

CHHAVI P. PANDEY
WIHG, DEHRADUN, INDIA

RESEARCH GROUP: GEOPHYSICS

FIELD OF SPECIALIZATION: ATMOSPHERIC SCIENCE, AIR POLLUTION, TIME SERIES ANALYSIS, STATISTICAL DATA PROCESSING.

EDUCATION: PhD (PHYSICS)

PROFESSIONAL EXPERIENCE:

SCIENTIST ‘D’ (WADIA INSTITUTE OF HIMALAYAN GEOLOGY, DEHRADUN)
JANUARY 2024 – PRESENT

SCIENTIST ‘C’ (WADIA INSTITUTE OF HIMALAYAN GEOLOGY, DEHRADUN)
SEPTEMBER 2019 - DECEMBER 2023

SCIENTIST ‘B’ (WADIA INSTITUTE OF HIMALAYAN GEOLOGY, DEHRADUN)
AUGUST 2015 - AUGUST 2019

VISITING POSITIONS:

Visiting scholar at Department of Physics, May 15 - July 15, 2009, University of Konstanz, Konstanz, Germany.

TEACHING EXPERIENCE:

ASSISTANT PROFESSOR (AD-HOC)

DEPARTMENT OF PHYSICS,

KANYA GURUKUL CAMPUS,

GURUKUL KANGRI VISHVAVIDYALAYA, HARIDWAR

AUGUST - NOVEMBER 2014

AUGUST - NOVEMBER 2013

AUGUST - NOVEMBER 2012

GUEST FACULTY

JANUARY - APRIL 2014

JANUARY - APRIL 2015

SERVICES:

a. Supervision/Guidance to Ph.D. Students: Two students completed Ph.D. (under co-supervision)

b. Training:

M.Sc. Dissertation: 6 (six)

Summer Trainee: 10 (six)

c. Teaching:

d. Membership:

- Life member of “National Radon Network Society” (RADNET), SRT Campus, HNB University, Tehri Garhwal, Uttarakhand, India.
- Life member of “The association of Physics Teachers” (IAPT), Kanpur, Uttar Pradesh India.
- Life member “Himalayan Geology”.

e. Editorial Board:

f. International/National Seminars/Workshop:

- i) 3rd International Conference on Recent Advances in Mathematical Sciences and its Applications (RAMSA) January 17-19, 2019, Department of Mathematics, Jaypee Institute of Information Technology, Noida, India.
- ii) International Conference on Climate Change and Disaster Risk Reduction, October 26-28, 2018, H.N.B. Garhwal University S.R.T. Campus, Tehri, Uttarakhand, India.

- iii) International Conference on Aerosol, Air Quality & Climate Change on Himalayan Region of Uttarakhand (AAC-2018), October 21-23, 2018, H. N. B. University, Srinagar Garhwal, Uttarakhand, India.
- iv) Refresher Course on Landslide Studies and Earthquake Geology, March 19-23, 2018, Regional Training Institute, Northern Region, Dehradun, India.
- v) 2nd International Conference on Recent Advances in Mathematical Sciences and its Applications (RAMSA) December 12-14, 2017, Department of Mathematics, Jaypee Institute of Information Technology, Noida, India.
- vi) National Workshop on Earthquake safety in Himalaya, November 21-22, 2017, Dehradun, India. • XXXII Annual IAPT Convention 2017, Oct 29-31, 2017 GKV Haridwar & IAPT, RC-5, Haridwar, India.
- vii) 2nd Second National Conference on Radon Awareness and Detection in Natural Environment (RADNET II), September 25-27, 2017, Gurukul Kangri Vishwavidyalaya, Haridwar, India.
- viii) Bhartiya Vigyan Sammelan and Expo, May, 11-14, 2017, Fergusson College, Pune India.
- ix) Geophysical Software Practices for Subsurface Imaging, December 12-17, 2016, Department of Applied Geophysics, Indian Institute of Technology (ISM), Dhanbad, Jharkhand, India.
- x) 2nd India International Science Festival December 7-11, 2016, National Physical Laboratory, New Delhi.
- xi) Low cost experiments and Hands on training in Physics September 19-20, 2016, Gurukul Kangri University, Haridwar, India.
- xii) 1st India International Science Festival December 4-8, 2015, New Delhi, India.
- xiii) International Workshop on Stellar Spectral Libraries December 5-9, 2011, University of Delhi, India.
- xiv) Recent Trends in Micro and Macro Physics October 12-13, 2011, Govt. PG College, Gopeshwar, Uttarakhand, India.
- xv) Workshop on Rapidly Oscillating Ap stars February 25 - March 3, 2012, Institute Fur Astrophysik. Vienna, Austria.
- xvi) VAMDC Annual Meeting February 21-24, 2012, University of Vienna, Vienna, Austria.
- xvii) Visited OAC Mountain Observing Station, August 2-20 2008, Mario G. Fracastoro, Catania, Italy.
- xviii) Summer School in Cosmology, July 21 - August 1 2008, International Centre for Theoretical Physics (ICTP), Italy.
- xix) 11th Young Astronomers' Meet, January 3-5, 2008, School of Pure and Applied Physics, Mahatma Gandhi University, Kottayam, India.
- xx) The Indian Institute of Astrophysics-Penn State University Astrostatistics School, July 2-7, 2007, Kavalur, Tamilnadu, India.
- xxi) International Workshop on Theoretical High Energy Physics (IWTHEP) March 15-20, 2007, Roorkee, India.
- xxii) The XXVth Meeting of the Astronomical Society of India, February 7-9, 2007, Department of Astronomy, Osmania University, Hyderabad, India.
- xxiii) 10th Young Astronomers' Meet, January 3-5, 2007, Indian Institute of Astrophysics, Bangalore, India.
- xxiv) High Energy Physics Symposium, December 11-15, 2006 Department of Physics & Meteorology, IIT Kharagpur, India

xxv) Recent Trends in the Fluorescence Spectroscopy and its Application, December 1-3, 2005, Department of Physics, Kumaun University, Nainital, India.

g. External Research Fund received & Project Handled:

h. Member of important Committees:

a. Awards/Medals/Prizes:

- “7th Himalayan Nari Shakti Samman”, on International Women’s day 2025, organized by Divya Himgiri and Uttarakhand State Education & Research Centre, Department of Information Technology, Good Governance & Science Technology, Govt. Of Uttarakhand, India.
- “Young Scientist Award” for best oral presentation, (category II) under the discipline Environment Science and Forestry during 14th Uttarakhand State Science and Technology Congress 2019-2020.”

b. Fellowships:

- Junior & Senior research fellow (JRF/SRF) January 2006 - July 2008.
(Aryabhatta Research Institute of Observational Sciences, Nainital)

c. Memorial/Invited Lectures:

- i. Invited two lectures entitled “Installation of R Packages, extreme value theory & Hands on training on data sets” during workshop on Data Analytics using Advanced Mathematical Tools, Faculty of Engineering and Technology, Gurukul Kangri (Deemed to be university) in collaboration with Uttarakhand Science Education & Research (USERC), 13-18, March, 2023.
- ii. Invited lecture (online) entitled “Climate Change and Sustainable Development”, during National Science Day, ICFAI University, Dehradun, India, Feb. 28, 2022.
- iii. Invited lecture (online) entitled “Black Carbon Air Pollutants and Climate Change”, during ID Refresher Course on Environmental Protection & Disaster Management

- ,UGC- Human Resource Development Centre, Gauhati University, Guwahati, Dec. 01, 2021.
- iv. Invited lecture (online) entitled “Effect of Himalaya on India’s Climate: with special reference to BC Air Pollutants” during One day workshop on Modern research Areas in Physics, Dept. of Physics, Manipal Institute of Technology, Manipal, Karnataka, India, Nov. 16, 2021.
 - v. Invited lecture (online) entitled “Short Lived Climate Pollutants and our Environment”, during National Conference on Advances in Theoretical Physics, Material and Atmospheric Sciences, VSKC Govt. PG College, Vikasnagar, Dehradun, Uttarakhand, July 16, 2021.
 - vi. Invited lecture entitled “Black carbon air pollutants in our environment: causes, effects, and mitigation strategies”, organised by Vigyan Prasar, Department of Science and Technology, Govt. of India, 9 Feb 2021.
 - vii. Invited lecture entitled “Hamari prithvi ka jeevandayi aanchal: vegyanik drishti se”, Hindi Pakhwara organised by WIHG, 21 Sep 2020.
 - viii. Invited lecture entitled “Journey of black carbon towards Himalayan Cryosphere”, Himalayan Divas organised by WIHG, 09 Sep 2020.

d. Recognition/Honors:

- Recognized as Assistant Professor by the Academy of Scientific & Innovative Research (AcSIR) for conducting Ph.D. (since 06 Oct, 2021)

COUNTRIES VISITED: ITALY, GERMANY, AUSTRIA.

NATIONAL/INTERNATIONAL COLLABORATION:

Inside WIHG Collaborator:

PATENT -- NA --

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PH.D. ADVISOR: CURRENTLY TWO STUDENTS ARE REGISTERED UNDER CO-SUPERVISION

PROF SHUCHI BISHT

DEPARTMENT OF PHYSICS
DSB CAMPUS,
KUMANUN UNIVERSITY, NAINITAL,
UTTARAKHAND

DR. B. B. SANWAL

SCIENTIST (Retd.)
ARYABHATTA RESEARCH INSTITUTE OF OBSERVATIONAL SCIENCE
(An autonomous institute under the Department of Science and Technology, Govt. of India)
MANORA PEAK, NAINITAL
UTTARAKHAND

LIST OF PUBLICATIONS

(a) SCI Papers

1. Shrivastava, A., ***Pandey, C. P.**, (2024). Optical and Physico-chemical Characteristics of Ambient Aerosols Along Gangotri Glacier Valley in Western Himalaya, India. *Aerosol Science and Engineering* 1-13. **(IF 1.86)**
2. Ahuja, V., ***Pandey, C. P.**, Joshi, L. K., Nandan, H., Pathak, P. P. (2024). Extreme value analysis of precipitation and temperature over Jammu & Kashmir and Ladakh in western Himalaya, India. *MAUSAM*, 75(1), 149-180. **(IF 0.906)**
3. Ahuja, V., ***Pandey, C. P.**, Joshi, K. L., Nandan, H. Pathak, P. P., Statistical modeling of century-long precipitation and temperature extremes in Himanchal Pradesh, India generalized extreme value approach and return level estimation, *Indian Journal of Physics*. **(IF 2.0)**
4. Singh, A., ***Pandey, C.P.**, Nandan, H., Semwal. P., Variation of AIRS-Retrieved CO₂ over Uttarakhand, India, During 2010–2017. *J Indian Soc Remote Sens* **51**, 1553–1564 (2023). **(IF 2.5)**
5. Singh, A., Deep, A., ***Pandey, C.**, & Nandan, H. (2023). Comparative study of gaseous pollutants for major cities in foothills of Garhwal Himalaya of Uttarakhand. *MAUSAM*, 74(1), 57-72. **(IF 0.906)**

6. Amarjeet, Sharma, V., **Pandey, C.**, Gupta, A., Chakraborty, A. (2023). Study of moisture flux over Uttarakhand State: signature of cloud bursts. *Climate Dynamics*. 3. 10.1007/s00382-023-06859-8. (IF 4.6)
7. ***Pandey, C.P.**, Ahuja, V., Joshi, L.K. Nandan, H., Extreme value analysis of precipitation and temperature over western Indian Himalayan State, Uttarakhand. *J Earth Syst Sci* **132**, 48 (2023) (IF 1.9).
8. Anil Tiwari, Kalachand Sain, Amit Kumar, Jyoti Tiwari, Ajay Paul, Naresh Kumar, Chinmay Halder, Sushil Kumar, **Chhavi P Pandey**, (2022) Potential seismic precursors and surficial dynamics of a deadly Himalayan disaster: an early warning approach. *Sci Rep* **12**, 3733 (2022). (IF - 4.6)
9. ***Pandey, C. P.**, Negi, P. S. , (2022) Characteristics of equivalent black carbon aerosols over Doon Valley in NW Indian Himalaya during COVID-19 lockdown 2020. *Environ Monit Assess* **194**, 229. (IF – 3.307)
10. Negi, P. S., ***Pandey, C. P.** (2021) Black carbon pollutants in pristine Himalayan ecosystem: a pilot study along Gangotri Glacier Valley. *Environ Monit Assess*. Oct 16;193(11):726. (IF – 3.307)
11. Deep, A., ***Pandey, C. P.**, Hemwati Nandan *et al.* (2021). Aerosols optical depth and Ångström exponent over different regions in Garhwal Himalaya, India. *Environ Monit Assess* **193**, 324. (IF – 3.307)
12. **Chhavi P. Pandey**, Jaydeep Singh, Vijay K. Soni, Narendra Singh. (2020), Yearlong first measurements of black carbon in the western Indian Himalaya: Influences of meteorology and fire emissions (in press) *Atmospheric Pollution Research*. (IF 5.755)
13. P. S. Negi, ***Chhavi P. Pandey**, Narendra Singh. (2019), Black carbon aerosol in the ambient air of Gangotri Glacier Valley in North-Western Indian Himalaya. *Atmospheric Environment*, 217.
14. Amar Deep, **Chhavi P. Pandey**, Hemwati Nandan, K. D. Purohit, Narendra Singh, Jaydeep Singh, A. K. Srivastava and Narendra Ojha. (2019), Evaluation of ambient air quality in Dehradun city during 2011-2014. *Journal of Earth System Science*, 128, 96.
15. K. Ray, P. Pandey, **C. Pandey**, A. P. Dimiri. (2019), On the recent floods in India. *Current Science*, 117,2.
16. N. Kishore, A. K. Srivastava, H. Nandan, **C. P. Pandey**, S. Agarwal, N. Singh, V. K. Soni, D. S. Bisht, S. Tiwari, Manoj K. Srivastava. (2019), Long-term (2005-2012) measurements of near-surface air pollutants at an urban location in Ind-Gangetic Basin. *Journal of Earth System Science*, 128,55

17. **Chhavi P. Pandey**, Denis V. Shulyak, Tanya Ryabchikova and Oleg Kochukhov, (2011). Abundance and stratification analysis of the CP star HD 103498 Monthly Notices of Royal Astronomical Society. 417, 444-452 (IF 5.235)
18. ***Chhavi P. Pandey**, T. Morel, M. Briquet, K. Jayakumar, S. Bisht, B.B. Sanwal. (2011), A spectroscopic study of the hybrid pulsator γ Pegasi, Communications in Asteroseismology, 162, 21.
19. ***Chhavi P. Pandey**, U. D. Goswami, H. Dehnen, S. Bisht. (2011) Anharmonic vibrations in pulsating stars, Indian Journal of Physics, 86(9):849853. (IF 2.0)
20. L. Fossati, T. Ryabchikova, D. V. Shulyak, C. A. Haswell, A. Elmasli, **C. P. Pandey**, T. G. Barnes and K. Zwintz. (2011), The accuracy of stellar atmospheric parameter determinations: a case study with HD 32115 HD 37594, Monthly Notices of Royal Astronomical Society, 417, 459–507 (IF 5.235)

(b) Non-SCI Articles

- i) **छवि पंत पांडेय**, (2024), “कुमाउँनी लोक त्यौहार : हरेला की वर्तमान परिदृश्य में सार्थकता”, अश्मिका, अंक 30, पृष्ठ सं. 83.
- ii) **छवि पंत पांडेय**, (2023), “संसार: स्वप्नतुल्यो हि”, अश्मिका, अंक 29, पृष्ठ सं. 72.
- iii) **छवि पंत पांडेय**, (2022), “ज्योतिषशास्त्र: मेरा अनुभव”, अश्मिका, अंक 28, पृष्ठ सं. 51.
- iv) **छवि पंत पांडेय**, (2021), “संख्या शास्त्र”, अश्मिका, अंक 27, पृष्ठ सं. 78
- v) **छवि पंत पांडेय**, (2020), “ब्लैक कार्बन अभिकण और हमारा पर्यावरण” अश्मिका, अंक 26, पृष्ठ सं. 21.
- vi) **छवि पंत पांडेय**, (2019), “जलवायु परिवर्तन का खगोलीय सिद्धांत”, अश्मिका*, अंक 25 पृष्ठ 17.
- vii) **छवि पंत पांडेय**, (2018), वीसैट तकनीकी व उसके अनुप्रयोग, अश्मिका, अंक 24, पृष्ठ 58.
- viii) **छवि पंत पांडेय**, (2017), मंगल ग्रह में जीवन की सम्भावना, अश्मिका, अंक 23, पृष्ठ 1.

*(राजभाषा कार्यान्वयन समिति, वाडिया हिमालय भूविज्ञान संस्थान, देहरादून द्वारा प्रकाशित वार्षिक पत्रिका)

- ix) U.D. Goswami, Hemwati Nandan, **C.P. Pandey** and N.M. Bezares-Roder, (2009) Covariant Formalism of Maxwells Equations and Related Aspects Journal of Physics Education 26, 926.
- x) U. D. Goswami, Hemwati Nandan, **C. P. Pandey** and N. M. Bezares-Roder (2008) Maxwells equations, electromagnetic waves and magnetic charges, Journal of Physics Education 25, 251.

(c) Chapter in Books -- NA --

(d) Books-authored/Edited volume: ---NA --

(e) Abstract volume:

- i) Aman Shrivastava, **Chhavi P. Pandey**, Abhishek Thakur, (2025) Understanding Elemental Characteristics of Atmospheric Aerosols using Raman Spectroscopy: A case study from Doon Valley, One-Day National Symposium on the theme “Seventy-Five Years of

Accomplishments of Mausam: Quarterly Journal of Meteorology, Hydrology, and Geophysics. pp 201-205

- ii) Abhishek Thakur, **Chhavi P Pandey**, Aman Shrivastava (2025), " Mobile Monitoring and Analysis of Black Carbon Emissions from Vehicular Sources: A Case Study in Uttarakhand Himalayas," One-Day National Symposium on the theme "Seventy-Five Years of Accomplishments of Mausam: Quarterly Journal of Meteorology, Hydrology, and Geophysics. pp 245-246.
- iii) Vineet Ahuja, **Chhavi P. Pandey**, Hemwati Nandan (2025), Study of annual rainfall patterns for North-Western Indian Himalayan Region, One-Day National Symposium on the theme "Seventy-Five Years of Accomplishments of Mausam: Quarterly Journal of Meteorology, Hydrology, and Geophysics. pp 305-309.
- iv) Surendra K. Dhaka, Sachiko Hayashida, Yutaka Matsumi, A. P. Dimri, Saumya G. Kutty, Vivek Panwar, Vinay Kumar, Narendra Singh, **Chhavi P. Pandey**, Hemwati Nandan, Ramesh P. Singh. *Measurements of PM 2.5 concentration using smart and compact sensor in Delhi NCR during 2016-2018*. International Workshop on Climate Change and Extreme Events in Himalayan Region IIT Mandi, Himanchal Pradesh, India 18-20 April 2019 pp 135.
- v) **Chhavi P Pandey**, Sanjay S Bora, Sushil Kumar, Sandeep K Chabak. *Analysis of frequency content in strong motion earthquake records using time-frequency method*. 3rd International Conference on Recent Advances in Mathematical Sciences and its Applications (RAMSA) IIIT Noida, UP, India, 17-19 Jan 2019 pp B.7.
- vi) **Chhavi P. Pandey**, P. S. Negi, Narendra Singh. *Black carbon variations over two high altitude stations in Garhwal Himalaya of Uttarakhand*. International Conference on Climate Change and Disaster Risk Reduction. Department of Geology, HNB Garhwal University, Campus Badshahi Thaul, Tehri Garhwal, Uttarakhand, India 26-28 Oct, 2018 pp 82.
- vii) P. S. Negi, **Chhavi P. Pandey**. *Investigation on Black Carbon Aerosol concentration in high Himalayan region of Gangotri Glacier Valley, Northwestern Indian Himalaya*. International conference on Aerosol, Air Quality and Climate Change on Himalayan region of Uttarakhand, HNBG Central University, Srinagar, Uttarakhand India. 21-23 Oct, 2018 pp 24.
- viii) N. Kishore, A. K. Srivastava, H. Nandan, **C. P. Pandey**, S. Agrawal, N. Singh, Amar Deep. *Long Term [2005-2012] Investigation of Air Pollutants and its Association with Meteorological Parameters at Dehradun in the Himalayan Region*. International conference on Aerosol, Air Quality and Climate Change on Himalayan region of

Uttarakhand, HN BG Central University, Srinagar, Uttarakhand India, 21-23 Oct, 2018 pp 37.

- ix) **Chhavi P. Pandey**, Abhishek Joshi, Amar Deep, Hemwati Nandan, Narendra Singh. *Study of extreme precipitation over a century in Uttarakhand, India*. International conference on Aerosol, Air Quality and Climate Change on Himalayan region of Uttarakhand, HN BG Central University, Srinagar, Uttarakhand India, 21-23 Oct, 2018 pp 165.
- x) Amar Deep, **Chhavi P. Pandey**, Hemwati Nandan, Narendra Singh, Garima Yadav, K. D. Purohit. *Long-Term Study of Aerosols Optical Depth and Ångström Exponent over Garhwal Himalayas: A Case Study of Chamoli and Dehradun Districts of Uttarakhand* International conference on Aerosol, Air Quality and Climate Change on Himalayan region of Uttarakhand., 21-23 Oct, 2018 pp 37.
- xi) Amar Deep, **Chhavi P. Pandey**, Hemwati Nandan, K. D. Purohit, Narendra Singh. *A comparative study of PM₁₀ in major cities of Uttarakhand*. *Bhartiya Vigyan Sammelan and Expo*, Fergusson College, Pune. 11-14 May 2017 pp 72.

(f) Reports/Other Documents:

(g) Articles in Proceeding Volumes

- i) Narendra Singh, Ashish Kumar, Anshumali, Chandra Prakash, **Chhavi P. Pandey (2019)**. Study on the satellite and ground based aerosol measurements over Himalayan region. URSI APRSC doi: 10.23919/URSI AP-RASC.2019.8738218.
- ii) Amar Deep, **Chhavi P. Pandey**, Hemwati Nandan, K. D. Purohit **(2018)**. *Analysis of air pollutant in Rishikesh and Dehradun city of Uttarakhand: Influence of surface meteorological parameters*. Journal of Environment and Bio-Sciences. vol. 31 (2) 459-462. ISSN: 0973-6913 (Print), ISSN: 0976-3384 (On Line)
- iii) Amar Deep, **Chhavi P. Pandey**, Hemwati Nandan, K. D. Purohit. **(2017)**, Analysis of air pollutant in Rishikesh and Dehradun city of Uttarakhand: Influence of surface meteorological parameters. J. Env. Bio-Sci: Vol. 31 (2) 459-462.
- iv) **Chhavi P. Pandey, (2017)**. Study of spectro-temporal variation in paleo-climatic marine proxy records using wavelet transformations. AIP Conference Proceedings 1897, 020019.
- v) **Chhavi P. Pandey**, Denis V. Shulyak, Tanya Ryabchikova, Oleg Kochukhov. **(2012)** Stratified abundance analysis of CP star HD 103498, ASICS, 6, 225.

(h) Contribution in Oral/Poster Presentation during Conferences/Workshop/Symposia

- i. Aman Shrivastava, **Chhavi P. Pandey**, Pinkey Bisht, Abhishek Thakur; "Morphological and Elemental Characterization of Atmospheric Aerosol in the Upper Kali Ganga Catchment, Kumaon Himalayas" organised by Wadia Institute of Himalayan Geology, Dehradun, Uttarakhand, at Pre-Congress Session of WCDM 2023, Dehradun, 24 November 2023 (Poster presenter: Aman Shrivastava) .
- ii. Abhishek Thakur, **Chhavi P. Pandey**, Aman Shrivastava, P.S. Negi; "Assessing the transport and impact of Black Carbon in high altitude regions: Implication for Global climate change and Environmental health" organised by Wadia Institute of Himalayan Geology, Dehradun, Uttarakhand, at Pre-Congress Session of WCDM 2023, Dehradun, 24 November 2023 (Poster presenter: Abhishek Thakur).
- iii. Aman Shrivastava, **Chhavi P. Pandey**; "Indoor Black Carbon Concentration Assessment from Cooking in Different Kitchens." organised by Dolphin PG institute, Dehradun, Uttarakhand, at RADNET 2023, Dehradun during 2-4 March 2023 (Poster presenter: Aman Shrivastava).
- iv. Abhishek Thakur, **Chhavi P. Pandey**, Aman Shrivastava; "Assessment of Light absorbing carbonaceous aerosols via mobile monitoring in Dehradun city." organised by Dolphin PG institute, Dehradun, Uttarakhand at RADNET 2023, Dehradun during 2-4 March 2023 (Poster presenter: Abhishek Thakur).
- v. Abhinav Singh, Amar Deep, **Chhavi P. Pandey**, Hemwati Nandan "Comparative study of particulate matter for major cities of Uttarakhand" organised by Department of Botany and Microbiology, Gurukula Kangri (Deemed to be University) Haridwar, Uttarakhand, presented in International Conference on Environment and Human Health: Global Issues during 07-08 December 2022 (Poster presenter: Abhinav Singh).
- vi. Shruti Mondal, **Chhavi P. Pandey**, Dipanwita Sengupta, Som Dutta, "Low frequency climatic variability in Northwest Himalaya and its forcing mechanisms", organized by Wadia Institute of Himalayan Geology, Dehradun presented in 3rd Triennial Congress of Federation of Indian Geosciences Association (FIGA) during 16-18 November 2022. (Poster presenter: Shruti Mondal)

- vii. Abhinay Singh, **Chhavi P. Pandey**, Hemwati Nandan and Prapti Semwal “Variations of AIRS retrieved CO₂ over Uttarakhand, India during 2010-2017” organised by Department of Physics, Manipur University, Imphal, Manipur, presented in XIII Biennial National Conference of Physics Academy of North East (PANE-2022) during 08-10 November 2022 (Poster presenter: Abhinay Singh).
- viii. Aman Shrivastava, **Chhavi P. Pandey**; "Morphological Characteristics of Black Carbon Aerosol Particles in Himalayan Foothills Dehradun, India, organised by HNB Garhwal University, Srinagar, Uttarakhand, in 2nd International Conference on Aerosol, Air Quality & Climate Change over Himalayan Region of Uttarakhand (AAC-2022) during 04-06 November 2022. (Poster presenter: Aman Shrivastava).
- ix. Abhinay Singh, **Chhavi P. Pandey** and Hemwati Nandan “A pilot study of black carbon air pollutants in Haridwar city, Uttarakhand” Department of Physics, Hemwati Nandan Bahuguna Garhwal University, Srinagar Garhwal, Uttarakhand, presented in 2nd International Conference on Aerosol, Air Quality & Climate Change over Himalayan Region of Uttarakhand (AAC-2022) during 04-06 November 2022; (Poster presenter: Abhinay Singh).
- x. Abhinay Singh, **Chhavi P. Pandey** and Hemwati Nandan “A pilot study of black carbon air pollutants in Haridwar city, Uttarakhand” Department of Physics, Hemwati Nandan Bahuguna Garhwal University, Srinagar Garhwal, Uttarakhand, presented in 2nd International Conference on Aerosol, Air Quality & Climate Change over Himalayan Region of Uttarakhand (AAC-2022), during 04-06 November 2022; (Poster presenter: Abhinay Singh).
- xi. Aman Shrivastava, **Chhavi P. Pandey**; "Study of Black Carbon Aerosol over Gangotri Glacier Valley, NW Himalayas, India." Organised by Indian Institute of Technology, Roorkee, at ICCWE 2022, during 19-20 September 2022 (Oral presenter: Aman Shrivastava).
- xii. Aman Shrivastava, **Chhavi P. Pandey**; entitled "Morphological characterization of atmospheric aerosols over Gangotri Glacier Valley." Organised by University of California, Davis and CSTEP, India at ASIC-India 2022, during 23-26 August 2022 (Poster presenter: Aman Shrivastava).
- xiii. Vineet Ahuja, **Chhavi P. Pandey**, Hemwati Nandan entitled “Extreme value analysis of precipitation and temperature over North-Western Indian Himalayan regions, Jammu &

- Kashmir and Ladakh” organised by Uttarakhand State Council for Science and Technology Congress (UCOST), held at Graphic Era (Deemed to be University), Dehradun from 22-24 June, 2022 (Oral presenter: Vineet Ahuja).
- xiv. Vineet Ahuja, **Chhavi P. Pandey**, Hemwati Nandan entitled "Statistical modeling of atmospheric parameters over North- Western Himalaya" organised by Wadia Institute of Himalayan Geology, Dehradun during July 22-23, 2021 (Oral presenter: Vineet Ahuja).
 - xv. Abhinay Singh, Amar Deep, **Chhavi P. Pandey** and Hemwati Nandan “Gaseous air pollutants over major cities in Uttarakhand in India” organised by Departments of Physics, VSKC Govt. PG College, Dakpathar, Dehradun, Uttarakhand, presented in Advances in Theoretical Physics, Material and Atmospheric Sciences during 16-17 July 2021; (Oral presenter: Abhinay Singh).
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