

***CURRICULUM – VITAE***

 **DR. CHANDRA MANI TIWARI**

**1. FATHER'S NAME : SRI N. K. Tiwari**

**2. MOTHER'S NAME : SMT. P. TIWARI**

**3. DATE OF BIRTH : APRIL 4, 1972**

**4. PLACE OF BIRTH : PURVATIR, TAHSEEL - TEONTHAR, REWA (MP)**

**5. NATIONALITY : INDIAN**

**6. MARITAL STATUS : MARRIED**

**7. CASTE : BRAHMAN**

**8. CATEGORY : GENERAL**

**9. MAILING ADDRESS : ANAND SADAN,**

**SHARDA PURAM (Behind Maharaja Bandh), SAMAN**

 **REWA (MP) 486 005**

 **Mobile: 09424337848, 8224878568**

 **Email:** cmtiwari2007@gmail.com,

 cmtiwari\_2005@yahoo.com

**10. Academic Career:**

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| --- | --- | --- | --- | --- | --- |
| **Exam.****Passed** | **Year** | **Board/Univ.** | **Subjects** |  **Div.** | **%age** |
| High School | 1988 | Board of Sec. Education, Bhopal | All Compulsory subjects | I | 68% |
| Intermediate | 1991 | Board of Sec. Education, Bhopal | Math, Physics, Chem., Hindi, English | I | 65% |
| B.Sc. | 1994 | Model Sc. College, APSU, Rewa | Maths, Physics, Geology | II | 58% |
| M.Sc. | 1996 | UTD, APSU Rewa | Physics | I | 73% |
| M.Phil. \* | 1998 | APS Univ., Rewa | Physics | A Grade | - |
| Ph.D. \* | 2001 | APS Univ., Rewa | Space Physics | - | - |
| PGDCA \* | 1997 | UTD, APSU, Rewa | Computer Science | First | 73% |
| M.Sc. (CS)  | 2009 | MCU (Study centre Sai Computer College Rewa, M.P.) | Computer Science | First | 71 % |
| B.Ed. | 1996-97 | APS Univ., Rewa | Science | Th.Prac. | 65%77% |

\* **Title of M. Phil. Dissertation:** Average Characteristics of diurnal variation of cosmic Ray intensity.

\* **Title of Ph.D. Thesis:** Characteristics of Higher harmonics of the Daily variation of Cosmic Ray Intensity during period 1989-1999" **Supervisor** Late Prof. S. P. Agrawal, Ex-Head, Dept. of Physics & Computer Science, A.P.S. University, Rewa (M.P.)

\* **Title of Project (PGDCA):**  "Pending Letter Information System"

**11. Teaching/Work Experience**

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| --- | --- | --- | --- |
| **S.N.** | **Institution** | **Designation** | **Period** |
| 1 | SECT Computers, Sidhi | Instructor | May 1996-Sep. 1996 |
| 2 | INFOTECH Rewa | Lab Instructor | Jan. 1997-Aug. 1997 |
| 3 | Govt. Model Sc. College, Rewa | Guest Teacher | Sept. 1997- Dec. 1997  |
| 4 | Dept. of Physics, APSU Rewa | Guest Lecturer | 01 June 1998 (still continuing) |

During my service period as guest Lecturer I have taught following papers:

**S. No. Courses Papers**

1. B.Sc. : Computer Fundamentals, Business Data Processing.

2. B.C.A. : Digital Electronics, Computer Network, Computer

 Architecture.

3. B.E. : Engineering Physics.

4. PGDCA: Computer Organization & Assembly Language Programming, Accounting and Financial Management, DBMS, Introduction to Programming, System Software and Programming.

5. M.Sc. (Physics): Electrodynamics & Plasma Physics, Classical Mechanics, Electronic Devices, Atomic and Molecular Physics, Computer Programming & Informatics.

6. M. Phil: Computer Applications (E.B.,J,N, Centre, Economics, Psychology)

7. M.T.A.: Computer Applications

8. M.S.W.: Computer Applications

9. Ph. D.: Pre-Ph. D. course Astrophysics, Research Methodology and Computer Application in Various Departments of UTD.

**Text Books Published:**

1. Heat and Thermodynamics, Alpha Science International Ltd, Oxford, U.K. (Published in 2014) ISBN: 978-1-84265-902-1
2. Mechanics: Laxmi Publication (in press) New Delhi

**12. Computer Experience**: O.S. PC Packages, Computer Languages.

 The following Project reports [in P.G.D.C.A. (CC)] submitted under my supervision

 (a) Library management system (2002)

 (b) Examination processing system (2002)

**13. Research Experience: 23- years in the area of Space Physics/Cosmic Ray Physics**

* During this period **79** research papers have been published in National/ International Journals and 60 papers have been presented in symposia/Conferences (see list of Publication for details)
* **Minor Research Project have been Completed**: 01

 Cosmic ray variability and its association with solar and geomagnetic activity parameters, UGC, Bhopal, duration 2 years. Co-Investigator, **Dr. Chandra Mani Tiwari** (2,00,000/-)

**14. Additional Information**

 1. Membership: Member Indian Science Congress Association (A814)

 2. Contributed in University Examination affairs (A.S., Invigilation duty, result cell, Decoding cell and Valuation etc).

 3. Associated with Computer teaching in other SSP Courses like: M.Phil. M.T.A. and M.S.W., PGDCA, B.Lib. Sci. (CC) etc.

 4. Recipient of University Research Fellowship during 1999 to 2000.

 5. Member: Inter-University state level youth festival committee 1-3Nov. 2014.

 6. Contributed in NTA Examination affairs As an Observer during the year 2021 to 2023.

 7. Membership: Consular in Parivar Paramars Kendara, Civil line police station, Rewa

**References:**

1. Prof. A. P. Mishra, Ex-Professor, Dept. of Physics, APS University, Rewa (M.P.)
2. Prof. A. K. Rai, Professor, Dept. of Physics, Allahabad University, Prayagraj (U.P.)
3. Prof. A.K. Saxena, Professor & Head, Dept. of Physics. APS University, Rewa (M.P.)
4. Prof. Bharat Mishra, V. C. MGG University, Chitrakoot, Satna (M.P.)

 **Date…………..**

 **(Chandra Mani Tiwari)**

**List of Publication**

**III(A)i**

**(Dr. C.M. Tiwari)**

**Referred journals**

**International Journals:**

1. Average Characteristics of Diurnal Variation of Cosmic ray intensity for the solar cycle 22 to 23. **Impact factor**: 1.06

 **C. M. Tiwari** and D. P. Tiwari,

AMSE Journal (Modelling) **68(1),** 65-69, (2007), ISSN No.12595985.

2. Characteristics of high energy cosmic ray diurnal anisotropy on Day- To-Day Basis,

 **Impact factor**: 1.061

####  **C. M. Tiwari** and D. P. Tiwari,

#### Cosmic Research, **46** (5), Kosmicheskie Issledovaniya, 93–96 (2008), ISSN No 00109525.

3. Study of anisotropic variation of Cosmic rays intensity with Solar activity **Impact**

 **factor:** 1.081

 **C. M. Tiwari**, Devendra Sharma, Lalji Tiwari, A.K. Saxena and D.P. Tiwari

 Natural Science **3(2)** 1-3, (2011) doi:10.4236/ns.2011.32015, ISSN No 2150-4091.

4. Study of High Energy Cosmic Ray Anisotropies with Solarand Geomagnetic Disturbance Index Impact factor: 5.804

 **C. M. Tiwari**, and D. P. Tiwari

 International Journal of Astronomy **1(5)**: 73-80, (2012) (DOI: 10.5923/j. astronomy. 20120105.01), ISSN No 2169-8848, 2169-8856.

5. Comparative study of solar and geomagnetic indices for the solar cycle 22 and 23

 **Impact factor**: 1.78

 **C. M Tiwari**

IJETCAS, USA,10(3), 219-223(2014) ISSN(online):2279-0055.

6. Association of solar activity with storm time disturbance index. **Impact factor**: 9.173

**C. M Tiwari**

AIJRSTEM, USA,8(2),174-176(2014) ISSN(online):2328-3580.

7. Comparative study of odd-even asymmetry of long-term variation of cosmic ray intensity.

 **Impact factor**: 9.173

**C. M Tiwari**

AIJRSTEM, USA,8(3), 191-194(2014) ISSN(online):2328-3580.

8. Study of GLE with solar energetic particle emission and solar wind. **Impact factor**: 1.78

**C. M Tiwari**

IJETCAS, USA, 10(2 ), 107-109(2014)ISSN(online):2279-0055.

9. Long-term modulation of cosmic ray intensity in relation to solar parameters. **Impact factor**: 1.78

**C. M Tiwari**

IJETCAS, USA,10(2),136-137(2014) ISSN(online):2279-0055.

10. Study of anomalous behavior of cosmic ray intensity during rising phase of solar cycle 24.

**Impact factor**: 9.173

**C. M Tiwari**

AIJRSTEM, USA,8(1),89-91(2014) ISSN(online):2328-3580.

11. Association of CME events and cosmic ray intensity decreases **Impact factor**:9.173

**C. M. Tiwari**, Lalji Tiwari and R. K. Tiwari

AIJRSTEM, USA8(2),162-164(2014) ISSN(online) 2328-3580.

12. Efficient Pair wise Reversible data hiding technique using in image Authentication

 Nidhi Mishra and **C.M.Tiwari**

AIJRSTEM, USA, 8(3), 251-255,(2014)ISSN(online):2328-3580.

13. Coronal mass ejection (CME) events in the ascending phases of solar cycle 23 and 24- a

 Comparative study. **Impact factor**: 3.24

 Balendra Pratap Singh, Bharti Nigam, P.K.Charnadia and **C.M.Tiwari**

 International Journal of Scientific Res.4(5), 28-30(2015) ISSN 2277-8179.

14. Variability of solar cycles 22-24 in relation to cosmic ray intensity and geomagnetic

 Parameters.

 Prithviraj Singh, A.K.Saxena and **C.M.Tiwari**

 International Journal of Current. Res. Vol 7.09, 20045-20048. Sept(2015).

15. Association of solar activity with cosmic ray intensity during rising phase of solar cycle 24.

 **C.M.Tiwari** and Nidhi Bagga

 International Journal Of Applied Research, 1(11), 705-708(2015), ISSN (online)-2394- 5869

16. Study of geomagnetic storm observed during March 1989

 Anand Prakash Tiwari, Saxena A.K. and **Tiwari C M**

 Int. J. Current Res. 8(2) 26098- 26102 (2016) ISSN 075-833X

17 Study of long-term solar output variability and their effect on the Earths magnetosphere

 And galactic cosmic rays

 A.P. Tiwari, A.K. Saxena and **C.M. Tiwari**

 Int. J. Naveen Shodh Sansar (2015) 35-38 ISSN 2320-8767.

18. Study of geometrical structure of perfect difference network (PDN)

 Sunil Tiwari, Rakesh Kumar Katare, Vinod Sharma and **C.M. Tiwari**

 IJARCCE, 5(3), 466-470 (2016) ISSN 2278-1021

19. Long-term cosmic ray variability during solar cycle 22 to 24

 Anand Prakash Tiwari, A.K. Saxena, **C.M. Tiwari** and P.K. Sharma

 Int. J. Divya Shodh Samiksha , 12-14 (2015) ISSN 2394-3807

20. Variations in solar cycles 22, 23 and 24 and their effect on Earth’s climate

 Prithvi Raj Singh, **Chandra Mani Tiwari** and Ajay Kumar Saxena

 Int. J. Astronomy and Astrophys. 6 (2016), 8-13, doi:org./10.4236/ijaa2016.61002.

21. Study of anomalous behavior of coronal mass ejections and solar flares and its effect on Earths environment.

 A.P. Tiwari, A.K. Saxena and **C.M. Tiwari**

 Res. J. of Physic vol Sci. 4(8), 6-9(2016), E- ISSN 2320-4796

22. The effect of 27- day solar rotation on Earth magnetosphere.

 Sham Singh, A.C. Pandey, **C. M. Tiwari** and A. P. Mishra

 Int. J. Res. Eng. & Appli. Sci.)(IJREAS), 6, 11, 134-145, (2016), ISSN 2249-2905.

23. Cosmic ray associated with coronal index and solar flare index during solar cycle 22-23

 Prithvi Raj Singh, Shabir Ahmad, A C Pandey, Ajay Kumar Saxena, **Chandra Mani Tiwari**, A P Mishra

 Int. J of Astronomy & Astrophys, DOI:10.4236/ijaa.2017.73013, 7,162-173(2017), Online ISSN: 2161-4725

24. Mid-term periodicities and heliospheric modulation of coronal index and solar flare index during solar cycles 22-23.

 Prithvi Raj Singh, A. K. Saxena, and **C. M. Tiwari**

 J. Astrophys .Astr., 39:20 (2018),https://doi.org/10.1007/s12036-018-9514-9.

25. Comparative study of Odd and Even solar cycles.

 Sarver Ahmad, Niyaz Ahmad, Shabir Ahmad, **C M Tiwari**, A K Saxena, AP Mishra, G N Singh and K L Jaiswal

 Int. J. Scientific Res.in Phys & Applied Sci. (2019) ISSN:2348-3423(online).

26. Correlative analysis of long-term cosmic ray variation in relation with interplanetary magnetic field.

 Sarver A. Khan, A.K. Saxena and **C. M. Tiwari**

 Int. J. Scientific Res.in Phys & Applied Sci. (2019) vol. 7(2) pp 70,ISSN:2348-3423(online).

27. Cosmic ray intensity variations in relation to solar activity parameters for solar cycle 21-24.

 Sarver Ahmad Khan, Niyaz Ahmad, A K Saxena, G N Singh , K L Jaiswal, **C M Tiwari**

 IJIRMF (2020) , vol 6(2) ISSN:2455-0620(online).

28. Interrelationship among various solar activity parameters from solar cycles 21 to 24.

 Niyaz Ahmad, Sarver Ahmad, **CM Tiwari**, GN Singh.

 IJIRMF (2020) , vol 6(3) ISSN:2455-0620(online).

29. Solar cycle distribution of geomagnetic storms during solar cycle 21 to 24.

 Sarver Ahmad Khan, Niyaz Ahmad, , **C M Tiwari**, A K Jyoti, Meera Gupta.

 IJIRMF (2021) , vol 7(9) ISSN:2455-0620(online).

30. An Investigation on Cosmic Ray Variation with Interplanetary Magnetic Field during Solar Cycle 24.

 Bhanu Pratap Singh, Sushil Kumar Sharma and **C.M. Tiwari**

Int. J.of Analytical & Experimental Model analysis, (2022), Vol.XIV, XI, 617-621, ISSN:0886-9367.

31. Modulation Of Cosmic Rays In Relation With Solar And Interplanetary Disturbances

 Bhanu Pratap Singh, Dr. Sushil Kumar Sharma, **C. M. Tiwari**

 Int. J. of advance research in Sci & Eng. Feb. (2023), Vol. 12, 02, [www.ijarse.com](http://www.ijarse.com)

32. Study of solar activity during the rising phase of solar cycle 25.

 Sri Krishna Singh, Sarver Ahmad Khan, Niyaz Ahmad, **C. M. Tiwari**, GN Singh

 Int. J of Scientific Res.in Phys & Applied Sci.,April(2023) vol.11,2, 38—43, E-ISSN:2348-3423.

33. Solar variation and super Geomagnetic storm event of solar cycle 24 during period from 10 march to 31 March 2015.

 Udayveer Vikram Singh Bundela, Sushil K. Sharma, **C. M. Tiwari**

 IJARSE May (2023), vol 12,05, 11-25, ISSN(O)☹P): 2319-8346.

34. Study of Variability of Cosmic ray in descending phase of solar cycle 24.

 Rahul K Patle, AK Saxena, Laxmi Tripathi and **C. M. Tiwari**

 Int. J of Applied Res. (2023), vol. 9,05,230-233, ISSN:2394-7500, 2394-5869.

35. Feature of 27-day variation of Cosmic Ray Intensity with Interplanetary Magnetic field.

 Rahul K Patle, AK Saxena, Laxmi Tripathi and **C. M. Tiwari**

 UIJMSR, July(2023),vol. 5(6), ISSN: 2581-8872.

36. A study of cosmic ray intensity with different event variations of solar activity in the ground level enhancement.

 Chaudhary Vidya Sagar, Saxena A K, **Tiwari C.M.**

 IJSREM June(2023) vol.07,(06)PP 1-6,ISSN2582-3930

37. Investigation hysteresis effect on solar and interplanetary activity during solar cycles 23 and 24.

 Mudasir Ayoub, G.N. Singh, **C.M. Tiwari**

 IJFIRMF Aug (2023) vol. 9 1-8 DOIs:10.2015/IJIRMF/202308038.

38. A comparison of cosmic-ray modulation during the passage of CIRs and ICMEs.

 Udayveer Vikram Singh Bundela, Sushil K. Sharma, **C. M. Tiwari**

IJATES June (2023) vol. no. 11Issue 6 ISSN 2348-7550.

39. Cosmic-ray modulation two high speed solar wind steams of different speed.

 Dharmendra singh, P.K. Chamadia and **C.M. Tiwari**

 IJEEE Jan- June 2023 vol. 15 Issue no. 01, 201-213 ISSN (0) 2321-2055 ISSN(P) 2321-2045.

40. A study heliosphere disturbance of solar cycle 24 during period from 10 march to 31 march 2015

 Dharmendra Singh, P.K. Chamadia and **C.M. Tiwari.**

 IJARSE May 2023 vol. 12 (05) 1-10, ISSN 2319-8354.

**Proceedings of International Conference:**

**III(A)ii**

1. Study of the characteristics of low and high amplitude diurnal wave trains of cosmic rays.

 Ajay K. Pandey, G.K. Pandey and **C.M. Tiwari**

 29th Int. Cosmic Ray Conf. (ICRC), 183-186, **2,** Aug. 2005, Pune (India).

2. Effect of interplanetary disturbances on cosmic ray daily variation at neutron monitor energies.

 **C.M. Tiwari** and S.P. Agrawal

 29th Int. Cosmic Ray Conf. (ICRC), 187-190, **2,** Aug. 2005, Pune (India).

3. The study of daily variation of cosmic ray anisotropy for the period of 1991 to 2004.

 G.K. Pandey, **C.M. Tiwari** and Pankaj K. Shrivastava

 29th Int. Cosmic Ray Conf. (ICRC), 167-170, **2,** Aug. 2005, Pune (India).

4. Heliospheric modulation of cosmic rays and solar activity during solar cycle 22-24.

 PR Singh, **CM Tiwari,** AK Saxena, Proc. IAU-340, Cambridge University Press, (2018)147.

5. Statistical analysis of sunspot area and their Heliospheric effect to the period 1986- 2016.

 Prithvi Raj Singh, SL Agrawal **C. M. Tiwari** and Abhay Kumar Singh

 37th ICRC (2021), July 12th - 23rd online Berlin, Germany.PP1-8.

**National Journals**

1. Study of daily variation of Cosmic Ray intensity for the period of 1989-2000.

 **C.M. Tiwari**, S.P. Agrawal, D.P. Tiwari, M.A. El-Borie and Pankaj K. Shrivastava

 J.Curr. Sci. 3(1) 219-222 (2003), ISSN No. 0972-2279

2. Correlation of first two harmonics of cosmic rays anisotropy with sunspot activity.

 D.P. Tiwari, **C.M. Tiwari**, Sant P. Agrawal and Pankaj K. Shrivastava

 J. curr. Sci., 5(1) (2004), ISSN No. 0972-6101

3. Cosmic ray diurnal anisotropy and geomagnetic Ap index.

 **C.M. Tiwari** and Pankaj K. Shrivastava

Asian Journal of Physics (AJP), **13**, **1**, 69-71 (2004), ISSN No 0971-3093.

4. Relationship of first two harmonics of cosmic ray daily variation with solar activity

 **C.M. Tiwari**, D.P. Tiwari, Sant P. Agrawal, and Pankaj K. Shrivastava

Indian Journal of Radio & Space Physics, **33**, 95-98 (2004), ISSN No 0367-8393.

5. Average anisotropy characteristics of high energy cosmic ray particles and geomagnetic disturbance index Ap. Impact factor**:** 2.179

 **C. M. Tiwari**, D. P. Tiwari, Ajay K. Pandey and Pankaj K. Shrivastava

J. Astrophys. Astro. **26,** 429- 434, **(**2005), ISSN No 0250-6335.

6. Comparative study of different solar parameters with sunspot numbers.

 V.K. Mishra, D.P. Tiwari, **C.M. Tiwari,** and S.P. Agrawal

 Indian Journal of Radio & Space Physics **34**, 13-16 (2005), ISSN No 0367-8393.

7. Anomalous behavior of Cosmic ray diurnal anisotropy during descending Phase of the Solar Cycles 22,

 **C M Tiwari**, D P Tiwari and Pankaj K. Shrivastava,

 Current Science **88**, 8,25 (2005), ISSN No 0011-3891.

8. Correlative study of various harmonics of the daily variations of Cosmic rays.

 **C.M. Tiwari**, D.P. Tiwari, S.P. Agrawal, and Pankaj K. Shrivastava

 Ultra science **15(3)**, 433-436 (2003), ISSN No. 2231-346(A), 2231-3478(B).

9. Solar longitudinal distribution of solar flares in association with Forbush decreases.

 Neelam Singh, D.P. Tiwari, **C.M. Tiwari** and Pankaj Shrivastava

 Acta Ciencia Indica, XXX **2, 209** (2004), ISSN No. 0253-732X.

10. Comparative study of anisotropies of cosmic ray intensity variation in relation with solar activity.

 **C.M. Tiwari**, D.P. Tiwari, and Pankaj K. Shrivastava,

 Vindhya Bharati, APS University, Research Journal **1**, 165-171, (2004), ISSN No. 0876- 9986.

11. Study of distribution of solar flares around the sun and their relationship with sporadic variations of cosmic ray intensity.

 Neelam Singh, D.P. Tiwari, **C.M. Tiwari** and Pankaj K. Shrivastava,

 Vindhya Bharati,APS University, Research Journal **1**,157-164, (2004), ISSN No. 0876-9986.

12. A Report on Variational trends of cosmic ray intensity on different Neutron Monitor stations.

 **C.M. Tiwari** and D. P.Tiwari

Vindhya Bharati,APS University, Research Journal 1(3), 44 - 47, (2005), ISSN No. 0876-9986.

13. Daily variation in cosmic ray intensity for the period 1991 to 2004

 G. K. Pandey, **C. M. Tiwari** and Pankaj K. Shrivastava

 Vindhya Bharati,APS University, Research Journal **2**, 29-33 (2004), ISSN No. 0876-9986.

14. Variational Characteristics of Diurnal Anisotropy on Day-To-Day Basis

 **C. M. Tiwari** and D.P. Tiwari

Vindhya Bharati, APS University, Research Journal **2(2)**,19-22 (2006), ISSN No. 0876-9986.

15. Study of Variational Characteristics of cosmic ray daily variation.

 **C. M. Tiwari**, R.K. Tiwari and Manoj K. Pandey

Acta Ciencia Indica,  **XXXII** (3), 351-356, (2006), ISSN No. 0253-732X.

16. Comparative study of diurnal variation observed at high and low cut-off rigidity stations.

 G.K. Pandey, **C.M. Tiwari** and D.P. Tiwari

 Acta Ciencia Indica, **XXXII** (3), 373-375, (2006), ISSN No. 0253-732X.

17. A study on P-N homojunction solar cell.

 A.K. Saxenaand **C. M. Tiwari**

 Vindhya Bhari research journal APS University, **1** (10), 135-141Rewa (2010), ISSN No. 0876-9986.

18. Computer based study on long-term cosmic ray modulation and its solar terrestrial relationships.

 **C.M. Tiwari,** D.P. Tiwari, R.K. Tiwari, Bharat Mishra and Shailendra Singh

 Research J. of Social & life Sciences, 10, June, 591-593 (2011), ISSN No. 0973-3914.

19. Short-term variation of solar activity and Forbush decrease.

 C.M. Tiwari

 **Vindhya bharati, A.P.S. University, Research Journal,** 1(12)**, 29-31 (2012),** ISSN No. 0876-9986.

20. Long term relationship between geomagnetic and solar activity parameters.

 R.K. Tiwari, **C.M. Tiwari** and Lalji Tiwari

 J. Pure Appl. & Ind. Phys Vol. **3**(3), 221-224 (2013), ISSN No. 2229-7596.

21. Association of solar activity parameters for the solar cycle-24.

 A.C. Pandey and **C.M. Tiwari**

 Vindhyan Journal of Basic Sciences, **1 (G)** 24-27, Aug. (2013), ISSN No.2348-1285.

22.Long-term modulation of cosmic ray intensity in relation to solar parameters.

 A.C. Pandey, **C.M. Tiwari** and Chetna Tiwari

 Vindhyan Journal of Basic Sciences, **2 (G)** 17-18 (2014), ISSN No.2348-1285.

23. Comparative study of solar indices during solar cycles 21 to 23.

 **C.M. Tiwari,** A.C. Pandey, and Lalji Tiwari

 Vindhyan Journal of Basic Sciences, 4(G),36-38, (2014), ISSN No.2348-1285.

24. Geomagnetic storm event occurred 6th August 2011 and associated phenomena

Devendra Kumar Bajpai, Achyut Pandey, **C M Tiwari**, Purushottam Kumar and Bharti Nigam

Vindhya Bharti(Multi-disciplinary research journal),APS University, Rewa(M.P.),29-32, (2018), 16, vol.II, ISSN:0976-9968.

25. Heliospheric effect on sunspot area during ascending phase of solar cycle

 Prithvi Raj Singh, D K Pathak, Shabir Ahmad, AK Saxena and **C M Tiwari**

Vindhya Bharti(Multi-disciplinary research journal),APS University, Rewa(M.P.),33-35, (2018), 16, vol.II, ISSN:0976-9968.

26. Comparative study of solar cycle 23 to 24

 AP Tiwari, A K Saxena and **C M Tiwari**

Vindhya Bharti(Multi-disciplinary research journal),APS University, Rewa(M.P.),40-42, (2018), 16, vol.II, ISSN:0976-9968.

27. Study of solar flare in ascending and descending phase of solar cycle 24

 Bharti Nigam, V K Pathak, Pramod Ku. Chamadia and **C M Tiwari**

Vindhya Bharti(Multi-disciplinary research journal),APS University, Rewa(M.P.),43-46, (2018), 16, vol.II, ISSN:0976-9968.

28. Correlative study of different solar energetic particle emission during solar cycle 23 & 24

 Archana Pandey, A K Saxena and **CM Tiwari**

Vindhya Bharti(Multi-disciplinary research journal),APS University, Rewa(M.P.),51-53, (2018), 16, vol.II, ISSN:0976-9968.

29. Variation of solar parameters during odd and even solar cycles

 **CM Tiwari**, AC Pandey, DK Pathak Lalji Tiwari and AP Mishra

 VINDHYAN, (2020), vol 21, ISSN- 2249-1988.

30. Solar Plasma related to Geomagnetic Disturbance storm time during solar cycles 22 & 23.

 PR Singh, S Ahmad, AK Saxena, **CM Tiwari** and SL Agrawal

 IJRSP (2021), vol 50, 156-162.

31. The study of Geomagnetic storms with solar wind and IMF parameters during solar cycle 24.

 Vidya Sagar Chaydhary, Sri Krishna Singh, Bhanu Pratap Singh, **C. M. Tiwari**, GN Singh, AK Saxena,

 Journal of Asiatic Society of MUMBAI, (2023),Vol XCVL 21, ISSN: 0972-0766.

**Proceedings of National Conference:**

1. Tri-diurnal component of Cosmic Ray daily variation during ascending phase of solar cycle 23.

 M.P. Mishra, **C.M. Tiwari,** Pankaj K. Shrivastava and D.P. Tiwari

 Proc. of Plasma Allied Publishers Pvt. Ltd., 190-192, (2005).

2 Study of day to day anisotropic variation of cosmic ray intensity.

 **C.M. Tiwari,** D.P. Tiwari and Pankaj K. Shrivastava

 Proc. of Plasma, Allied Publishers Pvt. Ltd., 187-189, (2005).

3. The effect of major solar out on geomagnetic activity

 C.P. Pandey, D.P. Tiwari, **C.M. Tiwari** and P. K. Shrivastava

 Proc. of National Seminar on solar activity and cosmic ray modulation, 57-59 (2010).

4. Study of coronal mass ejection and their effect on geomagnetic activity and cosmic ray intensity

 C.P. Pandey, D.P. Tiwari, **C.M. Tiwari** and Devendra Sharma

 Proc. of National Seminar on solar activity and cosmic ray modulation, 82-85 (2010).

5. Short-term variability of solar activity with Forbush decreases.

 Devendra Sharma, Lalji Tiwari, C.P. Pandey, **C.M. Tiwari** and A.K. Saxena

 Proc. of National Seminar on solar activity and cosmic ray modulation, 86-89 (2010).

6 A Stiff image registration problem applying genetic Algorithm.

 Nidhi Mishra, U.P. Singh, R.K. Tiwari and **C.M. Tiwari**

 Proc. of Recent advances in Environmental Management and Biotechnology, New. Science College, Rewa, 64-66, (2013), ISSN No. 978-81-928063-2-7.

7. A correlative study between various solar and geomagnetic parameters:

 Balendra Pt. Singh, Achyut Pandey, P.K. Shrivastava, R.K. Tiwari and **C.M. Tiwari**

 Proc. of National Seminar on Solar Plasma Processes of Cosmic ray modulation, New Science College, Rewa 48-49, Feb 8-9, (2014), ISSN No. 13:978-81-928063-5-8 .

**List of Symposium/Seminars/ attended**

1. Participated in intellectual property right workshop, held at A. P.S. University, Rewa Dec.04, (1999).

2. Study of correlated variations between various harmonics of the daily variations of cosmic rays.

 Sant. P., Agrawal and **Chandra Mani Tiwari**

 XII National Space Science Symposium held at Barkatullah University, Bhopal Feb. 25–28, DS3-2.10, 365, (2002).

3. Study of Amplitude and phase variations between high and low latitude neutrons.

 **Chandra Mani Tiwari**, Sant. P., Agrawal and D. P. Tiwari

 XII National Space Science Symposium held at Barkatullah University, Bhopal Feb. 25–28, DS3-2.11, 367, (2002).

4. Study of diurnal variation of galactic cosmic radiation at neutron monitor energies,

 **C. M. Tiwari ,** D. P. Tiwari , Pankaj K. Shrivastava, Ajay K. Pandey and V.K. Mishra

 18th National symposium on Plasma Sci. & Tech. held at Mesra Ranchi, SAP-15, 121, during Dec.8-11,168, Plasma-(2003).

5. Study of cosmic ray diurnal semi-diurnal anisotropy with geomagnetic disturbance index Ap,

 **C. M. Tiwari** , D. P. Tiwari , Pankaj K. Shrivastava, Ajay K. Pandey and V.K. Mishra

 18th National symposium on Plasma Sci. & Tech. held at Mesra Ranchi SAP-14, 121 during Dec, 8-11,167, Plasma-(2003).

6. Effect of coronal green lines (coronal index) on cosmic ray intensity variations.

 V K Mishra C M Tiwari and D.P. Tiwari

 18th National symposium on Plasma Sci. & Tech. held at Mesra Ranchi, SAP-9, 119, during Dec.8-11, Plasma-(2003).

7. Cumulative Effect of Forbush-decreases in Long-Term Modulation of Cosmic Rays

 V. K. Mishra, **C.M. Tiwari** and D.P. Tiwari

 XIII National Space Science Symposium held at Kottayam, Kerala 3 SEC-03, 105, during Feb., 17-20, (2004).

8. Effect of Solar Flares in the Modulation Process of Cosmic Rays for Solar Cycles 21 and 22

 D. P. Tiwari, **C. M. Tiwari** and V.K. Mishra

 XIII National Space Science Symposium held at Kottayam, Kerala, 2, SPP-13, 63, during Feb., 17-20, (2004).

9. Anomalous Responses of Cosmic Ray Anisotropy during Different Phases of the Solar Cycle during 1993 and 1994 in Cosmic Ray Variation

 **C.M. Tiwari**, A.K. Pandey, G.K. Pandey D.P. Tiwari, S.K. Nigam and Sant P. Agrawal

XIII National Space Science Symposium held at Kottayam, Kerala 3, SEC-05, 105, during Feb., 17-20, (2004).

10. Association of Solar flares with SSCs and Forbush decreases of Cosmic ray intensity.

 Neelam Singh, D.P. Tiwari, **C.M. Tiwari** and Pankaj K. Shrivastava

 XIII National Space Science Symposium held at Kottayam, Kerala 2 SPP-12, 63, during Feb., 17-20, (2004).

11. Study of day-to-day anisotropic variation of cosmic ray intensity.

 **C.M. Tiwari**, A.K. Pandey, D.P. Tiwari, M.P. Mishra, V.K. Mishra and Pankaj K. Shrivastava,

 19th National symposium on Plasma Science & Tech. held at Bundel khand University, Jhansi, during Dec.7-10, Plasma, (2004).

12. Effect of solar wind plasma stream on cosmic ray daily variation.

 **C. M. Tiwari,** G.K. Pandey and M.P. Mishra

19th National symposium on Plasma Science & Tech. held at Bundel khand University, Jhansi, during Dec.7-10, Plasma, (2004).

13. Tri-diurnal component of cosmic ray daily variation during ascending phase of solar Cycle 23.

 M.P. Mishra, **C. M. Tiwari**, Pankaj K. Shrivastava and D.P. Tiwari

 19th National symposium on Plasma Science & Tech. held at Bundel khand University, Jhansi, during Dec.7-10, Plasma-(2004).

14. Correlative study of different solar parameters with sunspot numbers.

 V.K. Mishra, D.P. Tiwari, **C.M. Tiwari,** Meera Gupta and S.P. Agrawal

 National Seminar on Solar Terrestrial Physics, APS Univ. Rewa, Nov.30-Dec.01,(2004).

15. A recent report on daily variation of cosmic ray intensity.

 **C.M. Tiwari**, D.P. Tiwari and Ajay K. Pandey

 National Seminar on Solar-Terrestrial Physics, APS Univ. Rewa Nov.30-Dec.01, (2004).

16. Study of anomalies on anisotropic variation in cosmic ray intensity.

 D.P. Tiwari, **C.M. Tiwari,** V.K. Mishra and M.P. Mishra

 National Seminar on Solar- Terrestrial Physics, APS Univ. Rewa Nov.30-Dec. 01, (2004).

17. Magnetic cloud effects on cosmic ray intensity 1995 to 2000.

 M.P. Mishra, Pankaj K. Shrivastava, D.P. Tiwari and **C.M. Tiwari**

 National Seminar on Solar- Terrestrial Physics, APS Univ. Rewa Nov.30-Dec. 01, (2004).

18. Effect of solar wind plasma on cosmic ray diurnal anisotropy variation during 1986 to 1996.

 M.P. Mishra, D.P. Tiwari, **C.M. Tiwari** and Chandra Prabha Verma

 National Seminar on Solar Terrestrial Physics, APS Univ. Rewa, Nov.30-Dec. 01, (2004).

19 Paper presented in 74th Annual Session of the National Academic of Sciences, Dec.2-4.2004, Jaipur, Rajasthan, India

20. Paper presented in 75th Annual Session of the National Academic of Sciences, Dec.8-9.2005, Pondicherry India.

21. Relationship between solar activity and anisotropies of Cosmic Ray daily variation.

 **C. M. Tiwari** and D.P. Tiwari

 29th National Symp on Plasma Sci. & Techno. SAE, during Dec.2-5, Cochin University, Plasma (2005).

22. Study of long-term variation of daily variation in cosmic ray intensity.

 G. K. Pandey, **C. M. Tiwari** and D. P. Tiwari,

 29th National Symp. on Plasma Sci. & Techno. SAE during Dec.2-5, Cochin University, Plasma (2005).

23. Attended and presented papers in ICRC Aug. 3-10,2005 Pune, India.

24. Relationship between diurnal anisotropy from high and low cut-off rigidities stations

 **C. M. Tiwari** and D.P. Tiwari

 XIV National Space Science Symposium held at Visakhapatnam, during 9-12, 3 AA-44, 132, February (2006).

25. Study of solar wind plasma stream on cosmic ray daily variation.

 D. P. Tiwari and **C. M. Tiwari**

 XIV National Space Science Symposium held at Visakhapatnam, during 9-12, 3AA-45, 133, February (2006).

26. Anomalous changes in cosmic ray daily variation at neutron monitor energies with approaching solar minimum.

 **C. M. Tiwari** and Sant P. Agrawal

XIV National Space Science Symposium held at Visakhapatnam, during 9-12, 3 AA-43, 132, February (2006).

27. Study of diurnal and semi-diurnal variations on a day-to –day basis during 2004-2005.

 G.K. Pandey, A.K. Pandey and **C.M. Tiwari**

 XIV National Space Science Symposium held at Visakhapatnam, during 9-12, 3 AA-21, 126, February (2006).

28. Study of long-term variability with solar parameters and Cosmic Ray Intensity.

 Neelam Singh, **C. M. Tiwari**, Pankaj K. Shrivastavaand D. P. Tiwari

 XIV National Space Science Symposium held at Visakhapatnam, during 9-12, 3 AA-20, 126, February (2006).

29. Attended National Seminar on Polymer Science: Emerging Trends, held at Dept of Chemistry, Govt. Girls P.G. College, Rewa (M.P), Oct. 27-28, (2006).

30. Study of High Energy Cosmic Ray Anisotropies with Solarand Geomagnetic Disturbance Index.

 **C. M. Tiwari** and D.P. Tiwari

 XV National Space Science Symposium held at NCRA-TIFR Ooty, during 26-29, February (2008).

31. Variability of cosmic ray diurnal variation in conjunction with solar and interplanetary parameter during solar cycle 23.

 **C. M. Tiwari**, G. K. Pandey, M. P. Mishra and D. P. Tiwari

XV National Space Science Symposium held at NCRA-TIFR Ooty, during 26-29, February (2008).

32. Comparative Study of Magnetic Cloud Event of October 1995 with Magnetic Cloud Event of July (1996).

 M.P. Mishra, **C.M. Tiwari,** Pankaj K. Shrivastava and D.P. Tiwari

 XV National Space Science Symposium held at NCRA-TIFR Ooty, during 26-29, February (2008).

33. Participated in workshop on Educational Reforms (Semester System & Vision 2020) held at A.P.S.U. (2008).

34. Association of first two components of Cosmic ray anisotropic variation with solar and geomagnetic indices**.**

 **C. M. Tiwari** D. P. Tiwari, and Pankaj K. Shrivastava

16th National Space Science Symposium (Nsss-2010) Surashtra University Rajkot (Gujarat), February 24- 27, (2010).

# 35. Study of Coronal Mass Ejection and their effect on geomagnetic activity and Cosmic Ray Intensity.

 C.P. Pandey, D. P. Tiwari, **C. M. Tiwari** and Devendra Sharma

 National Seminar on Solar Activity and Cosmic Ray Modulation, Govt. P.G. College Satna (M.P.) Oct. 9-10, (2010).

36. The effect of major solar output on geomagnetic activity.

 C.P. Pandey, D.P. Tiwari**, C.M. Tiwari** and P.K. Shrivastawa,

 National Seminar on Solar Activity and Cosmic Ray Modulation, Govt. P.G. College Satna (M.P.) Oct. 9-10, (2010),

37. Short-term variability of solar activity with Forbush decreases.

 Devendra Sharma, Lalji Tiwari, C. P. Pandey, **C. M. Tiwari**, and A. K. Saxena

 National Seminar on Solar Activity and Cosmic Ray Modulation, Govt. P.G. College Satna (M.P.) Oct. 9-10, (2010).

38. Participated in workshop and delivered talk on Application of Space technology for development of Vindhya region held at APS University, Rewa on 16 April (2010).

39. Average characteristics of diurnal component of cosmic ray daily variation for the period of solar cycle 23.

 **C. M Tiwari**, Pankaj K. Shrivastava, Brijesh Singh and D. P. Tiwari

 17th National Space Science Symposium (Nsss-2012), S.V. University, Tirupati, February 24-27, (2012).

40. Study of anisotropic variation of cosmic ray intensity with Sunspot numbers.

 Devendra Sharma, A. K. Saxena, Lalji Tiwari and **C. M. Tiwari**

 17th National Space Science Symposium (Nsss-2012), S.V. University, Tirupati, February 24-27, (2012).

41. Study of long-term cosmic ray modulation in relation with geomagnetic field variation.

 Bharat Mishra,**C.M. Tiwari**, A. K. Saxena and D.P. Tiwari

 17th National Space Science Symposium (Nsss-2012) S.V. University, Tirupati, February 24-27, (2012).

42. Variability of solar activity and their long-term relationships with Cosmic Rays during solar cycle 23.

 Lalji Tiwari, Devendra Sharma, **C. M. Tiwari** and D. P. Tiwari

 17th National Space Science Symposium (Nsss-2012) S.V. University, Tirupati, February 24-27, (2012).

43. Study of Forbush decreases with solar activity for the solar cycles 22 and 23.

 Devendra Sharma, Lalji Tiwari, **C. M. Tiwari**, and A. K. Saxena

 Paper presented in National Seminar on CR Modulation in Inner Heliospher. Dept. of Physics, Govt. Model Sci. College, Rewa (M.P.), Feb.9-10, (2013).

44. Cosmic Ray intensity decreases in relation with solar wind disturbances

 **C. M. Tiwari**

 Paper presented National Seminar on Recent trends in Mathematical Science and Application, , Govt PG College, Panna, 4-5 Nov. (2012).

45. Study of long-term cosmic ray modulation in relation with geomagnetic field variation for the solar cycle 23

**C. M. Tiwari**,R. K. Tiwari, A. K. Saxena and D.P. Tiwari

 Paper presented in National Seminar on CR Modulation in Inner Heliospher.

 Dept. of Physics, Govt. Model Sci. College, Rewa (M.P.), Feb.9-10, (2013).

46. Anomalous Behaviour of Cosmic Rays during Solar Cycle 23.

 **C. M. Tiwari**, R. K. Tiwari and D. P. Tiwari

 Paper presented in National Seminar on Cosmic Ray Modulation in Inner Heliospher.

 Dept. of Physics, Govt. Model Sci. College, Rewa (M.P.), Feb.9-10, (2013).

47. Comparative study of odd and even solar cycles at solar minimum.

 G.K. Pandey, **C.M. Tiwari**, Nishant Khare and V.K. Mishra

 Paper presented in National Seminar on Cosmic Ray Modulation in Inner Heliospher,

 Dept. of Physics, Govt. Model Sci. College, Rewa (M.P.), Feb.9-10, (2013).

48. Comparative Study of odd and even solar cycles.

 **C.M. Tiwari**

 Attended and presented paper in Seminar on recent trends in Science, held at Govt. TRS College, Rewa, Aug. 7, (2013).

49. A Stiff image registration problem applying genetic Algorithm.

 Nidhi Mishra, U.P. Singh, R.K. Tiwari and **C.M. Tiwari**

 Paper presented in VIII National Conference on Biotechnology, Biodiversities & Environment.

 Govt. M.S. Golwarkar College, Rewa (M.P.), April 19-20, (2013).

50. Cosmic ray intensity decreased in relation with solar wind disturbances.

 Attended National Seminar on Recent trends in Mathematical Science & Application

 Organized by Dept. of Mathematics Chhatrasal Govt. PG College, Panna (M.P.), Nov. 4-5, (2012)

51. Comparative Study of odd and even solar cycles.

 **C.M. Tiwari**

 Paper presented National Seminar on Solar Plasma Processes and Cosmic Ray Modulation, held at New Science, College Rewa (M.P.), 8-9 Feb. (2014).

52. Attended and presented invited talk in International workshop on Computer forensics Bhoutiki avam Computer Vigyan Parishad Govt. TRS College Rewa Aug. 6, (2013).

53. Effect of Interplanetary disturbances on the Earth environment

 **C.M.Tiwari**, A.C.Pandey and A.P.Mishra

 Paper presented International Conference on Space and Plasma Science 22-24 Sept.Maihar, (ICSPS-2015)

54 National Seminar On Solar Plasma Processes And Comic Ray Modulation

 Govt. M.S. Golwarkar College, Rewa (M.P.), Feb 8-9, (2014).

55. International conference on space and plasma science

 Held at Dept. of physics Govt. Vivekanand P.G.College Maihar Satna(M.P.) 2015.

56. Attended Seminar on Dignity in Mental Health at APS University Rewa(M.P) Oct 2015

57. Attend 30th National symposium on Plsma Sci. and Technology (PLASMA-2015), 1-4 Dec. 2015, Saha Institute of nuclear Phys. Kolkata.

58. Impact of solar variability on geomagnetic field

 Delivered invited talk in National conf. on recent trends in applied science and technology (NCRTAST -2016), Bhopal, May 6-7, 2016

59. Study of coronal mass ejection during solar cycle 24.

 Attend and presented paper in Int. Conf. on recent trends in Mathematical science and cosmology, Dec. 17-18, 2016.

60. High energy cosmic ray intensity anisotropies with solar activity.

 Paper presented in Nat. Seminar on energy harvesting, storage and recycling, MGG Vishwavidyalaya, Chitrakoot (M.P.), March 30-31, 2017.

61. Long-term modulation of Cosmic Rays

 **C.M. Tiwari**

Int. Conf. on Recent advances in Engineering and Management (ICRAESM)August, 11-12,(2017), SEMS & VITS, Satna.

62 Heliospheric effect on sunspot area during ascending phase of solar cycle 22-24.

 Paper presented in Nat. conference on Recent trends in space science and Nano materials, sponsored by MPCST, Bhopal, Organized by Dept. of Phys. APS University, Rewa (M.P.), March 26-27, 2018.

63. Paper presented in Nat. conference on Effect of Space Environment on Blue Planet, Organized by Dept. of Phys. Govt T. R. S. College, Rewa (M.P.), April 22-23, 2018.

64. Attended various webinars during covid period from 2019 to 2020.

65. Attended and presented research paper in National Conference at PG College Panna and PG College Satna (M.P.) 2023.

**List of Workshop Attended**

1. Participated in Joint training program on Maintenance of Electronic Instruments, held at USIC, A. P.S. University, Rewa **July.5-10, (2004).**

2. Participated in DST sponsored workshop on Fundamentals and Applications of Plasmas held at Dept. of applied Physics Smart Ashok Technological Institute, Vidisha, M.P., **Feb.19-24, (2007)**.

3. Participated and attended in Faculty development programme in entrepreneurship (CRISP) sponsored by NSTEDB, Department of Science & Technology Govt. of India, New Delhi at Christukala Womens English medium College, Satna, M.P., 29/12/2016 to09/01/**2017(two week)**.

4. Participated in one day workshop on SPSS 25, jointly organized by Dept. of Computer Application and Dept. of Business Administration, A. P.S. University, Rewa August, 02**, (2018).**

**(Dr. Chandra Mani Tiwari)**