

**PART - A**

**BIO-DATA**

**OF**

**DR LALAN PRASAD (VERMA)**

**(Principal & Professor's Physics)**

**In**

**Brief Academics**

**2026**

**GOVT. DEGREE COLLEGE, SHITLAKHET ALMORA, UTTARAKHAND**

## PERSONAL DATA

- Full Name (in Capital letter): **LALAN PRASAD (VERMA)**
- Father/ Mother name: **LATE SHRI R.N. PRASAD/  
LATE SMT. RADHIKA DEVI**
- Employee Code : **070012637**
- Subject for which Appointed: **PHYSICS (Dept. of H.E. Selected by  
Public Service Commission 1998)**
- Date of appointment: **09.01.1999**
- Current Designation: **PROFESSOR in Physics**
- Post, Pay Band and Academic Level: **Professor, 144200 - 218200 & 10,000  
Academic Level - 14**
- 10. Date of Professorship: **09.01.2014, onward**
- Qualification: **M.Sc. (Gold Medalist), Ph.D., ISYA  
(China)**
- 12. Date of Birth **3<sup>rd</sup> January Nineteen Sixty Seven**  
D D M M Y Y Y Y  

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 0 | 3 | 0 | 1 | 1 | 9 | 6 | 7 |
|---|---|---|---|---|---|---|---|
- 13. Any other major assignment in addition to Teaching. (e.g. Principal, etc.) **Principal since 17<sup>th</sup> November 2022 at  
GDC, Shitlakhhet, Almora**
- 14. Residential Address (With Pin code) **Gaujajali Uttar, Bareilly Road  
Haldwani – 263 139  
Nainital, Uttarakhand**
- 15. Contact No. **Mobile No. 09412131988 & 9536254821**  
Email: [lpverma40@gmail.com](mailto:lpverma40@gmail.com), [gdcshitalkhet@gmail.com](mailto:gdcshitalkhet@gmail.com)

## 16. Service Record in the Year:

| Sr. No. | Post                | Pay Scale/Pay Band & Grade Pay                        | Duration     |              |                                      | Department/ College/Office                                                         |
|---------|---------------------|-------------------------------------------------------|--------------|--------------|--------------------------------------|------------------------------------------------------------------------------------|
|         |                     |                                                       | From         | To           | Total Number of Years, Months & Days |                                                                                    |
| (1)     | (2)                 | (3)                                                   | (4)          | (5)          | (6)                                  | (7)                                                                                |
| 1.      | Lecturer            | 8000 – 13500                                          | 09. 01. 1999 | 09. 01. 2003 | 04                                   | Physics/ Govt. P.G. College, Gopeshwar & Physics/ M.B. Govt. P.G. College Haldwani |
| 2.      | Sr. Lecturer        | 10000 - 15200<br><br>15600 – 39100<br><br>7000 + 8000 | 09. 01. 2003 | 09. 01. 2008 | 05                                   | Physics/ M.B. Govt. P.G. College Haldwani                                          |
| 3.      | Reader              | 37400 – 67000 + 8000                                  | 09. 01. 2008 | 09. 01. 2011 | 03                                   | Physics/ M.B. Govt. P.G. College Haldwani                                          |
| 4.      | Associate Professor | 37400 – 67000 + 9000                                  | 09. 01. 2011 | 12.07.2017   | 06 Years, 06 Months                  | Physics/ M.B. Govt. P.G. College Haldwani                                          |
| 5.      | Associate Professor | 37400 – 67000 + 9000                                  | 13.07.2017   | 31 Dec 2013  | About 06 months                      | Physics/Govt. PG College, Berinag, Pithoragarh                                     |
| 6.      | Professor           | 144200 - 218200 + 10000                               | Jan 2014     | Continue     | About 03 Yrs                         | By Govt. Order 762/XXXIV(4)2019-01(09)2016TC                                       |
| 7.      | Principal Permanent | 144200 - 218200 + 10000                               | 11 Nov 2022  | Continue     | More than 2 years                    | Govt Degree College, Shitlakhet, Almora                                            |
|         | Total Service Years | -----                                                 | -----        | -----        | 27 Years 09 Months on 19.05.2026     | -----                                                                              |

## 17. Academic Qualifications:

| S N | Examination | University | Year | Subject       | Marks                  | Division      |
|-----|-------------|------------|------|---------------|------------------------|---------------|
| 1   | B.Sc.       | Gorakhpur  | 1986 | PCM           | 62.9%                  | First         |
| 2   | M.Sc.       | – do-      | 1988 | Physics       | 67.3%                  | Gold medalist |
| 3   | ISYA        | CHINA      | 1992 | Astrophysics  |                        |               |
| 4   | Ph.D.       | Gorakhpur  | 1993 | Solar Physics | Astrophysics Astronomy |               |

## 18. Service Details

| S.No. | Name of College                           | Period from | Up to      | Remark                                                        |
|-------|-------------------------------------------|-------------|------------|---------------------------------------------------------------|
| 1.    | Govt. PG College Gopeshwar Chamoli        | 09.01.1999  | 22.12.1999 | Selected by UPSE Allahabad                                    |
| 2.    | M.B. Govt. PG College, Haldwani, Nainital | 23.12.1999  | 12.07.2017 | Produced 07 Ph.D & 01 Mphil, Completed 03 UGC Projects        |
| 3.    | Govt. PG College Berinag, Pithoragarh     | 13.07.2017  | 16.11.2022 | Produced 04 PhD, Completed 01 UGC Project                     |
| 4.    | Govt Degree College, Shitlakhhet, Almora  | 17.11.2022  | Continue   | Letter No.1051(1)/XXIV-C-4/2022-01(35)/2021 dated 11 Nov 2022 |

19. **Family:** Dr. Smt. Vimala Verma (**Wife**-Head in Govt. Jr. High School Mehtoli, **Uttarakhand**)

Mr. Saurabh Verma (**Son**, Associate Engineer in Brisbane Dept of Railway Govt of **Australia**)

Smt Loshita Rani Verma, **Son's** wife (Microbiologist at Food Neutrition **Brisbane**)

Dr. Smt Sangathan Verma (**Daughter**, MS Guano & Medical Officer in Civil Hospital **Rajkot Gujrat**)

**Dr Bhargav Patel** (In-Law's MD Rajkot Gujrat)

Km. Rachana Verma (**Daughter** BTech, from **IIT Kharagpur**, employee at the post of "Senior Analyst" Management group of American Express, Gurgaun)

## 20. Name & Address of the persons who may be consulted about my work:

- (i) **Prof. Ram Sagar**, Former Director, ARIES, Nainital, Mob No. 9886443436 and mail ID ram\_sagar0@yahoo.co.in
- (ii) **Prof. R.S. Bhakuni**, Deputy Director, Dept of Higher Education, Directorate Higher Education, Govt of Uttarakhand,  
**Phone:-** 9412364210, 8923661210, **Email-** [drsbhakuni@gmail.com](mailto:drsbhakuni@gmail.com)
- (iii) **Prof. B.S. Bisht**, Former JD Higher Education Govt. of Uttarakhand at presend MD of Meerut Institute of Technology, Shiksha Nagar, Haldwani Mob No. 9410332911

(iv) **Prof. B.P. Tyagi**, DBS College, Dehradun, Uttarakhand  
**Resi:-**23 – Adarsh Vihar, Raipur Road, Dehradun – 248001 Uttarakhand  
**Phone:-** 01352787020, 09837123716, [iaptddn@gmail.com](mailto:iaptddn@gmail.com), [bptyagi@gmail.com](mailto:bptyagi@gmail.com)

21. Research Experience: 32 Years  
 22. Teaching Experience: 23 Years UG & PG  
 23. Administrative Experience: From 17 Nov 2022 as Principal & onwards  
 23. Ph.D./M.Phil Produced 13 Awarded PhD  
 01 M.Phil + 05 working for PhD  
 24. Projects completed 02 MRP and 01 Minor of UGC, New Delhi  
 25. CSIR Major research Project going on: File No. 03/1491/2023/EMR-II dated 04.09.2023

**Seminars/workshops/conferences organized in the capacity of organizing secretary.**

| S.No | Duration                 | Name of workshop/seminar/conference                                                             | No. of Research papers presented/lectures                         | Participants                                           | Expenditure In Rs. |
|------|--------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------|--------------------|
| 1.   | 03-04 Nov 2012           | Conference on Recent Trend in Interdisciplinary Research and Astrophysics Space Science         | 20 Invited Talk, 18 contributory talk and 62 poster presentations | 419 Participants participated                          | 335000.00          |
| 2.   | 27-28 Dec 2014           | National Seminar on Recent Development in Physics and Prosperity in Solar Physics-Space Science | 14 Invited Talk, 15 contributory talk and 73 poster presentations | 379 participants participated                          | 230000.00          |
| 3.   | 28.01.2014 to 17.02.2014 | Twenty One Days Research Orientation Workshop (ROW) for Pre Ph.D. Scholars                      | 62 Lectures of learned speakers from various institutions         | 137 Pre Ph.D. Scholars of various streams participated | 72000.00           |
| 4.   | 20 – 30 Jan 2016         | Organised 10 days Research Orientation Workshop for Pre PhD Scholars of all streams             | 29 Lectures of learned speakers from various institutions         | 95 Pre Ph.D. Scholars of various streams participated  | 4784.00            |

|    |                             |                                                                                                              |                                                                |                        |           |
|----|-----------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------|-----------|
| 5. | 04 <sup>th</sup> April 2016 | Organised one day National Seminar on Building Awareness on Intellectual Property Rights in Higher Education | 05 Lectures of IPR Experts from different Institutions         | About 400 participants | 140000.00 |
| 6. | 25 -31 March 2017           | 7 - Day National Workshop on Developing Synergy between ICT & Academics                                      | 19 Lectures by ICT experts & Lab work by Laptops with software | About 159 Participants | 317000.00 |

## LIST OF PUBLICATIONS

### 2026 (03+01)

1. Study of the Magneto-sonic Mach Number for the Magnetosphere of the Earth, Megha Agari and **L.P. Verma**, Asian Journal of Research and Reviews in Physics, Volume 9, Issue 4, Page 50-56, 2025; Article no.AJR2P.144946 ISSN:2582-5992 DOI: <https://doi.org/10.9734/ajr2p/2025/v9i4205>  
**Impact Factor- 3.26**
2. Study of Large Solar Energetic Particle Events with Halo CME and their Association with Solar Flares for Solar Cycles 23, 24 and 25, Chandani Mathpal and Lalan Prasad, in the Springer Nature Brazilian Journal of Physics, Brazilian Journal of Physics (2026) 56:96 **Impact Factor- 4.05**  
<https://doi.org/10.1007/s13538-026-02017-7>  
<https://link.springer.com/article/10.1007/s13538-026-02017-7>, <https://rdcu.be/e4CVy>
3. Quantitative analysis of CME Flare coupling and their influence on Solar Energetic Particle Events (1997-2024) , Chandrasekhar Bhoj and **Lalan Prasad**, Accepted in the Journal IJPA **ID 1758**, SCI Scopus DOAJ IF-1.10  
**Impact Factor- 5.02**

### 2025 (05+03)

1. "Cosmic Ray Intensity Modulation Due to Interplanetary Magnetic Field and Geomagnetic Storms for Solar Cycle 24 and 25 (Article Id: IJPAP#1201)," which has been submitted to Indian Journal of Pure & Applied Physics (IJPAP). (Submitted)
2. "Magnetic phenomena which is similar to atmospheric phenomena: result from the Northern lights or Aurora features with Solar Wind, Interplanetary Magnetic Field, and Geomagnetic Activity", Megha Agari and **Lalan Prasad**, International Journal of Physics and Applications 2025; 7(2): 44-51 DOI: <https://doi.org/10.33545/26647575.2025.v7.i2a.169> E-ISSN: 2664-7583 P-ISSN: 2664-7575 IJOS 2025; 7(2): 44-51 **Impact Factor- 6.26**
3. Study of large solar energetic particle events with halo CMEs and their association with solar flares for solar cycles 23, 24 and 25", Chandni Mathpal and **Lalan Prasad**,

(Submitted Submission ID 4e834fe5-bee0-4c54-b9e9-82b82079d849 in the Brazilian Journal of Physics on 10 June 2025 UTC, 11.11.2025), Accepted 23.01.2026

**Impact Factor- 3.01**

4. Study of IMF-B Y dependency in the magnetosphere during solar cycle 25" (submitted to Astrophysics and Space Science on 01 July 2025 UTC Submission ID 93eab043-a552-421f-ae53-9a8419f531b5).

**Impact Factor- 5.36**

5. Study of IMF and its North-South Component (BZ) When DST Reaches  $130\text{nT} \leq \text{DST} \leq -100\text{nT}$  during Geomagnetic Storm, Megha Agari, **L. P. Verma**, International Journal of Scientific Research and Engineering Development-- Volume 8 Issue 5, Sep-Oct 2025, ISSN: 2581-7175, is published in the United Kingdom, European journal.

**Impact Factor- 6.02**

[www.ijared.com/volume8/issue5/IJSRED-V815P29.pdf](http://www.ijared.com/volume8/issue5/IJSRED-V815P29.pdf)

6. Study of the Magneto-sonic Mach Number for the Magnetosphere of the Earth Megha Agari and **L.P. Verma**, *International Astronomy and Astrophysics Research Journal* Volume 7, Issue 1, Page 98-104, 2025; Article no.IAARJ.144946, This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript, Received: 24/08/2025 Published: 27/10/2025, DOI: <https://doi.org/10.9734/iaarj/2025/v7i1119>, ISSN 144946. This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://pr.sdiarticle5.com/review-history/144946>
7. A paper submitted entitled Descriptive Study of Interplanetary Magnetic Field, Magneto-sonic Mach Number, AL, and AU for the Earth's Atmosphere or Magnetosphere Associated with Intense and Severe Geomagnetic Storm during the Solar Cycles SC 23, SC 24, and SC 25 (Article Id: IJPAP#1558)" to Indian Journal of Pure & Applied Physics (IJPAP).

**Impact Factor- 3.26**

## **2024 (2+2)**

1. The Science and Technology of Ancient India, Chandrasekhar Bhoj and **Lalan Prasad**, Govt Degree College, Shitlakhe-263678t, Almora, Uttarakhand, India, Pub in International Journal of Creative Research Thoughts (IJCRT) ISSN: 2320-2882, Vol 12, Issue 4 April 2024, [www.ijcrt.org](http://www.ijcrt.org)
2. Study of large solar energetic particle events with halo CMEs and their association with solar flares for solar cycles 23 and 24 (Submitted for publication in the European Journal of Physics)
3. A detailed study of moderate, intense and severe geomagnetic storms in relation to diverse solar wind parameters, interplanetary parameters and their product function for Solar Cycle 23 and 24" (Submitted to Solar Physics Submission ID cb84f6a0-2416-4486-9503-192d271e8919 on 30.04.2024).
4. Variation in the Effective Parameter for Earth's Atmosphere on Comparision of Solar Cycle 24 and Solar Cycle 25 By

**Impact Factor- 2.67**

Megha Agari, **LP Verma** and Nisha Kohli.

International Journal of Management Science and Technology, UGC ID 47959, ISSN 2250-1959(0) 2348-9367(P) Vol – 15, Issue – 7 July 2024;  
**Impact Factor- 5.26**  
 DOI:HTTPS://DOLORG/10.32804/IRJMST, Peer Reviewed & Refereed Journal.

5. Variation of CRI with Solar Wind Speed for Solar Cycles 23 by Chandrasekhar Bhoj1\* • **Lalan Prasad**<sup>1</sup>, J. Mountain Res. P-ISSN: 0974-3030, E-ISSN: 2582-5011 DOI: <https://doi.org/10.51220/jmr.v19-i2.53> Vol. 19(2), (2024), 519-525, UGC Care Group II in the master Journal list <https://mjl.clarivate.com/home> and paper in the link [https://jmr.sharadpauri.org/papers/19\\_2\\_2024/53\\_jmr2024217\\_shekhar.pdf](https://jmr.sharadpauri.org/papers/19_2_2024/53_jmr2024217_shekhar.pdf)

**Impact Factor- 7.07**

### **2023 (01+2)**

1. Published a Book entitled PROSPERITY OF THE SUN IN RESPECT OF RESEARCH, 2nd Edition by LAMBERT Publication Stemberg with ISBN 978-620-5-49966-5, in the last of Dec 2022 and received first week of January 2023. **Impact Factor- 3.08**
2. Association between the HCMEs and major SEP events for Solar Cycle 23 & Effect of HCME on Cosmic Ray Intensity and Disturbance Storm Time Index. (Submitted for Publication).
3. Variation of Effective Parameters which are Responsible for the Atmosphere of Earth during the Solar Cycle 24 (Submitted for Publication).

### **2022 (2+0)**

1. Study of Cosmic Ray Intensity and Geomagnetic Storms in Relation to Various Interplanetary Parameters and their product functions for Solar Cycle 24  
 Chandni Mathpal<sup>1</sup>, **Lalan Prasad**<sup>2</sup>, Department of Physics, Govt. P.G. College, Berinag-262531 Pithoragarh Uttarakhand, India<sup>1,2</sup>, **International Advanced Research Journal in Science, Engineering and Technology, Vol. 9, Issue 2, February 2022**  
**DOI: 10.17148/IARJSET.2022.9225**, ISSN (O) 2393-8021, ISSN (P) 2394-1588  
**A monthly peer-reviewed journal** **Impact Factor- 7.105**

2. Association between the HCMEs and major SEP events for Solar cycle 23 & Effect of Halo Coronal Mass Ejection on Cosmic Ray Intensity and Disturbance Storm-Time index. Chandrasekhar Bhoj , **L P Verma**, *International Journal of Research in Engineering and Science (IJRES)* ISSN (Online): 2320-9364, ISSN (Print): 2320-9356 [www.ijres.org](http://www.ijres.org) Volume 10 Issue 5 | 2022 || PP. 16-20, Peer Reviewed Journal Accept by UGC.

**Impact Factor- 5.711**

### **2021 (5+2)**

1. ASSOCIATION OF INTENSE GEOMAGNETIC STORMS WITH INTERPLANETARY MAGNETIC FIELD AND KP INDEX FOR SOLAR CYCLE 24

**Impact Factor- 6.941**

2. "Dr DP Khandelwal - A Multifaceted Personality" by HD Bist and **Lalan Prasad Verma**, published in the Bulletin of Indian Association of Physics Teacher, A monthly Journal of Education in Physics & Related Areas, ISSN 2277 - 8950, Volume **13**, Number 4, April 2021, PP 112 - 118.

**Impact Factor- 3.26**

3. A Correlative study of Geomagnetic Storms and CRI for solar cycle 22 and 24 during ascending and descending phase,

Meena Pokharia and **Lalan Prasad** Volume 8, Issue 2, February 2021

DOI 10.17148/IARJSET.2021.8213, ISSN (Online) 2393-8021 ISSN (Print) 2394-1588

**Impact Factor 6.612**

4. Received VD Good International Scientist Awards 2021 on Engineering, Science and Medicine, from Pondicherry, India.

5. "Study of solar wind parameters, interplanetary parameters and their product function during the main phase of geomagnetic storm for solar cycle 22" ( Submitted in the journal of Astrophysics Space Science).

6. A comparative study of moderate, intense and severe geomagnetic storms in relation to diverse solar wind parameters for Solar Cycles 20 to 24 ( Submitted in the Journal of EPJP 2021)

Chandni Mathpal, **Lalan Prasad**, Chandrashekhar Bhoj, Meena Pokharia

## **2020 (6)**

1. To Study the geoeffectiveness of Interplanetary Coronal mass ejection speed for moderate, intense and severe geomagnetic storms for Solar Cycle 23 and 24 (Submitted for publication in the J of Solar Physics, Netherlands)

2. Published a Book entitled PROSPERITY OF THE SUN IN RESPECT OF RESEARCH by LAMBERT Publication Stenberg with ISBN 978-620-2-67644-1 on dated 29.06.2020

3. Forbush Decrease correlated to Geomagnetic Storm and Interplanetary Magnetic Field, Accepted for publication in the International Journal of Scientific & Engineering Research (IJSER) ISSN 2229-5518 July 4, 2020.

**Impact Factor- 4.312**

4. **Teacher of the Year Award 2020** received on the occasion of Teacher's day (05 Sept. 2020), ceremony was organized by MHRD, Chairman Commission for Scientific & Technical Terminology Govt. of India, UCOST Dehradun, Sri Dev Suman State University Uttarakhand, Uttarakhand Technical University Dehradun and Divya Himgiri & DHtv.

5. To Study the geoeffectiveness of High Speed and Slow Speed Interplanetary Coronal mass ejection for Solar Cycle 23 and 24. **IARJSET** ISSN (Online) 2393-8021, ISSN (Print) 2394-1588, *International Advanced Research Journal in Science, Engineering and Technology* Vol. 7, Issue 12, December 2020. **DOI 10.17148/IARJSET.2020.71207**

Chandni Mathpal<sup>1</sup>, **Lalan Prasad**<sup>2</sup>, Arvind Kumar<sup>3</sup>, Nisha Kohli<sup>4</sup>

Research Scholar, Govt. P.G. College Berinag Pithoragarh Uttarakhand, India  
 Professor and Head Department of Physics, Govt. P.G. College Berinag Pithoragarh Uttarakhand, India<sup>2</sup>  
 Associate Professor Physics, DSB College, Dehradun, Uttarakhand<sup>3</sup>

**Impact Factor- 6.612**

6. Relevance of Combined Electron and Photon Beams in Radiotherapy of Head and Neck Cancers in the Era of Intensity-Modulated Radiotherapy. 2020. Spring Hope Cancer Foundation & Young Oncologist Group of Asia. This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial-License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>). *Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India* DOI <https://doi.org/10.1055/s-0040-1718636> ISSN 2454-6798.

Vinod Pandey<sup>1</sup> K.C. Pandey<sup>1</sup> N.K. Pant<sup>1</sup> **L.P. Verma<sup>2</sup>**

<sup>1</sup>Department of Radiotherapy, Swami Ram Cancer Hospital & Research Institute, Haldwani, Uttarakhand, India

<sup>2</sup>Department of Physics, Govt. P.G. College, Berinag, Uttarakhand, India

**Impact Factor- 3.219**

**2019(05)**

1. "Study of the very slow speed solar wind streams with Cosmic Ray Intensity and Ae index for Solar Cycle 24 (2008-2013)."

Meena Pokharia and **Lalan Prasad**, *J. Mountain Res.*, 2019, **14**(1): 59-61. ISSN: 0974-3030. Publication- India.

**Impact Factor- 3.26**

2. "Study of Geomagnetic Storms, Interplanetary Magnetic Field and Solar Wind"

Chandrasekhar Bhoj and **Lalan Prasad**, *J. Mountain Res.* ISSN: 0974-3030 Vol. **14** (1), (2019) 29-31

3. "Study of the cosmic ray intensity in relation to geomagnetic storms and solar interplanetary parameters for solar cycles 21 and 23".

Chandrasekhar Bhoj, **Lalan Prasad**, Meena Pokharia and Chandni Mathpal, 2019, *J. Astrophys. Astr.* **40**:26. ISSN: 0250-6335, Publication- Springer and Indian Academy of Science, India.

\*Corresponding author. E-mail: [lalitchandu08091992@gmail.com](mailto:lalitchandu08091992@gmail.com);

[lpverma40@gmail.com](mailto:lpverma40@gmail.com), Available on: <https://rdcu.be/bGUks>

**Impact Factor- 0.849**

4. A Correlation study of Geomagnetic Storms for four consecutive solar cycles 21 - 24 (1976 - 2017) (Submitted in the *Journal of Astrophysics Space Science*).

5. "Association of Intense Geomagnetic Storms with Solar Wind Speed For Solar cycle 24"

Chandni Mathpal, **Lalan Prasad** 2019. *Bulletin of Enviroment, Pharmacology and Life Sciences*, Vol. 8. S1-S3.

**Impact Factor- 1.647**

**2018(11)**

1. "Association Between Geomagnetic Storm and Solar Wind"

Rajesh Mathpal<sup>1</sup>, **Lalan Prasad**<sup>2</sup>

Vol 6, Issue 1 March 2018, ISSN:2320-2882, *International Journal of Creative Research Thoughts (IJCRT)* [www.ijcrt.org](http://www.ijcrt.org)

**Impact Factor - 5.97**

2. Association Between Averages HSSW and SSSW with DST and Proton Flux During 2005 - 2009

Rajesh Mathpal<sup>1</sup>, **Lalan Prasad**<sup>2</sup>

Vol 08, Issue 1 January 2018, pp 18545-18547, ISSN: 2230-9926, *International Journal of Development Research (IJDR)*, [http:// www.journalijdr.com](http://www.journalijdr.com)

**Impact Factor 5.667**

3. Study of Association between Geomagnetic Storm with Solar Wind and Interplanetary Magnetic Field during 1997-2008

Suman Garia<sup>1</sup>, **Lalan Prasad**<sup>2</sup>

<sup>1</sup>Assistant Teacher, Dept. of Education, Uttarakhand, India.

<sup>2</sup>Professor & Head Dept. of Physics, Govt. P.G.College, Berinag Pithoragarh, Uttarakhand

*International Journal of Innovative Research in Science, Engineering and Technology Monthly, Peer Reviewed Journal*, Vol. 7, Issue 3, March 2018, ISSN(Online): 2319-8753 ISSN (Print): 2347-6710 Visit: [www.ijirset.com](http://www.ijirset.com)

**Impact Factor 7.089**

4. "Study of cosmic ray intensity in relation to the interplanetary magnetic field and geomagnetic storms for solar cycle 24"

Chandni Mathpal · **Lalan Prasad** · Meena Pokharia · Chandrashekhar Bhoj

*Journal of Astronomy, Astrophysics and Space Science* Springer ISSN 0004-640X Volume 363

Number 8 Astrophys Space Sci (2018) 363:1-11 DOI 10.1007/s10509-018-3390-2, **Netherlands**

**Impact Factor 1.885**

5. "Study of Geomagnetic Storms and Solar and Interplanetary Parameters for Solar Cycles 22 and 24".

Meena Pokharia, **Lalan Prasad**, Chandrashekhar Bhoj and Chandni Mathpal, 2018, *Solar Phys.* **293**(9): 1-20. ISSN: 0038-0938, Publication- Springer, **Netherlands**. <https://rdcu.be/5xOS>

**Impact Factor- 2.580**

6. "A comparative study of geomagnetic storms for solar cycles 23 and 24".

Meena Pokharia, **Lalan Prasad**, Chandrashekhar Bhoj and Chandni Mathpal, 2018, *J. Astrophys. Astr.* **39**:53. ISSN: 0250-6335, Publication- Springer and Indian Academy of Science, India.

**Impact Factor- 0.849**

7. "A comparative study of SSN and DST for solar cycle 23 and 24"

Rajesh Mathpal<sup>1</sup>, **Lalan Prasad**<sup>2</sup>, © 2018 JETIR November 2018, Volume 5, Issue 11 [www.jetir.org](http://www.jetir.org) (ISSN-2349-5162)

**Impact Factor 5.87**

8. "Solar wind variation with sunspot numbers and geomagnetic storms for solar cycle 23 and 24"

Chandrashekhhar Bhoj, **Lalan Prasad**, Meena Pokharia and Chandni Mathpal, 2018, *International Journal of Scientific and Engineering Res.*, **9(1)**: 23-27. ISSN: 2229-5518, Publication-India. **Impact Factor- 4.2**

9. "Study of the very slow speed solar wind streams with Kp index and solar wind proton density for solar cycle 24 (2008-2016)". Meena Pokharia and **Lalan Prasad**, *IJCRT*, 2018, **6(2)**: 90-95. ISSN:2320-2882. **Impact Factor- 5.97**

10. Association of solar flares with coronal mass ejections accompanied by Deca-Hectometric type II radio burst for two solar cycles 23 and 24

Hema Kharayat<sup>1</sup> · **Lalan Prasad**<sup>2</sup> · Sumit Pant<sup>3</sup> *Astrophys Space Sci* (2018) 363:87

<https://doi.org/10.1007/s10509-018-3309-y>

**Impact Factor - 4.37**

11. "Dependence of Geomagnetic Storms on Diverse Solar Wind Parameters , Interplanetary Magnetic Field, Interplanetary Conditions on Solar Cycle 23"

Chandni Mathpal and **Lalan Prasad** 2018, *Journal of Pure Applied and Industrial Physics*, **8(8)**: 90-97. ISSN 2319-7617, Publication- India. **Impact Factor- 4.715**

## **2017(09)**

1. "Measurement of Radiation Dose at Abutment Region of Clinically Relevant Photon and Electron Field in External Beam Radiotherapy of Head and Neck Cancers"

Vinod Pandey<sup>[1]</sup>, **Lalan Prasad**<sup>[2]</sup>, Silam<sup>[3]</sup> K.C.Pandey<sup>[1]</sup> *International Journal GLOBAL JOURNAL FOR RESEARCH ANALYSIS* for 15th May, 2017 issue. Impact factor of 4.547 with Index Copernicus Value 80.26. ISSN 2277-8160 **Impact Factor – 4.547**

2. "Association between Major Solar Energetic Particle Events and Halo Coronal Mass Ejection for the Solar Cycle 23"

Hema Kharayat, **Lalan Prasad**, Beena Bhatt, *Int. J. Curr. Sci. Tech.*, 2017: 6(1):16-19 ISSN 2278-6198

**Impact Factor – 3.927**

3. "Space Weather Association with Sunspots and Geomagnetic storms for Solar Cycle 23 (1996-2007) and Solar Cycle 24 (2008-2016)". Chandrasekhhar Bhoj , **Lalan Prasad** Meena Pokharia , Chandani Mathpal, Rajesh Mathpal, in the *Journal of Pure Applied and Industrial Physics* Vol **7(4)** 156- 161 April 2017. ISSN2229-7596 **Impact Factor – 4.715**

4. "Association between the very slow Speed Solar Wind Streams and the Cosmic Ray Intensity for Solar Cycle 24 (2008 - 2016)".

Meena Pokharia Rajesh Mathpal, **Lalan Prasad**, Hema Kharayat, C. Bhoj, Chandani Mathpal, in the *Journal of Pure Applied and Industrial Physics* Vol **7(5)** 162 - 165 May 2017, ISSN 2229-7596, [www.physics-journal.org](http://www.physics-journal.org) **Impact Factor – 4.715**

5. "Study of Large Solar Energetic Particle Events with Halo Coronal Mass ejections and Their Associated Solar"

Hema Kharayat, **Lalan Prasad**, Rajesh Mathpal, Meena Pokharia, Chandrashekhhar Bhoj, Chandni Mathpal, *New Astronomy*, 2017, vol **53**, page 44-52, ISSN:1384-1076, Elsevier **Impact Factor – 1.085**

6. “Study of Cosmic Ray Intensity and Geomagnetic Storms with Solar Wind Parameters during the period 1998 – 2005” Hema Kharayat, **Lalan Prasad**, *Astrophysics and Space Science*, **Netherlands** 2017, vol. **362**, page 20. **Impact Factor – 2.222**

7. “Association between the Solar Wind Speed, Interplanetary Magnetic Field and the Cosmic Ray Intensity for Solar Cycles 23 and 24”.

Meena Pokharia, **Lalan Prasad**, Chandni Mathpal, Chandrashekhar Bhoj, Hema Kharayat and Rajesh Mathpal, 2017, *J. Astrophys. Astr.* **38**(4): 65. ISSN: 0250-6335, Publication- Springer and Indian Academy of Science, India. **Impact Factor- 0.849**

8. Study of Moderate, Intense and Severe Geomagnetic Storms in Relation to the Interplanetary Magnetic Field for Solar Cycle 24.

Chandani Mathpal, **Lalan Prasad**, Meena Pokharia, Chandrasekhar Bhoj, Rajesh Mathpal, , Hema Kharayat, , in the *Journal of Pure Applied and Industrial Physics* Vol **7(11)** 419 - 425 Nov. 2017, ISSN 2229-7596, [www.physics-journal.org](http://www.physics-journal.org) **Impact Factor – 4.715**

9. "Measurement of Radiation Abutment Dose for 6MV Photon and 9 MeV Electron Beam Combinations by GAFCHROMIC EBT3 Film at Extended SSD"

Vinod Pandey<sup>1</sup>, **Lalan Prasad** <sup>2</sup>, Kailash Chandra Pandey <sup>1</sup>

*International Journal for Research in Applied Science & Engineering Technology (IJRASET)* . [www.ijraset.com](http://www.ijraset.com) Volume **5** Issue V, May 2017 IC Value: 45.98 ISSN: 2321-9653

**Impact Factor – 3.82**

## **2016(8)**

1. Study of Cosmic Ray Intensity in Relation to the Interplanetary Magnetic Field and Geomagnetic Storms for Solar Cycle 23.

Hema Kharayat, **Lalan Prasad**, R Mathpal, SumanGariya&Beena Bhatt: 2016 *Solar Physics*, Netherlands, ISSN 0038-0938, *Sol Phys* DOI 10.1007-016-0852-y, Springer Vol. **291**/1, Jan 2016, Netherlands **Impact Factor – 3.256**

2. “Effect of Halo Coronal Mass Ejection on Cosmic Ray Intensity and Disturbance Storm-Time index for the Ascending Phase of the Solar Cycle 24”

Hema Kharayat, **Lalan Prasad**, Rajesh Mathpal 2016, *International Journal of Scientific Engineering and Applied Science (IJSEAS)*,2 (4), 228-236, ISSN: 2395-3470.

**Impact Factor – 3.466**

3. Association between GS with Solar Wind during 2000-2010

Rajesh Mathpal, **Lalan Prasad**, Hema, C Bhoj, C Mathpal andM.Pokhariya, *International Journal of Physics and Astronomy*, ISSN:2051-6851, Vol., Issue. 1, Feb 2016 **Impact Factor – 4.2**

4. “Relationship of High Speed Solar Wind Streams with Geomagnetic Field Variation During 2003–2005 ofSolar Cycle 23”

Rajesh Mathpal, **Lalan Prasad**, Hema, ChandaniMathpal, MeenaPokhariya, C. Bhoj, 2016, *Journal of Pure Applied and Industrial Physics*, 6(3), 25-28, ISSN 0976-5727. **Impact Factor – 4.71**

5. Association between Cosmic Ray Intensity, geomagnetic storm and Solar Wind Speed for the period 2000-2005

HemaKharayat, **Lalan Prasad**, Rajesh Mathpal 2016, *Asian Journal of Science and Innovative*

*Research(AJSIR)*.ISSN 2320–4818 Vol I, Issue-I page 79-83

**Impact Factor – 0.541**

6. “Study of Large Solar Energetic Particle Events with Halo Coronal Mass ejections and Their Associated Solar”

HemaKharayat, **Lalan Prasad**, Rajesh Mathpal, MeenaPokharia, ChandrashekharBhoj, ChandniMathpal (Accepted in 2016, ISSN:1384-1076) *International Journal of in Astronomy and Astrophysics New Astronomy* Elsevere **Impact Factor – 1.085**

7. Fluorescence Studies of ZnO Nanomaterial with Samarium ion

Yogesh Kumar Sharma<sup>1</sup>, Sudha Pal<sup>1</sup>, Priyanka Goyal<sup>1</sup>and **Lalan Prasad Verma**<sup>2</sup>  
J. Chem. Eng. Chem Rs 3 (2016) 1027 - 1030.

**Impact Factor – 0.541**

8. Solar Flares Associated Coronal Mass Ejections in Case of Type II Radio Bursts”

Beena Bhatt, **Lalan Prasad**, Harish Chandra Suman Garia, *Astrophysics and Space Science*, Netherlands 2016, vol. **361**, page265. **Impact Factor – 1.622**

## **2015(03)**

1. “Distribution of solar flares with respect to the coronal mass ejection (CME) span during 1996 to 2012. Beena Bhatt, **Lalan Prasad**, Suman Garia, Hema and Rajesh Mathpal: 2015, *Astrofizika* Vol. 58, No. 3, pp 463 – 472, September, 2015, Springer New York. **Impact Factor – 4.479**

2. “Statistical Analysis of Coronal Mass Ejection and Forbush Decrease”

Beena Bhatt, **L. Prasad**, Suman Garia, Hema, Rajesh Mathpal, Manish Pandey (submitted 2015 for the Proceeding of the conference to be held in Gopeshwar, Chamoli).

3. The Statistical Analysis between the Association of Geomagnetic Storm with Solar Wind and Interplanetary Magnetic Field during 1997-2008

**Lalan Prasad**· Suman Garia. Beena Bhatt. Hema, Rajesh Mathpal& \*M K PANDEY

Submitted to the Proceeding of the National Seminar to be held at Govt. P.G. College, Gopeshwar, Chamoli.

## **2014(2+3)**

1. Effect of Solar Flare and Coronal Mass Ejection in our Earth

**Lalan Prasad**, Beena Bhatt and Suman Gariya, 2014, *J of Physics Education* Vol **30**, No.1, Article No. 2 in the issue Jan – March 2014 PP 1-8, ISSN 0970-5953. **Impact Factor – 0.61**

2. Association between M-class flare and Coronal Mass Ejection during solar cycle 23<sup>rd</sup>

**Lalan Prasad**, Beena Bhatt, and Suman Gariya, 2014, *International Journal of Physics and Application*, India **6(2)**, PP 103-107. ISSN **0974-3103** **Impact Factor – 3.26**

3. Distribution of solar flares associated with Halo Coronal Mass Ejection Causing Geo-effectiveness.

Beena Bhatt, **Lalan Prasad**, and Suman Gariya, 2014, (Submitted ) *Journal of Astronomy & Astrophysics*

4. Distribution of Solar Flare and their Association with Coronal Mass Ejection in Case of with and without Type II Radio Bursts

Beena Bhatt, **Lalan Prasad**, and Suman Gariya, 2014, Submitted to *Indian Journal of Radio & Space Physics*

## **2013(6)**

1. To Study of the Association of Halo Coronal Mass Ejections and Geomagnetic Storms during 2000-2005, **Lalan Prasad**, Suman Garia and Beena Bhatt 2013 In the *International Journal of Physics and Astronomy London(UK)*, ISSN:2051-6851, **Vol. 26**, Issue. 2 PP 1122-1128.

**Impact Factor - 2.119**

2. Study of North-South Distribution of Soft X-Ray Solar Flares in Association with Coronal Mass Ejections during the Period 2005 to 2010, **Lalan Prasad** and Beena Bhatt, 2013 **Vol. 1. No.1**, pp. 36-43, 2013, ISSN: 2321-9742, *Journal of Advances in Physical Sciences Research* (2013).

**Impact Factor – 2.228**

3. Association between Geomagnetic Storms and Forbush Decreases, **Lalan Prasad**, Suman Garia and Beena Bhatt, 2013, *International Journal of Physics and Applications*, ISSN 0974-3103 **Vol. 5, Number 2**, (2013) PP 77-81. <http://www.irphouse.com>

**Impact Factor – 2.32**

4. Theoretical Estimation of Energy During Magnetic Reconnection in Current Sheet

**Lalan Prasad**, Suman Garia and Beena Bhatt, 2013, *J. Pure Appl. & Ind. Phys.* **Vol. 3 (4)**, 273-281 (2013). **Impact Factor – 0.766**

5. “Importance of Power Law and Hydrodynamical Approach of Nanoflare Heating”

**Lalan Prasad**, SumanGaria, Beena Bhatt and Vinod Pandey; 2013, *Advance in Applied Mathematics and Computational Physics*, India, ISBN 978-81909873-7-0: P104-112.

**Impact Factor – 0.43**

## **2012(02)**

1. Importance of Power Law and Hydrodynamical Approach of Nanoflare Heating

**Lalan Prasad**, SumanGaria, Beena Bhatt and Vinod Pandey

In the proceeding of Advanced in Applied Mathematics and Computational Physics (2012)

Published by ***World Education Publisher ISBN 978-81-909873-7-0 Published in 2013,***

**Delhi, India.**

**Impact Factor –0.0**

2. Nanoflares Heating of Solar Corona by Reconnection Model

Vinod Kumar Joshi and **Lalan Prasad**, 2012 *Romanian Astronomical Journal* Vo. 22,

No. P 1, P 13-21, Buchrest, **Romanian.ISSN(Print)1220-5168**

**Impact Factor – 2.4**

## **2011(1)**

1. Nanoflare Heating of Solar Corona by Reconnection Model, V.K. Joshi and **Lalan**

**Prasad**2011 *Space Science &Subtance*, **Ukrain.**

**Impact Factor – 1.6**

## **2010(1)**

1. **Oblique Propagation and Dissipation of Alfven Waves in Coronal Holes-reinvestigated**

Suresh Chandra and **Lalan Prasad** 2010, *Romanian Astronomical Journal* Vol20, 45-48.

ISSN(Print) 1220-5168

**Impact Factor – 2.4**

## **2009(4)**

1. Study of Solar Coronal Heating by Nano-flares

**Lalan Prasad**, VKJoshi and MK Pandey, 2009, *ActaCienciaIndica* Vol. XXXV P No. 2, 113.

ISSN: 0973-9424.

**Impact Factor – 0.1752**

2. On the conversion of Phase-mixed Alfven wave energy into thermal energy

**Lalan Prasad**, Manish Kumar Pandey and Sandeep Kumar, 2009,

*Asian Journal of Physics, India, ISSN: 0971-3093 ,18,No.1, 73-78.*

**Impact Factor – 1.2**

3. Power law and hydrodynamical approach of nanoflare heating

**Lalan Prasad** and VK Joshi, 2009, *Asian Journal of Physics, India,ISSN: 0971-3093 18,*

**No.1, 79-88.**

**Impact Factor – 1.2**

4. On the conversion of phase-mixed Alfvén waves energy into thermal energy

**Lalan Prasad**, Manish Kumar Pandey and Sandeep Kumar 2009, *Asian Journal*

*of physics*, India ISSN: 0971-3093 Vol. 18, No. 1, 73-78.

Impact Factor – 1.2

## **2008(2)**

1. Power law nanoflare heating

**Lalan Prasad** and V.K. Joshi, 2008, *Journal of Astron. Astrophys Proceeding* Edited by SS Hasan and RJ Rutten, Magnetic Coupling between the Interior and Atmosphere of the Sun, Springer-Verlag **Berlin Heidelberg** 452-453.

Impact Factor – 1.8

2. Power law and Hydrodynamical approach of Nanoflare Heating

**Lalan Prasad** and V.K. Joshi, 2008, *Asian Journal of Physics*

## **2007(4)**

3. Nanoflares is a possible coronal Heating agent

**Lalan Prasad**, Vinod Joshi and Manish Pandey, 2007, *J.ACI. Meerut*, India (submitted).

2. Dynamics of Phase-mixing in Force-free state

**Lalan Prasad**, M.K. Pandey and V.K. Joshi, 2007, *International Journal of Physical Sciences (IJPS)* (submitted).

3. Comment on 'Oblique Propagation and Dissipation of Alfvén Waves in Coronal Holes' by Srivastava and Dwivedi, Suresh Chandra and **Lalan Prasad** 2007, *J. Astrophys. Astr*

4. Nanoflares Heating of Solar Corona by Reconnection Model

**Lalan Prasad**, M.K. Pandey and V.K. Joshi, 2007, *IHY Proceeding in The Indian Journal of Radio Physics* 2007.

## **2005(2)**

1. The Sun

**Lalan Prasad**, N.K. Lohani and Sandeep Kumar: 2005, *Philosophy and Social Action (PAS) Philosophy, Science and Society Journal* 1, pp 31, 2005, Dehradun, India.

2. Coronal heating efficiency for resonant (A.C.) and non- resonant (D.C.) mechanisms

Suresh Chandra, Pramod G. Musrif and **Lalan Prasad**, 2005, *Bull. Astron. Soc. India* 33, 275.

Impact Factor – 1.40

## **2004(2)**

1. Heating of solar coronal loops by Phase-mixing

N.K. Lohani and **Lalan Prasad**: 2004, *J. Spacetime and Substance*, **Ukraine** 5, No. 2(22), pp 1-57. ISSN 1726-4499

Impact Factor – 1.25

2. Stars are not of the same type

**Lalan Prasad** 2004 in *Smarica published by Need Computer Education*, **Haldwani** 2, pp 25-

26.

### **2003(1)**

1. Boundary condition problem in contrasted to generating function method as to interpret solar activity

**Lalan Prasad** and N.K. Lohani, :*NBU (Sc. and Tech.) Siliguri*, India Review 2, 2003.

### **2001(2)**

1. Dynamical properties of flare loops on 27th Nov. 1996

Wahab Uddin and **Lalan Prasad**, 2001, *Bull. Astron. Soc.India*, 29, 241 - 243. ISSN: 0304-9523

**Impact Factor – 0.567**

2. On coronal loop heating by torsional Alfvén waves

U. Narain, P. Agrawal, R.K. Sharma, **Lalan Prasad**, B.N.Dwivedi, 2001, *Solar Phys. Netherlands*, 199, 307 - 315.

**Impact Factor – 1.875**

### **1995(2)**

1. Einstein A-coefficients for rotational transitions in  $\text{HN}_2\text{O}^+$

Suresh Chandra, **Lalan Prasad** A.K. Sharma, 1995, *Bull. Astron. Soc.India* 23, 452. ISSN: 0304-9523

**Impact Factor – 1.40**

2. Magnetohydrostatic equilibrium in solar coronal loops.

Suresh Chandra and **Lalan Prasad**, 1995, *Bull. Astron. Soc.India*, 23, 425. ISSN: 0304-9523

**Impact Factor – 1.40**

### **1994(3)**

1. Solar magnetic fields and solar activities **Lalan Prasad** published in the abstract of Young Scientist Award of 81st session - 1994 of *Indian Science Congress* held At Rajasthan Univ., Jaipur.

2. Magnetohydrostatic equilibrium in solar coronal arcades

Suresh Chandra and **Lalan Prasad**, 1994 *Bull. Astron. Soc.India* 22, 149. **Impact Factor – 1.40**

4. Energy equilibrium in the coronal magnetic loops - investigated

Suresh Chandra and **Lalan Prasad**, 1994, *Astrophys. Space Sci.Netherlands* 222, 9 -38.

**Impact Factor – 0.31**

### **1993(3)**

1. Force-free magnetic field may have a loss of equilibrium

Suresh Chandra and **Lalan Prasad** 1993, *Solar Phys.* (lett.) *Netherlands* 145, 201 - 204. **Impact Factor – 3.256**

2. A new expression for cylindrically symmetric magnetic fields in a coronal loop.

Suresh Chandra and **Lalan Prasad**, 1993, *Astrophys. Space Sci.Netherlands* 204, 263-281. **Impact Factor – 3.02**

3. Energy equilibrium in coronal magnetic loops

Suresh Chandra and **Lalan Prasad**, 1993, *Astrophys. Space. Sci.Netherlands* 207, 55-82. **Impact Factor – 2.10**

### **1992(3)**

1. Spatial profile of lines in steady-state coronal loops  
Suresh Chandra and **Lalan Prasad** 1992, *J. Quant. Spectrosc. Radiative Transfer* **G.B.**,  
47,533-537. **Impact Factor – 1.487**
2. Reply to the comments from Vinod Krishan on our paper  
Suresh Chandra and **Lalan Prasad** 1992, *Astrophys. Space Sci.*  
**Netherlands** **193**,329 - 331. **Impact Factor – 0.325**
3. New approach for the inclusion of the effect of gravity in magnetohydrostatic equilibrium  
in solar coronal arcades,  
**Lalan Prasad** and Suresh Chandra, 1992, *Bull. Astron. Soc. India* **20**, 221 - 229.  
**Impact Factor – 1.40**

### **1991(1)**

5. Two-dimensional steady state pressure structure in a coronal loop.(a) Superposition of  
two Chandrasekhar - Kendall functions ( $n=0, m=0; n=1, m=0$ )  
Suresh Chandra and **Lalan Prasad** 1991, *Solar Phys. Netherlands* **134**, 99 - 107.  
**Impact Factor – 2.5**

### **Total paper Published 107 & Submitted 02**

## **WORKSHOPS, CONFERENCES AND SEMINARS ATTENDED**

### **2026**

1. As an subject expert in the UKPSC, Haridwar from 12-21 Jan 2026, wide  
letter No. Conf i= AGC388/27/LPCS/AGC(01)/2024-25 dated 30 Dec 2025.
2. A thesis of APS University Rewa M.P. in Physics of Vindhya Srivastawa, on the topic  
Study of Short term CRI variation during ascending phases of Sc 23 &24, evaluated in  
January 2026 and conducted PhD Viva on 09.04.2026.
3. Conducted MSc IV Sem Physics Practical examination at the centre Govt PG College,  
Berinag on 25.04.2026 through wide letter No. Conf/SSJU/SCI/P/April/2026/104 dated  
22.04.2026.
4. Subject Expert In UP Public Service Commission, Prayagraj from 01 to 09 May 2026  
with the letter No. 6/con-7/mu/pcs-25/2025-26 dated 18.04.2026

### **2025**

1. As an subject expert in the UKPSC, Haridwar from 5-6 Feb, 2025 wide  
letter No. 225@22@GPP(AG-2)/AGC/ 2024-25 dated 30 Jan 2025.
2. Participated in the RTI workshop organized by Directorate HE at MB  
GOVT PG College, Haldwani on dated 07.02.2025.
3. Presented a paper in the two days (14-15 Feb 2025) International Seminar  
ICSSR Sponsord on “ Understanding sustainable Homestay tourism as a  
driving factor of tourist’s satisfaction through structural equation modelling  
under vision Viksit Bharat@2047” on Defference between Homestay and

Hotel with their importance in reference to Uttarakhand. Certificate S.No. 296.

4. Participated in the two days 1-2 March 2025 in the National Workshop on National Scheme for Institutional Leadership Programme in Higher Education organized by Vidya Bharti at Doon University, Dehradun.
5. As an subject expert in the UKPSC, Haridwar from 1-4 April, 2025 wide letter No. 297/33/PLPM(AG-2)/AGC/2024-25 dated 20 March 2025.
6. Participated in the leadership Program to be held at IIM Kashipur organized by Dept of Higher Education Govt of Uttarakhand from 14 to 18 April 2025.
7. As an subject expert in the UKPSC, Haridwar on 14 May, 2025 wide letter No. 22/36/ZUPP(01)/AGC/2025-26 dated 01 May 2025.
8. As an external examiner for physics practical examination of BSc VI Semester conducted on 06.06.2025 at the center Govt PG College Dwarahat, through wide letter number Con/SSJU/SCI/P/May/2025/149 dated 07.05.2025 by the controller of examination SSJU.
9. As an subject expert in the UKPSC, Haridwar on 13 to 17 October, 2025 wide letter No. 270/43/YIPP/AGC(01)/2025-26 dated 09 October 2025.
10. BSc VI Semester Physics Practical examination at the centre Govt PG College Dwarahat on 06.06.2025 vide letter No. Conf/SSJ/SCI/May/2025/149 dated 07.05.2025.

## **2024**

1. Visited as a subject expert from 08 to 15 January 2024 to UKPSC, Haridwar.
2. Participated in the DEVBHUMI UDYAMITA YOJNA organized by Department of Higher Education Govt of Uttarakhand Sensitization Workshop implemented by Entrepreneurship Development Institute of India, Ahmadabad on 24 January 2024 at Doon University Campus, Dehradun.
3. Conducted MSc II year Physics Practical of UOU examination at the centre M.B. Govt PG College, Haldwani on 27.01.2024.
4. Appointed as a subject expert in UKPSC Haridwar from 19 to 23 Feb, 2024.
5. NAAC Meeting of GDC Jainti Almora on 06-07 March 2024, appointed as a Director Nominee by letter No. 7140/Degree Seva-vividh/2023-24 dated 04 March 2024.
6. I was **key note speaker** in the 1<sup>st</sup> International conference organized by MIET Kumaon, Shiksha Nagar Haldwani on dated 11<sup>th</sup> March 2024 on the topic Study of geomagnetic storms with respect to solar activity and interplanetary parameters
7. Subject Expert In UKPSC, Haridwar from 12 to 15 March 2024

8. PhD Viva-voce examination of my Student Mr Chandrasekhar Bhoj in the Department of Physics, Kumaun University, Nainital on dated 16.03.2024 by Prof B.P. Singh CCS University, Meerut as an external examiner.
9. SSJ university Almora as affiliation member for the college Govt PG College, Ranikhet on dated 13.05.2024.
10. Presented paper as a flash on 20.05.2024 at 8.50 to 9 pm in the international e-conference, Spectrum of Physics particle to universe from 20-22 May 2024 by Lajpat Rai College, Ghaziabad, India.
11. Subject Expert In UKPSC, Haridwar from 28 to 29 May 2024 wide letter No. 09/Conf-3/2024 dated 22 May 2024.
12. Subject Expert In UKPSC, Haridwar from 05 July 2024 wide letter No. 249404/17(5)/G-3/AGC/2024-25/ dated 03 July 2024.
13. I got International recognition by Asia Pacific through Refacimento International Asia Pacific Who's Who Vol XXX Page No. 444 on dated 27.07.2024
14. Subject Expert Physics in UKPSC on 9 August 2024, by letter No Confidential letter No.: 27/04/EO(Sewa)/AGC/2024-25 dated 06 August, 2024.
15. Subject Expert Physics in UKPSC from 27 to 30 August 2024 by letter 40/30/AGC(02)/2024-25 dated 20 August 2024.
16. Subject Expert Physics in UKPSC from 14 to 16 October 2024 by letter 90/12/AGC(02)/2024-25 dated 01 October 2024.

## **2023**

1. On 02 December 2023 conducted SRF interview in the Department of Physics, SSJ University, Almora, Uttarakhand, 7 students applied for it and one Dr Chandani Mathpal selected for the post of SRF.
2. External Observer for the CTET CBT examination at the centre Universal Digital Zone, Kishanpur, Haldwani on 20,23,24 and 25 January 2023.
3. Actively participated in NPS training and Mission Karm Yogi iGOT training cum workshop at ATI Nainital on 08.02.2023
4. Subject expert in the UKPSC G-3, from 6 and 7 Feb 2023.
5. Subject Expert in the UKPSC G-3 from 16 and 17 February, 2023.
6. Chief Guest in Parul University Conclave under New Education Policy 2020 on dated 25.02.2023
7. Delivered **Invited talk** on Digital India in Gadarpur Degree College under G-20 on 11.03.2023.
8. PhD Viva conducted of my student Chandani Mathpal on 23.03.23 at Kumaun University as an internal examiner.
9. Conducted MSc III sem Physics Practical Exam at the centre GPGC Khatima on 05.04.2023.

10. PhD Viva conducted of my student Meena Pokhariya on 06.04.23 at Kumaun University as an internal examiner.
11. Conducted BSc I sem Physics Practical Exam at the centre GPGC Lohaghat on 08.04.2023.
12. CUET Observer on 08 and 11 June 2023.
13. UGC NET 2023 entrance examination Observer from 13 to 21 June 2023
14. MSc First Semester conducted Physics Practical as an External Examiner at the centre Bareilly College, Bareilly on 22 June 2023.
15. As a subject expert for confidential work in the UKPSC on 26 June 2023.

## **2022**

1. Subject Expert in the Uttarakhand Public Service Commission, Gurukul Kangari, Haridwar from 16 to 18 Feb 2022.
2. Participated in the one day State workshop of Principal's Degree College at MB PG College Haldwani organised by Department of Higher Education in February 2022.
3. One day workshop in the Directorate of Higher Education for rules and regulation with responsibility.
4. In IGNOU Academic Counselor with code AAYPP7662D appointed by Regional Centre Dehradun for the study centre 2711 for the session 2022-23 received on dated 27.04.2022.
4. Subject Expert in the Uttarakhand Public Service Commission (UKPSC), Gurukul Kangari, Haridwar from 09 to 10 May 2022.
5. Conducted Physics Practical Examination of M.Sc. III Semester on dated 11 May 2022 as an External Examiner in Sridev Suman University Campus Rishikesh.
6. Conducted Physics Practical Examination of M.Sc. III Semester on dated 11 June 2022 as an External Examiner in Govt PG College Someshwar of SSJ University.
7. Conducted Physics Practical Examination of M.Sc. III Semester on dated 10 June 2022 as an External Examiner in Govt PG College Khatima of Kumaun University.
8. Subject Expert in the Uttarakhand Public Service Commission, Gurukul Kangari, Haridwar for confidential work from 22 to 24 June 2022.
9. I got opportunity as an EC member of SSJ University by letter No. SSJU/Sa.Anu./2022-23/127 dated 12.07.2022, participated in the Meet on 14.07.2022 at Kasar Jungal Resorts Almora.
10. Subject Expert in the Uttarakhand Public Service Commission, Gurukul Kangari, Haridwar for confidential work from 27 to 29 July 2022.

11. Observer for the conduction of CBT examination of UGC- NET Dec 2021 & June 2022 Merged cycle Phase-III on dated 10, 11 and 12 October 2022 at the centre Radha Krishna Assessment centre UK02601, Haldwani.
12. Conducted Physics Practical Examination and evaluated Project Report of M.Sc. IV Semester on dated 14 October 2022 as an External Examiner in Govt PG College Khatima of Kumaun University.
13. Conducted Physics Practical Examination and evaluated project report of M.Sc. IV Semester on dated 15 October 2022 as an External Examiner in Govt PG College Rudrapur of Kumaun University.
14. Subject Expert in the Uttarakhand Public Service Commission, Gurukul Kangari, Haridwar for confidential work from 20 to 21 October 2022.
15. Participated as Principal in the NAAC Chintan Shivir held at DIET, Dehradun from 7 to 8 Dec 2022.
16. Subject Expert under CAS in the Directorate of Higher Education, Govt of Uttarakhand Haldwani from 13 and 14 Dec 2022.

## **2021**

1. Organised Webinar as Chairperson on "Science for Society" on 26 Feb 2021 with eminent speaker Dr Neha Bhatnagar, Dept of Physics, Auro University, Surat, Gujrat on the occasion of National Science Day.
2. **Key Note speaker** in one day National Webinar on the topic "Science and Mathematics to Society", Organized by Dept. of Physics, Govt Arts, Science and Commerce College, Nagda, MP on March 1, 2021.
3. **Cheif Speaker** in the webinar on "An Introduction to Astrophysics" 02 March 2021 organized by Govt PG College, Karanprayag, Uttarakhand.
4. Organised one day National Webinar on 06. March 2021 as **Chairperson on the topic** "Is it the Higgs or a Higgs" by the expert Dr Ambalika Biswas, Dept of Physics, Calcutta University.
5. Speaker in the Virtual-International Conference on the topic "Emerging trends in Science and Technology" organised by Dept of Applied Science NRI Institute of Research and Technology Bhopal from 2nd to 4th April, 2021.
6. Received NASA boarding pass for future Mars Mission scheduled upto July 2026, M@M546174041821.
7. Organised Webinar as **Chairperson** on "Our Dynamic Sun - Solar energetic events and space weather impacts" By Dr Abha Monga, SRF, ARIES Nainital on 09 April 2021 as the part of online video lecture series.

## **2020**

1. Actively participated in the two days GEM workshop wide letter No. 366/76(RUSA)/2019-2020 by State Coordinator Shri V. Raja during 10-11 Jan 2020 at MB Govt. PG College Haldwani.
2. Participated in the Webinar on "After Effect of COVID 19" organised by USERC, Dehradun on April 19, 2020
3. Actively participated in the webinar on the topic "Introduction of Solar Energy and its Research Prospects on May 11, 2020 organised by Dept of Physics, Dr. Bhim Rao Ambedkar University, Agra.

4. Actively participated in the webinar on the topic **Management - Challenges and Chances** organized by **Sri Gayathri College of Education, Salem** on 03-06-2020
5. Actively participated in the **National Level Webinar on Teacher and Cognition** organized by **Sri Gayathri College of Education, Salem** on 04-06-2020
6. Actively participated in the webinar on the topic **Challenges in higher education due to COVID19** on 07-08 Jun 2020 organised by Janta Vaidic College, Baraut Uttarpradesh.
7. Actively participated in the webinar on the topic **on Online Tools for Teachers and Teaching** organized by **Sri Gayathri College of Education, Salem** on 09-06-2020
8. Actively participated in the webinar on the topic The Wondrous World of Nanomaterials organised by Dept. of Physics, Dr Bhim Rao Ambedkar University, Agra, on 23rd May 2020.
9. Actively participated in the webinar on the topic *E-learning tools for 21st century learners*” organized by School of Education, Uttarakhand Open University, Haldwani on 6 and 7 June’ 2020.
10. Actively participated in the webinar on the topic **ADVANCES IN BIODIVERSITY AGRICULTURE AND BIOTECHNOLOGY** organized on June 5<sup>th</sup> 2020. organized by MIET, Haldwani Nainital Uttarakhand.
11. Actively participated in one day webinar on the topic **Virtual Lab** organized by F.E.T. and M.J.P. Ruhelkhand University Bareilly U.P. on June 6<sup>th</sup> 2020.
12. Actively participated in the two days International webinar on the topic **COVID19 Policy Measure for preventing current and future fall out** held on 2 & 3 June 2020, organized by SBS Govt. P.G. College, Rudrapur, US Nagarl Uttarakhand.
13. Actively participated in nine days webinar on the topic **Performing and Desining Experiments on Virtual Lab Plate form** organized by I.I.T. Roorkee and M.J.P. Ruhelkhand University Bareilly U.P. from June 08 to 17, 2020.
14. Actively participated in the International E-Conference on "Recent Advances in Physics: A Promise to Society organised by Govt PG College, Bajpur on 24-25 June 2020.
14. Delivered Invited Talk in The SAGE SIRTE group od Institutions Bhopal in the International Webinar on Recent Trends in Science and Technology from 13-13 July 2020.

## **2019**

1. Invited by Uttarakhand Public Service Commission, Gurukul Kangari, Haridwar on dated 14.01.2019 for the work of review of the competitive Physics questions.
2. NAAC meet of second cycle successfully completed in between 26 -27 Feb 2019 under my incharge principalship and college secure Grade B.
3. Appointed as NTA Representative for the conduction of NEET(UG) on 05.05.2019 wide letter No N14/NTA/OBS/APPT/NEET-2019 dated 24.04.2019 at Haldwani.
4. Participated in the two days Internal Conference on “Relevance of Mahatma Gandhi in Present Global Prospective” organized by Dept. of Bed, Govt. PG College, Pithoragarh, Uttarakhand on dated November 17 and 18, 2019. Chair second session and delivered on Academic thoughts of Gandhi as well as the advisory board member of this conference.
5. Delivered an **Invited Talk** on Implementation of Advance Technology in Higher Education in the one day National Conference on the topic “Leveraging New Technology for Reimagining

Education on November 22, 2019 at MIET Shiksha Nagar Haldwani, Nainital as well as the advisory board member of this conference.

6. Observer to conduct the UGC NET examination 2019 wide letter No. NTA/EXAM/OB/APPT/UGC-NET/2019 from 2 to 6 Dec 2019 at MIET, Shiksha Nagar Haldwani under Ministry of HRD Govt. of India.

7. As an Observer conducted the CBT examination of CSIR UGC Net on 15 Dec 2019 at the center Queens Public School, Damuadunga, Haldwani vide letter No. NTA/EXAM/OB/APPT/UGC-NET/2019.

### **2018**

1. JEE Main Entrance examination observer No. F 18/JEE/CBSE/EXAM/ OBS.2018/ E181964 /336 on 8th April 2018 at the centre Haldwani

2. NEET Entrance Examination Observer No.122.160.166.209.90/183186 at Bareilly UP on 06.05.2018

### **2017**

1. Transferred from M.B. Govt. P.G. College Haldwani Nainital on 13 July 2017 to Govt. P.G. College, Berinag, Pithoragarh, Uttarakhand.

2. Observer in UGC NET examination on 5th November 2017 at Srinagar Garhwal, Uttarakhand.

3. Invited by Uttakhand Public Service commission for highly confidential work for two days 16 and 17 November 2017.

4. Participated in the Principals/Vces/Education minister meet as principal representative on 20-21 Nov. 2017.

### **2016**

1. Conducted Physics Practical Examination for the Diploma in Panch-karma of UOU, Haldwani on dated 11.01.2016.

2. Organised 10 days Research Orientation Workshop during 20 to 30 Jan 2016 as an **Organising Secretary** for Pre Ph.D. students.

3. Conducted CTET examination held on 21st Feb. 2016 apt. by CBSE No. F-10/CBSE/CTET/EXAM/OBS.Feb-2016/F16740012/074 for the centre Bareilly Bishop Conard Sr. Sec Sch. as an **External Observer**.

4. Appointed as **Nodal Officer** from Subordinate Service Selection Commission Uttarakhand Dehradun held on 06th March 2016.

5. Presented a paper in the National seminar sponsord by UGC from 05 - 06 March 2016 on Women Empowerment Through Energy Accessibility Opportunities and Challenges to held at PNG Govt P.G. College Ramnagar, Uttarakhand

6. Member of Organising Committee of National Seminar on Indian Culture and Challenges organised by Dept. of His. M.B. Govt. PG College Hld on 28-29 March 2016.

7. Organised ONE Day National Workshop on 4<sup>th</sup> April 2016 entitled Building Awareness on IPR in Higher Education in the college premises as an **Organising Secretary**.
8. Actively participated in the **08** weeks training programme organized by **ISRO IIRS** Dehradun for ERDAS, GIS, SQL etc from 2<sup>nd</sup> May to 24<sup>th</sup> Jun 2016.
9. Conducted UGC NET examination held on 10<sup>th</sup> July 2016 apt. by CBSE No. F-30/UGC-NET/MISC/2016 for the centre Lucknow Collegiate Lucknow Gomtinagar as an **External Observer**.
10. Conducted Workshop on Technology Enabled Education on 26 July 2016 sponsored by UOU Haldwani & USERC Dehradun held at M.B. Govt. P.G. College, Haldwani worked as an **Coordinator**.
11. Conducted CTET examination held on 18<sup>th</sup> September 2016 apt. by CBSE No. F-10/CBSE/CTET/EXAM/OBS.SEPT-2016/S16073029/073 for the centre Dehradun CBSE at SGRR as an **External Observer**.
12. Worked as a coordinator in the Workshop on low Cost Experiments & Hands on Training in Physics on 19-20 September 2016 held at Gurukul Kangri Vishwavidyalaya, Haridwar, Uttarakhand.

## **2015**

1. Appointed as an external examiner to conduct the Physics Practical of B.Sc. III on 19 Feb 2015 at Bareilly College Bareilly.
1. Appointed as an observer by CBSE New Delhi No. F-16/CBSE/AIPMT /OBSVR/ 2015/151356/546 dated 10.04.2015 to conduct the AIPMT Examination at the centre Dehradun on 3<sup>rd</sup> May 2015.
2. Appointed as **Subject expert** by Directorate HE and Registrar KU letter No. 746/2015-16 dated 24.04.2015 for the New PG establishment in Govt. Girls PG College, Haldwani scheduled on 10.05.2015.
3. As a **subject expert** in the Anveshna - 2015 on dated 16th May 2015 at Aryaman Vikram Birla Institute of Learning.
3. Participated in the BOS meeting held on 01.06.2015 from 10 am till evening in the Dept. of Physics, SSJ Campus Almorah.
3. Appointed as an **observer** by CBSE New Delhi No. F-No. CBSEUGC(NET)/OBSVR/2015/J151150/78 dated 05.06.2015 to conduct the UGC Examination at the centre Wood Row Sr. Sec Sc. Bareilly on 28<sup>th</sup> June 2015.
4. Appointed as an **observer** for the selection of Asst., Asso. and professors in the Uttarakhand Aarved University Harawala Dehradun on 13th August 2015.

6. Resource person in the NAAC Sponsored National Seminar topic of **my Invited talk** Academic Prospective of IQAC to be held at SGRR PG College Dehradun on 9-10 October 2015.
5. Appointed as an **observer** by CBSE New Delhi No. F-No. CBSEUGC(NET)/ OBSVR/2015 /D151389/78 dated 30.11.2015 to conduct the UGC Examination at the centre Bishop Conrad Sr. Sec Sc. Bareilly on 27th Dec 2015.
6. Appointed as an **observer** by CBSE New Delhi No. F-16/CBSE/AIPMT/ OBSVR/ 2015 /151356 /508/0068-1599 dated 10.04.2015 to conduct the AIPMT Examination at the centre Kulachi Hansraj Model School Ashok Vihar Delhi 110052 on 25<sup>th</sup> July 2015.
7. Conducted CTET examination held on 20<sup>th</sup> September 2015 apt. by CBSE No. F-10/CBSE/CTET / EXAM/OBS.SEPT-2015/S151276/066 for the centre Bishop Conrad Sr. Sec. Sc. as an **External Observer**.
8. In the **organising committee** of two days national seminar " Problem and Prospect of Higher Education In Himalaya Region" on dated 22-23rd Nov. 2015 held at MB Govt. PG college, Haldwani sponsord by ICSSR, New Delhi & UCOST.

## **2014**

1. Organised Twenty One Days Research Orientation Workshop (ROW) for Pre Ph.D. Scholars from 28.01.2014 to 17.02.2014 as **COURSE CONVENOR** at M.B. Govt. P.G. College, **Haldwani**, Nainital.
2. Presented a paper titled "Emerging Technologies of New Era in Health Sciences, EduSat, Telemedicine & Onconet (CP-71)" in National Conference on Convergence between Distance and Conventional Education from 22<sup>nd</sup> – 23<sup>rd</sup> Feb. 2014 at SBS Govt. P.G. College, **Rudrapur**.
3. Participated in the National workshop on " Recent Trends in Atmospheric and Environmental Sciences" on 4-5th April 2014 held at Gurukul Kangri Vishwavidyala, **Haridwar**.
4. Conducted M.Sc. Final Physics Practical Examination at Jagdish Saran Hindu PG College, **Amroha**, Ruhelkhand University on 13 & 14 May 2014.
5. Participated in the National Programme on Technology Enhanced Learning Organised by IIT Madras at Amarpali Institute of Technology, **Haldwani** from 21<sup>st</sup> to 23<sup>rd</sup> Aug. 2014.
6. Deliver and discuss about the REGULATORY MECHANISMS IN HIGHER EDUCATION in the National Seminar organized by AkhilBhartiyaRastriyaShaikshikMahasangh from 13 – 14<sup>th</sup> Sept, 2014 at Rajasthan University **Jaipur**.
7. Conducted M.Sc. IV Semester Physics Practical Examination as an External Examiner appointed by Kumaun University, Nainital on 24<sup>th</sup> Sept. 2014 at the centre Govt. P.G. College, **Ranikhet**.

8. Presented a paper titled “Role of e-learning in the quality improvement of higher education” in **International Conference at Kashipur** Govt. P.G. College and in souvenir page No.85.
9. **Eminent Resource Person** in the Science Conclave on Renaissance of Science in Uttarakhand on 30<sup>th</sup> July 2014 Organised by School of Science, Uttarakhand Open University, Haldwani, Nainital (Certificate attached)

## **2013**

1. Participated in the one day workshop on “Space Technology and its applications” organized by Dr. I.S. Rathor, Director & Project coordinator, IIRMR, **Jaipur** on 19-01-2013 in M.B. Govt. P.G. College, **Haldwani**.
2. \*Delivered an invited talk in the national seminar organized by government modern college **Rewa, M.P.** 9<sup>th</sup> -10<sup>th</sup> February 2013 on the topic entitled “ study of north-south distribution of soft X-ray solar flare in association with coronal mass ejection during the period 2005 to 2010”.
3. Participated in the National Rover-Ranger X Samagam, held at Guru Ram Rai P.G. College, **Dehradun** from 28 Nov. to 1 Dec. 2013 and got Championship.
4. \*Delivered an **invited talk** in the National Seminar organized by Govt. P.G. College, **Kortdwar**, Uttarakhand on 23-24 Dec. 2013 on the topic entitled “ Role of Information and Communication Technology in Socioeconomic and Educational Development.

## **2012**

1. \*Delivered **Invited Talk** in the National Conference on Dispersion Relation in respect of Magnetic Reconnection in Steady-State in SBS Govt. P.G. College, **Rudrapur** from 3<sup>rd</sup> - 4<sup>th</sup> Jan. 2012. I was also in his National Advisory Committee.
2. \*Delivered a **contributory talk** in the National Conference On Applied Mathematics and Computational Physics (NCAMCP-2012) organized by Dept. of Mathematics and Physics, Hindu College, **Moradabad** U.P. from Feb. 25-26, 2012 on the topic entitled “ Importance of Power Law and Hydrodynamical Approach of Nanoflare Heating.
3. Delivered two lectures under EduSat Programme, in Doon University, **Dehradun** on 4-5, October 2012.
4. \*Delivered an **invited talk** in the NAAC sponsored state level two day seminar on PROMOTION OF QUALITY CULTURE THROUGH INTERNAL QUALITY ASSURANCE CELLS organized by Government Girls Degree College, **Haldwani** on 18<sup>th</sup> -19<sup>th</sup> July, 2012 on the topic entitled “ The active and passive part of IQAC in higher education”.

5. Organised National Conference on “Recent Trends in Interdisciplinary Research and Astrophysics Space Science” (NCRTIRASS) , in M.B. Govt. P.G. College, **Haldwani** on 3<sup>rd</sup> – 4<sup>th</sup> Nov. 2012 as **Organizing Secretary**.

## **2011**

1. Organised Chintan Divash on 22 Feb. 2011 in the memory of Lord & Lady Veden Pawel for Scout and Guide, in M.B. Govt. P.G. College, **Haldwani**, Nainital.
2. \*Participated as Nodal Officer and Subject expert in the “Content Generating Training Programme for Resource Persons” organized by Uttarakhand Space Application Centre, **Dehradun** from 25<sup>th</sup> to 29<sup>th</sup> July, 2011.
3. Participated in the one day workshop organized by Uttarakhand Space Application Centre and ISRO, Bangalore on 30<sup>th</sup> July, 2011 at **Dehradun**.
4. \*Delivered an invited talk on “Dynamics of phase-mixing in force-free state” in the National Seminar “Macro and Micro Physics” as Resource Person. Govt. P.G. College, **Gopeshwar, Chamoli**, Uttarakhand from 12<sup>th</sup> to 13<sup>th</sup> October 2011. I was also in his National Advisory Committee.
5. Participated in the workshop on "Advances in Physics & Role of Experiments in Physics Teaching on 05 Nov. 2011 organised by Dept. of Physics Gurukul Kangri Univ Haridwar.
6. Presented a paper entitled “Role of Technology in Globalization” in the National Seminar, M.B. Govt. P.G. College, **Haldwani**, Nainital 7<sup>th</sup> Nov. 2011.
7. Participated in the workshop on Role of Low Cost Experiments in Physics Teaching at DAV Centenary Public School Jagjeetpur, Kankhal, Haridwar on 06 Nov. 2011.
8. Participated in the two days EDUSAT “Content Generation Training Programme for Nodal Officers” by USAC, in Doon University, **Dehradun** from 29 & 30<sup>th</sup> Dec, 2011.

## **2010**

1. Attended three days workshop of Red Ribbon Club USACS at M.B. Govt. P.G. College, **Haldwani** from 11 to 13 March 2010.
2. \*I worked as Expert Member in the Interview committee for the selection of Physics Lecturer in Surajmal Agarwal Private Kanya Mahavidyalaya **Kitchha, US Nagar** on March 28<sup>th</sup> 2010.
3. Attended and delivered a lecture on the topic “Conversion of Alfvén waves energy into Thermal Energy via Phase-mixing Process” in the conference Scientific & Technical Approach in Higher Education held at Govt. Degree College **Bilashpur U.P.** on 18<sup>th</sup> April 2010.
4. Attended annual workshop of N.S.S. Kumaun University **Nainital** at M.B.A Campus, Bimtal Nainital on 30 April 2010.

5. \*Deliver **invited talk** in the Govt. Autonomous P.G.Collage**Satna**(M.P) in the National Seminar sponsored by UGC, Bhopal, from 9<sup>th</sup> to 10<sup>th</sup> Oct 2010.
6. Organized 8<sup>th</sup>Uttarakhand State Rover-Ranger Samagam from 11<sup>th</sup> to 14<sup>th</sup> Nov. 2010 at M.B.Govt.P.G.College,**Haldwani**and got championship.
7. \***Invited talk** on the topic “Magnetic Reconnection in Steady State” in the seminar on “Current Dimentions of physics” organized by Deptt. of Physics of St.Joseph’s Collage for Women,Civil line **Gorakhpur** on 27 Nov 2010.
8. Attended Edusat training program for nodal officers at Uttarakhand Space Application Centre, DoonUniversity ,**Dehradun** from 30<sup>th</sup> Nov. to 1<sup>st</sup>Dec. 2010.
9. Attended a seminar on Juneralism& Dalit Chintan of Gandhi Ambedkar at the Centre of Dr.Ambedkar Study Centre, K.G.K.P.G.Collage, **Muradabad** on 6 December 2010.

## **2009**

1. Visited Indian Institute of Astrophysics (IIA) **Bangalor**from December 2<sup>nd</sup> to 5<sup>th</sup> 2009 to presented a paper in the International conference.
2. Visited ARIES, **Nainital** for using computing and library facilities from Jan 5<sup>th</sup> to 15<sup>th</sup> 2009.
3. Visited **Gorakhpur** University IRC Centre from March 14<sup>th</sup> to 28<sup>th</sup> 2009 for collaboration work with Prof. D.C. Srivastava.
4. Visited PRL **Ahmedabad** from September 17<sup>th</sup> to 30<sup>th</sup>, 2009 for the completion of earlier work.

## **2008**

1. Attended a Water Management workshop in G.B. **Pantnagar**University from 23 - 24 Jan, 2008.
2. Delivered 4 lectures in PremaJagati International School, BeerBhathi, **Nainital** as resource person in the workshop of Intermediate Teachers 2008.
3. Visited IUCAA, **PUNE** under ASSOCIATSHIP program from May 26th to June 27th, 2008.
4. Visited PRL **Ahmedabad** from October 3 to 10, 2008 for data and discussion.
5. Visited UGC, **New Delhi** for the midterm presentation from October 14<sup>th</sup> to 16<sup>th</sup> 2008.

## **2007**

1. Completed a Training Programme in Computer from Jan, 15 to 20, 2007 at Uttaranchal Administration Academy, **Nainital**, Uttaranchal.
2. Presented a paper entitled "A Theoretical Study of Coronal Heating by Phase-Mixing Process" in the International Conference on Challenges for Solar Cycle-24 from Jan. 22 to 25, 2007 at PRL, **Ahmedabad**.

3. Presented a paper in the International Heliospheric Year workshop on 23 Solar Cycle from May 7 to 10, 2007, organized by ARIES, **Nainital**, Uttarakhand.
4. Participated in the Refresher course from May 14 to June 15, 2007 held at IUCAA, **Pune** and deliver a talk on Solar Coronal Heating on 14.06.2007.\*\*\*

## **2006**

1. Visited IUCAA, **PUNE** under ASSOCIATSHIP program from June 02nd to June 28th, 2006.
2. Deliver an invited talk in the workshop on Physics from Atom to Galaxy theoretical and technical status on "Heating of Solar Corona" during October 9-11, 2006, HNB Garhwal Univ. **Srinagar**, Uttaranchal.
3. Attended National Workshop on Recent advances in Solar Physics, Nov. 7 to 9, 2006, Department of Astrophysics Group, Meerut College, **Meerut**, U.P.
4. Presented a paper entitled "Nanoflare Mechanisms of Solar Coronal Heating" during Nov. 10 to 11, 2006 in First Uttaranchal Science Congress, Organised by UCOST, **Dehradun**, Uttaranchal.

## **2005**

1. Attended and presented a paper entitled " Application of Science and Technology in higher Education" in the workshop by Science and Technology for development of Uttranchal dated 18 - 19, Feb, 2005 at **BHIMTAL**.
2. Attended Astronomical Society of India (ASI) 23rd meeting and international meeting on star clusters from Feb. 21 - 24, 2005 at ARIES **NAINITAL**
3. Participated and presented a paper A Study of Solar Coronal Heating in ACADEMICA first Uttranchal Govt. Colleges Conference from March 11-12, 2005 at M.B. Govt. P.G. College **HALDWANI**.
4. Presented a paper entitled " Nanoflare as a Plausibile coronal Heating Agents" in the International Solar Workshop on Transient Phenomenon of the Sun and interstellar Medium from April 5 - 7, 2005 at ARIES **NAINITAL**.
5. Attended Refresher Course in Astronomy and astrophysics held at IUCAA **PUNE** from May 16 to June 17, 2005. \*\*\*
6. Attended the workshop on "Observing Projects with Small Telescope" held at IUCAA, **PUNE** from August 29 - 31, 2005.

7. Presented a paper in the Indo - Chinese workshop on Recent advances in Solar Physics, hosted by the Indian Institute of Astrophysics **BANGALORE** India during Nov 7-11, 2005.

### **2004**

1. Visited IUCAA, **PUNE** under ASSOCIATSHIP program from June 1<sup>st</sup> to June 28th, 2004 and delivered a talk in Neem Seminar On 23rd June, 2004 on the Nanoflare is a Plausible Coronal Heating Agents.
2. Attended UGC and ICSSR New Delhi sponsored national seminar on Corruption in India: Origine Cause and Solution from Oct 1 - 2, 2004 at Devasanskriti University **HARIDWAR**.
3. Participated in the IUCAA sponsored workshop on Astrophysics for College Teachers and Research Scholars at Dept. of Physics, Kumaun University **NAINITAL** from Oct25 to 29, 2004.
4. Attended the 29th Training programme for installations and operations of SOUL software held at INFLIBNET from 29th Nov. to 03 Dec, 2004at **AHMEDABAD**.

### **2003**

1. Visited IUCAA, **PUNE** under ASSOCIATSHIP program from June 15<sup>th</sup> to July 3rd, 2003.
2. Participated in the First Uttarachanal Rover-Ranger Samagam from 17 to 20 Dec 2003, held at M.B. Govt.P.G. College, Haldwani, Nainital.

### **2002**

1. Visited State Observatory, Manorapeak **NAINITAL** from May 15 to 25, 2002.
2. Visited as an associate in the IUCAA **PUNE** from June 10 to 20, 2002.
3. Attended Orientation Course held at D.D.U. Gorakhpur University **GORAKHPUR** from July 31st to Aug. 27th, 2002. \*\*\*

### **2001**

1. Visit and collaboration with Dr. Wahab Uddin Astronomer, State Observatory, Manorapeak **NAINITAL** from May 18th to 26th, 2001.
2. As an Associate visit to IUCAA **PUNE** from 16th to 30th June, 2001,
3. Attended Refresher course in Physics held at SRTM University, **NANDED** from Oct 1 to 28, 2001. \*\*\*

## **2000**

1. Visited Inter University Centre For Astronomy and Astrophysics (IUCAA), **PUNE** from June 09 to July 01, 2000 as an Associate of IUCAA.
2. Visited as an Associate of Inter University Centre for Astronomy and Astrophysics (IUCAA), **PUNE** from Oct. 01 to 21, 2000. I was one of the Speaker in XVI meet of MAHAFIL, Organised by Prof. Narlikar on 18th Oct. 2000.
3. Presented a paper entitled DYNAMICAL PROPERTIES OF FLARE LOOPS ON 27TH NOV. 1996, in the XX meeting of Astronomical Society of India held at D.D.U, Gorakhpur University, **GORAKHPUR** during Nov. 15 - 18, 2000.
4. Attended the workshop on SOLAR PHYSICS organised by IUCAA, **PUNE** during Dec. 5 - 8, 2000.

## **1999-1991**

1. Twenty days visit and collaboration with Dr. Wahab Uddin, Astronomer at U.P. State Observatory, Manorapeak, **NAINITAL** from June 15 to July 04, 1999.
2. Participated and presented a paper entitled SOLAR ACTIVITIES IN LIGHT OF THEIR MAGNETIC FIELDS in 104 cm Sampurnanand Telescope Silver Jubilee Workshop on Astronomy with moderate size Optical Telescope at U.P. State Observatory, Manorapeak **NAINITAL** from April 07 to 09, 1997.
3. One month visit and collaboration with Dr. Wahab Uddin at U.P. State Observatory, Manprapeak, **NAINITAL** from May 26 to June 26, 1997.
4. Participated in the IAU Colloquim No. 154 on Solar and Interplanetary Transients held at National Center for Radio Astronomy (NCRA) TIFR, **PUNE** from Jan. 23 to 27, 1995.
5. Presented a paper entitled SOLAR MAGNETIC FIELD AND SOLAR ACTIVITIES in 81st. session of Indian Science Congress Association, under Young Scientists Programme held at Rajasthan Univ. **JAIPUR** from Jan. 03 to 04, 1994.
6. Presented a paper entitled MAGNETOHYDROSTATIC EQUILIBRIUM IN SOLAR CORONAL ARCADES in the XVI meeting of the Astronomical Society of India held at IUCAA, **PUNE** from Oct. 24 to 29, 1994.

7. Presented a paper entitled MAGNETOHYDROSTATIC EQUILIBRIUM A CASE STUDY in the 8th National Space Science Symposium held at Vikram Sarabhai Space Centre **TRIVENDRUM** from Dec. 20 to 24, 1994.
8. Presented a paper in the Astronomical Society of India held at Bhabha Atomic Research Center (BARC) **BOMBAY** from March 02 to 05, 1993.
9. Presented a paper entitled NEW APPROACH FOR THE INCLUSION OF THE EFFECT OF GRAVITY IN MHS EQUILIBRIUM IN SOLAR CORONAL ARCADES in the 6th Asia Pacific Regional International Meeting held at IUCAA, **PUNE** from Aug. 16 to 20, 1993.
10. Participated and presented a paper entitled MAGNETOHYDROSTATIC EQUILIBRIUM A CASE STUDY in Saha Birth Centenary International Symposium on Spectroscopy and Astrophysics held at Dept. of Physics, Univ. of **ALLAHABAD** from Oct. 04 to 06, 1993.
11. Attended the GMRT winter School on Solar Radio Astronomy and Interplanetary Medium in the Institute of Radio Physics and Electronics, Calcutta Univ. **CALCUTTA** from Jan. 10 to 18, 1992.
12. Presented a paper entitled FORCE FREE MAGNETIC FIELDS MAY HAVE A LOSS OF EQUILIBRIUM in the National Space Science Symposium (NSSS) held at Physical Research Laboratory (PRL) **AHMEDABAD** from March 11 to 14, 1992. On this paper we got second award through NSSS – 1992.
13. Participated in the International School for Young Astronomers held at (Beijing) **CHINA** from July 19 to Aug. 08, 1992.
14. Scientific visit to Inter University Centre for Astronomy and Astrophysics (IUCAA), **PUNE** from Dec. 24, 1990 to Jan. 14, 1991.
15. Presented a paper in the Indian Science Congress held at **INDORE** from 05 to 09 January, 1991.
16. Presented a paper in the Astronomical Society of India held at **AHMEDABAD**, PRL from Jan. 29 to Feb 02, 1991.
17. Presented a paper in the conference on Laser and spectroscopy in the Atomic and Molecular Physics held at **BODH-GAYA** from March 29 to 31, 1991.

18. Participated in the Training Programme in Astronomy and Astrophysics held at Advance Astronomy Dept. Osmania Univ. **HYDERABAD** from April 15 to May 11, 1991.

### **Scholarships, Fellowships and Awards**

1. Chancellor's **Gold Medal** in M.Sc. (1988) for topping the University in the Physics.
2. J.R.F. from U.P. State Council of Science and Technology, No.CST/SERPD/176 1990 **Lucknow**.
3. Senior Research Fellow from CSIR No. 3(711)/91-EMR-II, **New Delhi**.
4. Award on the paper entitled FORCE-FREE MAGNETIC FIELDS MAY HAVE A LOSS OF EQUILIBRIUM was awarded second prize for the Upper Atmospheric Science during the concluding session of the National Space Science Symposium (NSSS) 1992 at PRL, **Ahmedabad** on 14th March 1992.
5. I got Shri Purushottam Melkani Memorial Higher Education Teacher **Shikshak Bhushan** Award by Shaikshik Maha Sangh Unit of Uttarakhand on 04.09.2018 on the pre Occasion of Teacher's Day.
6. **Teacher of the Year Award 2020** received on the occasion of Teacher's day (05 Sept. 2020), ceremony was organized by MHRD, Chairman Commission for Scientific & Technical Terminology Govt. of India, UCOST Dehradun, Sri Dev Suman State University Uttarakhand, Uttarakhand Technical University Dehradun and Divya Himgiri & DHtv.
7. Received VD Good International Scientist Awards 2021 on Engineering, Science and Medicine, from Pondicherry, India.
8. On 27 November 2023 Principal Prof L.P. Verma is the recipient of **Dev Bumi Shiksha Utkristata Award** from Hon'ble CM Shri Pushkar Singh Dhami organised by Amar Ujala and MIET Haldwani.
9. Principal Prof L.P. Verma got International recognition by Asia Pacific through Refacimento International Asia Pacific Who's Who Vol XX Page No. 444 on dated 27.07.2024.
10. On dated 29.09.2024 Prof L.P. Verma received **Bharat Shiksha Gaurav Puraskar & Certificate of Excellence** for outstanding achievements and remarkable contribution in the field of education from KTK Foundation Regd. Under MCA (Section 8) (Govt of India) License Number 122990, New Delhi.
11. On dated 20<sup>th</sup> December 2024 Prof LP Verma got Certificate of Excellence as "Atmanirbhar Bharat Shiksha Ratan Award for Best Principal in Academic Administration – 2024" by Global Society for Health & Educational Growth at New Delhi.

12. **BEST INDIAN PERSONALITES AWARD 2025** in the field of educational excellence and outstanding contribution for the progress of the nation & worldwide from Friendship Forum, New Delhi. In March 2025.
13. Our student Hema Kharayat her paper is included in the home page of DST New Delhi as <https://dst.gov.in/astronomers-map-differential-rotation-suns-chromosphere-using-100-years-kodaikanal-data> available on it.
14. Vice-Precedent of IAPT under RC-5 for a period of 3 Years from 01.01.2025 to 31.12.2027.
15. Mother Teresa Global Award for Educational Excellence and outstanding Individual achievements 7 Distinguished Services to the Nation from Friendship Forum on 09.03.2026 by General Secretary Shri Ravnish Wahi, New Delhi.

### **Popular Articles**

1. Binary Star System, Suresh Chandra, **Lalan Prasad** and A.K. Sharma in **Physics Edu.**, Bangalore July - Sept. 1995.
2. SUN'S HOT CROWN, **Lalan Prasad**, Science Reporter, **CSIR, New Delhi-110 012**, April-2001, page 56 - 57.
3. Our Noble Lauriate Scientist Sir C.V. Raman **Lalan Prasad** and N.K. Lohani, Prabodhini College Magazine 2002- 04, Haldwani, Nainital, India.
4. STARS ARE NOT OF THE SAME TYPE **Lalan Prasad** Physics News, 2004, India.
5. Bio-terrorism, **Lalan Prasad** Prabodhini 2004, pp 66 - 68.
6. Solar Flare and their Effect, **Lalan Prasad** and V.K. Joshi, in *J of Physics Education*, 2008, **25, No.4 Oct-Dec 2008**, pages 267-275. ISSN 0970-5953
7. Effect of Solar Flare and Coronal Mass Ejection in our Earth **Lalan Prasad**, Beena Bhatt and Suman Gariya, 2014, *J of Physics Education Vol 30*, No.1, Article No. 2 in the issue Jan – March 2014 PP 1-8, ISSN 0970-5953.
8. "Dr DP Khandelwal - A Multifaceted Personality" by HD Bist and **Lalan Prasad Verma**, published in the Bulletin of Indian Association of Physics Teacher, A monthly Journal of Education in Physics & Related Areas, ISSN 2277 - 8950, Volume **13**, Number 4, April 2021, PP 112 - 118.

### **Books under the co-authorship:-**

#### **2009**

1. Acoustic, Waves and Oscillations for -B.Sc.I Paper III published by – S.J.Publication, Unit of Kedar Nath Ram Nath, Meerut.(First Edition – 2009).

2. Thermodynamics and Heat for - B.Sc. II Paper I, published by – S.J. Publication, Unit of KedarNath Ram Nath, Meerut. (First Edition – 2009).

## **2010**

1. Optics for - B.Sc. II Paper II, published by – S.J. Publication, Unit of KedarNath Ram Nath, Meerut. (First Edition – 2010).

## **2011**

1. Solid State and Statistical Mechanics for - B.Sc. II Paper III, published by – S.J. Publication, Unit of KedarNath Ram Nath, Meerut. (First Edition – 2011).

## **2012**

1. Quantum Mechanics and Relativity for - B.Sc. III Paper I, published by – S.J. Publication, Unit of KedarNath Ram Nath, Meerut. (First Edition – 2012).

## **2013**

1. Modern Physics for - B.Sc. III Paper II, published by – S.J. Publication, Unit of KedarNath Ram Nath, Publications Meerut. (Second Edition – 2016).

## **2016**

1. B.Sc. I semester containing all 03 papers of physics, by S.J. Pub Unit of KedarNath Ram Nath, Publications Meerut. (First, Second Edition – 2016).
2. B.Sc. II semester containing all 03 papers of physics, by S.J. Pub Unit of KedarNath Ram Nath, Publications Meerut. (First, Second Edition – 2016). ISBN: 978-93-87007-44-4.

## **2017**

1. B.Sc. III semester containing all 03 papers of physics, by S.J. Pub Unit of KedarNath Ram Nath, Publications Meerut. (First Edition – 2017). ISBN: 978-93-87007-44-4.
2. B.Sc. IV semester containing all 03 papers of physics, by S.J. Pub Unit of KedarNath Ram Nath, Publications Meerut. (First Edition – 2017). ISBN: 978-93-87007-29-1.
3. Course content Book **MECHANICS, B.Sc. I Year** BSCPH-101 **Edition 2017** having 04 chapters of Uttarakhand Open University, Haldwani, Nainital.
4. Course content Book **OSCILLATIONS and WAVES, B.Sc. I Year** BSCPH-103 **Edition 2017** having 02 chapters of Uttarakhand Open University, Haldwani, Nainital.

## **2018**

1 . B.Sc. V semester containing all 03 papers of physics, by S.J Pub Unit of KedarNath Ram Nath, Publications 138 RG College Road, Meerut 250 001. (First Edition – 2018). ISBN: 978-93-87007-44-4.

2. B.Sc. VI semester containing all 03 papers of physics, by S.J Pub Unit of KedarNath Ram Nath, Publications 138 RG College Road, Meerut 250 001. (First Edition – 2018). ISBN: 978-93-87007-77-2.

### **2019**

1 . B.Sc. I semester containing 02 papers of physics, by S.J Pub Unit of KedarNath Ram Nath, Publications 138 RG College Road, Meerut 250 001. (First Edition – 2019). ISBN: 978-93-87007-44-4.

### **2020**

1. Published book on "Prosperity of the Sun in respect of Research" by Lambert Publication USA ISSN 978-620-2-67644-1

### **Organized Seminars of Learned Scientists in the Department of Physics, M.B. Govt. P.G . College Haldwani, Nainital**

1. Prof. Ram Sagar, Director, UPSO, **Nainital** on dated 18<sup>th</sup> Jan, 2001.
2. Prof. M.C. Pandey, Principal, M.B.Govt.P.G.College, **Haldwani**, 28<sup>th</sup> Feb 2002.
3. Prof. S. Chandra, Head Dept. of Physical Sciences, SRTM University, **Nanded** on dated 21<sup>st</sup> March 2003.
4. Prof. Ajit Kembhavi, Dean IUCAA, **Pune** on dated 26<sup>th</sup> Oct. 2004 on overview of Astronomy & Astrophysics.
5. Prof. K.C. Joshi, Head B.Ed. M.B.Govt.P.G.College, **Haldwani** on Science Day 28<sup>th</sup> Feb. 2005.
6. Prof. Ram Sagar, Director, ARIES, **Nainital** on dated 11<sup>th</sup> March 2005.
7. Prof. Ram Sagar, Director, ARIES, **Nainital** on dated 28<sup>th</sup> 2006, February 2008 as Chief Guest and eminent Speaker on the Occasion of Science Day.
8. One day Seminar by **Dr. Hemant Joshi, N.B. Inc KANSAS, USA** on the topics **1. Motivation towards Higher Education 2. Role of Science & Technology in respect of Biophysics** on dated 17.11.2014 from 1 to 3 PM.
9. One day Seminar by **Dr. M. K. RAI, Edu. Dept., Air-Force, New Delhi** on the topic **Whither Physics Today** dated 22.11.2014 from 12.30 – 2 PM.
10. Organized one day seminar of Dr. D.K. Ojha, **TIFR Mumbai** on ballooning techniques on 6 Dec 2015.

11. Two day experimental workshop organised in the Physics Department by expert **Shri Ashish Verma & Shri Mudit Agarwal** from, S.K. Scientific Instruments (P) Ltd, A-55, Gandhi Nagar Moradabad, (U.P.) on 28-29 Dec 2016 for BSc III, M.Sc I and III Sem students

### Associateships and Memberships

1. I got Associateship of IUCAA, **Pune** in July 1999 for a period of Three years.
2. I got extension for Associateship of IUCAA **Pune** for a period of Next three years, in July 2002 to June 2005.
3. I got again extension of IUCAA **Pune** Associateship for a period of next three years from July 2005 to June 2008.
4. Life Member of Astronomical Society of India (ASI). L-0952
5. Life member of Indian Association of Physics Teacher (IAPT). L-6973
6. Executive Council Member of Bio-technology, M.B. Govt.P.G.College, Haldwani, Nainital.
7. RC-5 elected member of IAPT for a period of 3 yrs from 2016 onwards.
8. Vice-President of IAPT under RC-5 for a period of 3 Years from 01.01.2025 to 31.12.2027.
9. Paper setter in (i) Uttarakhand Public Service Commission, Haridwar  
(ii) Uttar Pradesh Public Service Commission, Allahabad  
(iii) Bihar Public Service Commission, Patna

### Research Projects

| S. No. | Type of project                                       | Topic of project                                                                                      | Amount sanctioned                                | Period/ Project fellow                                         | Published work                                              |
|--------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------|
| 1.     | UGC Minor Research Project No. F6-117/2002 (MRP/NRCB) | Heating of Solar Coronal Loops                                                                        | 30000.00                                         | 2 March 2006                                                   | 06 papers in the journal of international repute. Completed |
| 2.     | UGC Majore Research Project F31-23/2005 (SR)          | Solar Coronal Heating by Phase Mixing                                                                 | 403000.00<br>Dr. Manish Pandey as project fellow | 8 oct 2007<br>with one project fellow with scholarship 8000/pm | 09 Papers. Completed                                        |
| 3.     | UGC Majore Research Project MRP No F.42-825/2013(SR)  | Study of distribution of solar flares around the sun and their association with coronal mass ejection | 770800.00<br>Dr. Hema as project fellow          | Jan 2015<br>Running & with one project fellow with scholarship | 13 papers the journal of National International repute      |

|    |                                                           |                                                                                                                      |                        |                                  |                               |
|----|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------|-------------------------------|
|    |                                                           |                                                                                                                      |                        | 16000/pm                         |                               |
| 4. | CSIR MRP File No. 03/1491/2023/EMR-II received 04.09.2023 | A Comparative study of geomagnetic storms and their effect in terms of various parameters for solar cycles 23 and 24 | SRF Dr Chandni Mathpal | Date of commencement 04 Dec 2023 | Two research papers submitted |

### No. of Ph.D. student awarded and working:

As per the letter no degree / scholar / 15309-17/.2014-15 dated 29/01/2015 the details of physics department about the research scholars and Ph.D. completed and running projects as the following:

| S. No. | Name                    | Topic                                                                                              | Year of registration | Ph. D. completed in the year                                                                | Fellows hip              | Ph. D. Supervisor              |
|--------|-------------------------|----------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------|--------------------------|--------------------------------|
| 1      | Dr. Naval Kishor Lohani | Solar coronal loops & their heating mechanism                                                      | 2002                 | 2006 <b>Awarded</b>                                                                         | Nil                      | Dr. L.P. Verma                 |
| 2      | Dr. Manish Kumar Pandey | Solar coronal heating by phase mixing                                                              | 2007                 | 27 <sup>th</sup> June 2011 <b>Awarded</b>                                                   | UGC MRP project fellow., | Dr. L.P. Verma                 |
| 3      | Dr. Vinod Kumar Joshi,  | Solar coronal heating by micro flare and nanoflare                                                 | 2007                 | 17 <sup>th</sup> March 2012 <b>Awarded</b>                                                  | Nil                      | Dr. L.P. Verma                 |
| 4      | Mr. Ravindra Tripathi   | Solar flare and their application                                                                  | 2009                 | 2010 M. Phil Awarded                                                                        | Nil                      | Dr. L.P. Verma                 |
| 5      | Dr. Smt. Suman Garia    | Study of Coronal Mass Ejections in relation with Geomagnetic Storm Forbush Decrease in Cosmic rays | 2011                 | 2 <sup>nd</sup> July 2014 Thesis submitted & Ph.D. 16 <sup>th</sup> May 2015 <b>Awarded</b> | Nil                      | Dr. L.P. Verma                 |
| 6      | Dr. Sudha Pali          | Development of nano material with various techniques                                               | 2011                 | Conducted Pre-Ph.D. viva on 7.10.2016 <b>thesis submitted Awarded on 03 Dec 2017</b>        | Nil                      | Dr. L.P. Verma (Co-supervisor) |
| 7      | Dr.Smt. Beena Bhatt     | Distribution of Solar Flare and                                                                    | 2012                 | Thesis submitted 16 <sup>th</sup> May 2015 &                                                | Nil                      | Dr. L.P. Verma                 |

|     |                        |                                                                                                                                   |      |                                                                                           |                                                                                                   |                                |
|-----|------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------|
|     |                        | Their Association with Coronal Mass Ejection.                                                                                     |      | 4 <sup>th</sup> June 2016<br><b>Ph.D.<br/>Awarded</b>                                     |                                                                                                   |                                |
| 8   | Dr. Vinod Kumar Pandey | Measurement of Radiation dose at Abutment Region of Electron & Photon Field in External Beam Radiotherapy of Head & Neck Cancers. | 2012 | PhD Thesis submitted 2017 & Awarded on 03.02.2018                                         | Nil                                                                                               | Dr. L.P. Verma                 |
| 9   | Dr. Priyanka Goel      | Analysis of polymer with nano technology                                                                                          | 2012 | Ph.D Thesis submitted 2017 & 05.01. 2018                                                  | Nil                                                                                               | Dr. L.P. Verma (Co-supervisor) |
| 10  | Dr. Hema               | Study of Cosmic Ray with Solar and Geomagnetic Activity.                                                                          | 2013 | PhD Thesis Submitted 2017 Awarded 22.10.2018 and NET clear Dec 2017 & USET Physics topper | UGC MRP project fellow 1 <sup>st</sup> & 2 <sup>nd</sup> Yr 14000/pm, 3 <sup>rd</sup> yr 16000/pm | Dr. L.P. Verma                 |
| 11  | Dr. Rajesh Mathpal     | Study of solar activities & their association with interplanetary medium                                                          | 2013 | PhD Thesis submitted 2017 and awarded on 19 March 2018                                    | Nil                                                                                               | Dr. L.P. Verma                 |
| 12. | Chandra Sekhar Bhoj    | Space weather dependent on interplanetary parameter                                                                               | 2016 | For Pre PhD Viva thesis submitted to KU on 9.8.2019 and awarded on 16.3.2024              | GATE qualified Final PhD Viva 16.3.2024 and awarded                                               | Dr. L.P. Verma                 |
| 13. | Km. Meena Pokhariya    | Cosmic Ray Intensity and its dependence of solar activity and interplanetary parameter.                                           | 2016 | For Pre PhD Viva thesis submitted to KU on 24.7.2019 Awarded 06.04.2023                   | Final PhD thesis submitted 13.07.22                                                               | Dr. L.P. Verma                 |
| 14. | Smt. Chandani          | Geomagnetic                                                                                                                       | 2016 | For Pre PhD                                                                               | Final PhD                                                                                         | Dr. L.P.                       |

|     |                  |                                                                       |                        |                                                          |                                                 |                |
|-----|------------------|-----------------------------------------------------------------------|------------------------|----------------------------------------------------------|-------------------------------------------------|----------------|
|     | Mathpal          | Storm their statistical relation with interplanetary condition.       |                        | Viva thesis submitted to KU on 28.7.2019                 | thesis submitted 13.07.22 and awarded 23.3.2023 | Verma          |
| 15. | Km. Nisha Kohali | Register                                                              | 2019                   | Course work Awarded 23.03.2023                           |                                                 | Dr. L.P. Verma |
| 16. | Anil Joshi       | Register                                                              | 2019                   | Course work Not Completed                                |                                                 | Dr. L.P. Verma |
| 17. | Ms Megha Agri    | Register<br>Effect of the Magnetic field of the Sun in our atmosphere | 2021<br>23.04.<br>2022 | Course Work Registration confirmed and accepted synopsis | Submitted 09.03.2026                            | Dr. L.P. Verma |
| 18. | Ms Ojasvi Sharma | Register<br>Study of Habitability of Exoplanets                       | 2021<br>23.04.<br>2022 | Course Work Registration confirmed and accepted synopsis |                                                 | Dr. L.P. Verma |
| 19. | Mr Deepak Kumar  | Register                                                              | 2021                   | Course Work Not Completed                                |                                                 | Dr. L.P. Verma |

### Ph.D. Thesis evaluated in Physics

11. Purvanchal University, **Jaunpur** U.P. in 2005 (Sup. Dr. Gunraj Prasad).
12. Garhwal University **Srinagar**, Uttarakhand in 2008 Sup. Prof. K.D. Purohit)
13. Baba Bhim Rao Ambedkar University, **Aurangabad**, Maharastra in 2008 “  
Photoelectric Photometry of Variable Stars (Sup. Dr. M.L. Kurtadikar)
14. Bhopal Univ, Dept. of Physics, Govt. P.G. Science College, **Rewa** “ Study of long term cosmic ray modulation during three successive Solar Cycles 21 to 23. (Sup. Dr. Achyut Pandey 2012)
15. Baraktullah Vishwavidyalaya **Bhopal** “Solar and Interplanetary Disturbances and their effects on Cosmic ray Intensity Variation (Sub. Dr. Mahendra Singh) 2013
16. A thesis of G.B. Pant Agriculture University evaluated and viva-voice examination conducted on 28 November 2017.
17. A thesis of Siddharth University Kapilvastu – 272202 in Physics of SP Pande evaluated in the month of September 2024.
18. A thesis of APS University Rewa M.P. in Physics of Kirti Mishra evaluated in April 2025.

19. PhD viva-voice examination of Kirti Mishra, APS University Rewa conducted online on dated 05.06.2025 as an external examiner vide letter No. Academic/Research/2025/1392 dated 03.06.2025.
20. A thesis of APS University Rewa M.P. in Physics of Vindhya Srivastawa, on the topic Study of Short term CRI variation during ascending phases of Sc 23 &24, evaluated in January 2026 and conducted PhD Viva on 09.04.2026.

### **In the National Advisory Committee**

1. National Seminar “Macro and Micro Physics” as Resource Person and delivered talk on “Magnetic Reconnection in Steady State” in the Govt. P.G. College, **Gopeshwar**, Chamoli, Uttarakhand from 12 to 13<sup>th</sup> October 2011.
2. National Conference on Recent Trend in Materials Science and Nano Structure, January 3-4, 2012. Govt. P.G. College, **Rudrapur**, UK
3. National conference on Applied Mathematics and Computational Physics Feb 25-26, 2012, Hindu College, **Moradabad**, UP.

### **Subject Expert in the Selection Panel of University/Colleges**

1. Surajmal Mahila Mahavidyalaya, Kitchha – 2009
2. Higher Education Uttarakhand, Haldwani - 2009
3. Surajmal Mahila Mahavidyalaya, Kitchha – 2011
4. Higher Education Uttarakhand, Haldwani - 2011
5. Uttarakhand Open University, Haldwani – 2012
6. Uttarakhand Open University, Haldwani – 3<sup>rd</sup> April, 2013
7. As an subject expert in the selection panel of H.E.U.K. 27.9.2014
8. Eminent Resource Person in the Science Conclave on Renaissance of Science in Uttarakhand on 30<sup>th</sup> July 2014 Organised by School of Science, Uttarakhand Open University, Haldwani, Nainital (Certificate attached)
9. Subject expert in the PG panel from KU for the Govt. P.G. College, **Rudrapur** 2014
10. Subject expert in the panel of Govt. P.G. College **Tanakpur** 2015
11. Subject expert in the PG panel from KU for the Govt. Girls P.G. College, **Haldwani** 2015
12. Subject expert Higher Education Uttarakhand, Haldwani - 2016
13. Subject expert in UKPSC Haridwar in 2017
14. Subject expert in UKPSC Haridwar in 2019
15. Subject Expert in UKPSC Haridwar in 2021
16. Subject Expert in UKPSC Haridwar in 2022
17. Subject Expert in UKPSC Haridwar from 14-16 Oct 2024 vide letter No. 90/12/AGC(02)/2024-25 dated 01 Oct 2024.
18. Subject Expert in UKPSC Haridwar from 1 to 4 April 2025.
19. Subject expert in Bihar Public Service Commission BPSC, 15, Nehru Path Patna, Letter No. 771 Top Confidential Date: 16 / OZ /202 A

## COMPLETED INSPIRE SUMMER PROJECT DETAIL FOR THE YEAR 2014

The following students from D. S. B, Nainital and M. B. Govt. PG. College, Haldwani completed their INSPIRE project under the supervision of Dr. L.P. Verma.

| S. No | Name                | Class                         | Mobile     | Title                             |
|-------|---------------------|-------------------------------|------------|-----------------------------------|
| 1     | Naveen Singh        | B. Sc. III                    | 8273653853 | Semiconductor and its application |
| 2     | Mamta Bhoj          | B.Sc. III                     | 8954359580 | Role of IC                        |
| 3     | Nisha               | B.Sc. II                      | 9756164761 | Microprocessor & its Applications |
| 4     | Chitra Bhatt        | B.Sc. II                      | 9927641289 | Role of Operational Amplifier     |
| 5     | Rahul Gahtori       | B. Sc. III                    | 9837574626 | Conservative Force                |
| 6     | Rakesh Chandra Pant | B. Sc. II                     | 9675855038 | Thermal Power Plant               |
| 7     | Nitin Pandey        | B.Sc. II                      | 9690616088 | Solar Energy                      |
| 8     | Pankaj Joshi        | B.Sc. II                      | 9758534728 | Bio-gas                           |
| 9     | Pooja Andola        | B.Sc. II                      | 7351012910 | Semiconductor Devices- Rectifier  |
| 10    | Anita Karnatak      | B.Sc. II                      | 7351927460 | Transformer                       |
| 11    | Mamta Bhoj          | B.Sc. III                     | 9411598068 | Role of IC                        |
| 12    | Neetu Bora          | B.Sc. II, DSB Campus Nainital | 9760504409 | Hydraulic Break                   |
| 13    | Minakshi Bisht      | B.Sc. II, DSB Campus Nainital | 9760504409 | Many stroke engine (6 Stroke)     |

### Extracurricular Activity

1. Participated in VII state level Rover Ranger Samagam at Govt. P. G. College, Lensdown, Pauri Garhwal from 28 oct to 1Nov, 2009 and received championship.

2. Appointed as special Observer by Panjab Technical University for the Examination center Mnemonic Convent School, Haldwani to conduct the examination in March 2010.
3. Organized VII state level Rover Ranger Samagam college premises from 12-14 Nov 2010 received championship.
4. Flood and Dengue fever provided services with the help of rover and rangers 15-30 September 2010.
5. Participated of team Rover Scout leader for the up-rastrapati course in Uttrakhand Bharat Scout Guide Training Centre Shitlakhet from 8 to 10 April 2011.
6. External flying team in-charge for the annual examination of Kumaun University from 22.04.2011.
7. 08 students completed Rambler batch under my guidance.
8. Organized essay competition on Swami Vivekananda on 28 Dec 2011 in the college Campus.
9. Conducted TIFR entrance examination for Ph.D. program as in-charge on 9.12.2011 in College.
10. Deliver two lectures under EduSat program at Dehradun in Doon University on 4 and 5 Oct, 2012.
11. Conducted TIFR entrance examination for Ph.D. program as in-charge on 8.12.2017 in Indira Priyadarshani Govt. Girls College of commerce, Haldwani.
12. JEE main entrance examination Observer at Haldwani Centre appointed by CBSE on 8 April 2018

### **Science Popularization Activities**

As I have been developed many science project models maximum from waste materials or low cost materials. All models are working in nature. In our city various 10+2 standard colleges of CBSE, ICSE and State Board. Our college colleague always asking about their child during the time of examination and I always try to help him/her. During the science exhibition on college, district or state levels, they invite for our gracious and encouraging lectures for their motivation to do better in the future for the system and society of the nation. These models are as the following:

1. **Energy Transformation:-**
2. Mechanical energy converted into rotational energy – by using a simple one pencil & one alpine and small hammer for hammering the pencil.

3. Mechanical energy converted into pressure energy – by a piece of bicycle tube & two small boxes.
4. Mechanical energy converted into electrical energy – by a motor & one LED.
5. Mechanical energy converted into water pressure energy – by a waste tooth paste cover and a balloon.
6. Mechanical energy converted into sound energy – by a top cover of any bottle & thread
7. Chemical energy converted into light energy – wet soil or cow dung with two pins and connecting wires.
8. By rubbing converted into rotational energy – using a pencil, one alpin& a knife.

**9. Pressure based model:-**

10. Hydraulic Pump – by using cold drings bottle with fine pipe and two siring injections.
11. Power testing of hands – by using waste poly packet of Refine or mustard oil small plastic pipe of diameter about 2 to 5 mm.
12. Lungs capacity to pore the air – by using about 2 to 3 meter polythine one end closed and other open.
13. Hydraulic Lift - by using cold dring's bottle with fine pipe and 06 siring injections.
14. Toy JCB - by using box, iron leaf, tape with fine pipe and 08 siring injections.

**15. Magnet based model:-**

16. Homo pole motor – by using a small very strong magnet, one iron nail, connecting wire and a dry cell.
17. DC Motor – by using a dry cell, a small magnet, and two big safety pins each of 3 inch in length, insulated armature copper wire of 1 to 2 meter in length to prepare the coil.
18. To access the magnetic field – by using one bicycle scape & one ring magnet.
19. Eddy Current representation – by using a small strong magnet, Aluminium & hard plastic pipes each of 1 meter in length and .5 to 1 inch diameter of both.
20. Rotation of pencil without base – by using an old useless bath room sleeper, 06 ring magnets, 01 pencil, 1/8 part of useless CD.

**21. Optics based model:-**

22. Periscope & Klydoscope – by using plane mirrors of length 10 cm and 1 to 1.5 cm wide and a butter paper and some colorful pieces of bangle. For other required agarbati boxes and black paper and two pieces of plane mirrors of  $2 \times 2 \text{ cm}^2$ .
23. Optical fiber – to exhibit total internal reflections using color light source and bunch of fiber hair wires.
24. Total internal reflection- using a biker of 500 ml, bath soap, laser light
25. Optical Color mixers – using different color poly sheets available in the packets of Dhoopbati and a light source.
26. Creation of spectrum – using glass slab of dimension  $6 \times 4 \times 2 \text{ cm}^3$ . & a white light source.
27. Diffraction Phenomenon – by using simple LASER beam and a computer generated No. of close lines on transparency.

Through these models demonstration student can easily understand the theoretical topics and get full confidence and create more interest in the study to do something new as our contribution to the nation. This is our aim and achievements to get the student their own goal.