dimethylacetamide and Chloroform at different temperatures.	Research in Applied Science and Engineering Technology				
14.	Ashutosh Upadhyaya, Tara Bhatt, H.B. Tripathi, D.D. Pant	Photophysics of 8-Anilinonaphthalene-1-sulphonate	J. Photochemistry and Photobiology A: Chemistry	89	201	1995 DOI: 10.1016/1010-6030(95)04057-M	25
15.	Tara Bhatt, H.B. Tripathi, D.D. Pant	Solvent effect on fluorescence lifetime of 8-Anilinonaphthalene-1-sulphonate	Current Science	59	991	1990 https://www.jstor.org/stable/24093652	3

Published books/Reports/Chapters/Articles etc. (Article published in ISBN only)

S. No.	Chapter Title	Book Title	Author's Name	Publisher	Year with ISBN
1	Hydropower Development in Uttarakhand: Prospects and Challenges	Discovering the Himalayas	Tara Bhatt, Tarun Pant	Adharshila Prakashan, Haldwani	2017, 978-93-81913-59-8
2	Importance of Livestock Management in Uttarakhand	Exploring the Himalayas: Land and the people	Tara Bhatt, Shruti Bhatt	Adharshila Prakashan, Haldwani	2017, 978-93-81913-60-4
3	A review of ultrasonic study of molecular interaction in liquid mixtures.	Recent advances in science and technology	Hema, Tara Bhatt	Seemant Engineering College, Pithoragarh	2017, 978-93-86724-77-9

Participation in different college committees	1. Organised two PARENTS TEACHERS MEETING on 4 th January and 6 th April 2023 (Convener of PTA Association)
	2. Nodal Officer of KAUSHAL VIKAS COMMITTEE

	3. Convener of Mahavidyalaya Anurakshan Samiti
	4. Convener of Students Grievances Samiti
	5. Convener of College Academic Calender
	6. Convener of College development and Beautification.