

## Curriculum Vitae

- 1 **Name :** **Dr. Hem Chandra Pandey**
- 2 **Present Designation :** Assistant Professor (Physics)  
(Senior Grade Pay 8000=00)
- 3 **Fathers Name :** Mr. R.C. Pandey
- 4 **Date of Birth :** 23.02.1972
- 5 **Nationality :** Indian
- 6 **Correspondence Address:** Dr. H.C. Pandey  
Head, Department of Electronics & Communication  
Engineering  
Birla Institute of Applied Sciences  
Bhimtal(Nainital), 263136  
Uttarakhand (India)

**E-mail :** [hempandey@birlainstitute.co.in](mailto:hempandey@birlainstitute.co.in)

**Mobile :** **+91 9412996069**

7 **Educational Qualification:**

Exam Passed	year	Board/University	Division
High School	1987	UP Board, Allahabad, India	I
Intermediate	1989	UP Board, Allahabad, India	I
B.Sc	1992	Kumaun University, Nainital, India	I
M.Sc.	1994	Kumaun University, Nainital, India	I
Ph.D	2003	Konstanz University, Germany and Kumaun University, Nainital, India	-----

- 8 Ph.D. Thesis :** Under **Indo-German Academic Exchange Service (DAAD)** at Kumaun University, Nainital, India and University of Konstanz, Germany.
- (i) Title :** Study of Role of Monopoles and Dyons in Dual Version of Color Gauge Theory.
- (ii) Supervisor :** **Dr. H.C. Chandola**, Department of Physics, Kumaun University, Nainital, India
- (iii) Co-Supervisor :** **Prof. Dr. H. Dehnen**, Department of Physics, Konstanz University, Konstanz, Germany.
- 9 Academic Awards/Fellowships :**
- (i) Awarded **Senior Research Fellowship (SRF)** by Council of Scientific and Industrial Research (CSIR), New Delhi, India in 2000.
- (ii) Awarded **DAAD Research Fellowship** by German Academic Exchange Service (DAAD), Germany, in 2002.
- (iii) Awarded **Senior Research Fellowship (SRF) Extended** by Council of Scientific and Industrial Research (CSIR), New Delhi, India in 2004.
- (iv) Awarded **Young Scientist Fellowship** by Department of Science and Technology (DST), New Delhi, in 2005.
- (v) Awarded Senior **DAAD Research Fellowship** by German Academic Exchange Service (DAAD), Germany, in 2008.
- 10 Teaching Experience :** **Sixteen years teaching experience in Postgraduate and Undergraduate classes**
- (i) One year (2004-2005) teaching experience at the Department of Physics, Kumaun University, Nainital, India.
- (ii) Actively engaged in teaching since 2005 at Birla Institute of Applied Sciences, Bhimtal (Nainital), affiliated with Uttarakhand Technical University, Dehradun , India

## 11 Academic/Administrative Responsibilities:

- (i) Head, Department of Electronics & Communication Engineering, Birla Institute of Applied Sciences, Bhimtal, since 2017-2020.
- (ii) Deputy Registrar, Birla Institute of Applied Sciences, Bhimtal, since 2018
- (iii) Chief Hostel Warden, Birla Institute of Applied Sciences, Bhimtal, since 2018-2020.
- (iv) Hostel Warden, Birla Institute of Applied Sciences, Bhimtal, from 2012 – 2018.
- (v) Chief Proctor. Birla Institute of Applied Sciences, Bhimtal, from 2010 - 2012.
- (vi) Member , Board of Studies (Physics), Uttarakhand Technical University, Dehradun since 2005-2010.
- (vii) Head Examiner, Physics, Uttarakhand Technical University, Dehradun, since 2005 - 2010.

## 12 Research Experience: Twenty years research experience

- (i) 1998-2000, **Research Scholar (UGC)**, Department of Physics, Kumaun University, Nainital, India.
- (ii) 2000-2002, **Senior Research Fellow (CSIR)**, Department of Physics, Kumaun University, Nainital, India.
- (iii) 2002-2003, **DAAD Research Fellow**, Department of Physics, Konstanz University, Konstanz, Germany.
- (iv) 2003-2004, **Senior Research Fellow (Extended) (CSIR)**, Department of Physics, Kumaun University, Nainital, India.
- (v) 2006-2009, **Fast Track Young Scientist** project (DST) at department of Physics, Birla Institute of Applied Sciences, Bhimtal, Nainital, India since 2005.
- (vi) 1/11/2008-31/12/2008, **Senior DAAD Research Fellow**, Department of Physics, Konstanz University, Konstanz, Germany.
- (vii) 2009 to till date at Birla Institute of Applied Sciences, Bhimtal, India.

**13 Research Interest :**

- (i) Quantum Chromodynamics
- (ii) Quark Confinement
- (iii) Finite Temperature Phase Transition
- (vi) Quark Gluon Plasma Physics

**14 List of Publications :**

**National and International Journals**

- (1) **H.C. Pandey** and H.C. Chandola : Nonperturbative aspects of dual QCD vacuum and confinement.  
Physics Letters **B476**, 193-198 (2000).
- (2) **H.C. Pandey** and H.C. Chandola : Long range behavior of dual RCD vacuum.  
International Journal of Theoretical Physics **40**, 477-489 (2001).
- (4) **H.C. Pandey** and H.C. Chandola : Dynamical Breaking of magnetic symmetry in dual QCD and SUSY QCD.  
Indian Journal of Pure and Applied Physics **39**, 339-345 (2001).
- (5) H.C. Chandola, **H.C. Pandey** and D. Yadav : Flux tube structure of dual QCD vacuum and confinement.  
Indian Journal of Physics **75A**, 561-567 (2001)
- (6) H.C. Chandola and **H.C. Pandey** : Proceedings of International Conference on Mathematical Physics, Nagpur, 1 (2002).
- (7) **H.C. Pandey**, H.C. Chandola and Hemwati Nandan : Confinement potential and large Scale structure of dual QCD.  
Proceedings of International Conference on Mathematical Physics, Nagpur, 1 (2002).
- (8) H.C. Chandola, **H.C. Pandey** : Current correlators and dual description of long distance QCD.  
Modern Physics Letters **A17**, 599-607 (2002).
- (9) H. Nandan, **H.C. Pandey** and H.C. Chandola : Magnetic symmetry, flux screening and color confinement in dual QCD.  
Indian Journal of Physics **76A**, 467-471 (2002).
- (10) H.C. Chandola, **H.C. Pandey** and H. Nandan : Topology of QCD vacuum and confinement.  
Canadian journal of Physics **80**, 745-754 (2002).

- (11) **H.C. Pandey** and H.C. Chandola : Color confinement and finite temperature phase transition in nonperturbative QCD.  
Proceedings. of the XIV symposium on High Energy Physics, Hyderabad (India), **2**, 74-78 (2002).
- (12) D.C. Yadav, **H.C. Pandey** and H.C. H.C. Chandola : An infrared effective dual QCD.  
Proceedings of the XIV symposium on High Energy Physics, Hyderabad (India), **2**. 66-73 (2002).
- (13) H.C. Chandola and **H.C. Pandey** H. Dehnen : Dyonic flux tube structure of nonperturbative QCD vacuum.  
International Journal of Modern Physics A18, 1623-1635 (2003).
- (14) **H.C. Pandey**, H.C. Chandola and H. Dehnen : Color confinement and QCD phase transition.  
International Journal of Modern Physics A19, 271-285 (2004).
- (15) H.C. Chandola, D.C. Yadav, **H.C. Pandey** and H. Dehnen : Critical parameters of phase transition in dual QCD.  
International Journal of Modern Physics A20, 2743-2752 (2005).
- (16) **H. C. Pandey**, Namita Pandey and H.C. Chandola : Color confinement in magnetically condensed QCD vacuum.  
American Institute of Physics IWTHEP Conference Proceedings, **939**, 369-371 (2007).
- (17) D.S. Rawat, H.C. Chandola, **H.C. Pandey** and Deepak Bhatt : Flux tube interaction and QGP formation process.  
Proceedings of DAE Symposium on Nuclear Physics, **62**, 794-795 (2017).
- (18) **H.C. Pandey**, H.C. Chandola and D.S. Rawat : Finite temperature confinement-deconfinement phase transition in dual QCD.  
Proceedings of DAE Symposium on Nuclear Physics, **62**, 794-795 (2017).
- (19) D.S. Rawat, H.C. Chandola, **H.C. Pandey** and D. Yadav : Flux tubes, field configuration and nonperturbative dynamics of QCD.  
Springer Proceedings in Physics **203**, 625-628 (2018).
- (20) Deepak Bhatt, H.C. Chandola, D.S. Rawat and **H.C. Pandey**: Dual models of QCD and their implications.  
Journal of Mountain Research, **14**, 65 (2019).
- (21) H.C. Chandola, D.S. Rawat, D. Yadav, **H.C. Pandey** and H. Dehnen : Nonperturbative and thermal dynamics of confined fields in dual QCD.  
Advances in High Energy Physics 4240512 (2020)

## 15 Participated and Talk Delivered in Conferences/Symposia/Schools

- (1) Participated in Symposium on **Advances in Physics from Small to Large Scales** held at **Department of Physics, Kumaun University, Nainital** during 14-16 March, 2019.
- (2) Participated in **Symposium on Digital Engagement at Community Level** held at **Birla Institute of Applied Sciences, Bhimtal (India)** on 16 February, 2019.
- (3) Participated in the **Workshop on Management through Internet Communication Technology** held at **Birla Institute of Applied Sciences, Bhimtal (India)** during 3-9 March, 2019.
- (4) Participated in **3<sup>rd</sup> IEEE Int, Conference on Internet of Things** held at **Birla Institute of Applied Sciences, Bhimtal (India)** during February, 12-14, 2018.
- (5) Participated in Symposium on **Advances in Physics from Small to Large Scales** held at **Physics Department, Kumaun University, Nainital (India)** during March, 27-28, 2018.
- (6) Participated in **Virtual Labs: IIT Delhi** sponsored by **Ministry of Human Resources Development** at **Birla Institute of Applied Sciences, Bhimtal (India)** on April 16, 2018.
- (7) Participated in **Int, Conference on Science, Social Science, Agricultural and Management (ICSSAM)** held at **Birla Institute of Applied Sciences, Bhimtal (India)** during June 12-14, 2017.
- (8) Participated in **Workshop on Technology Enabled Education on 26<sup>th</sup> July, 2016** organized by **USERC Uttarakhand** held at Govt. PG College, Haldwani, Uttarakhand.
- (9) Participated in Awareness Workshop on **The Facilities of UGC-DAE Consortium for Scientific Research** held at **Physics Department, Kumaun University, Nainital (India)** during April 5-7, 2016.
- (10) Participated in **National Programme on Differential Equations, sponsored by DST** at **Birla Institute of Applied Sciences, Bhimtal (India)** during 3-22 June, 2013.
- (11) Participated in **International workshop on Theoretical High Energy Physics** held at **Indian Institute of Physics (IIT) Roorkee (India)** during March 15-20, 2007.
- (12) Participated in **Young Scientist Congress** sponsored by **M.P. Council of Science and Technology, Bhopal**, during 23-25 November 2007.

- (13) Participated in **DESY Theory Workshop on Quantum Chromodynamics held at DESY, Humburg (Germany)** during september 24-27, 2002
- (14) Participated in **XIV DAE Symposium on High Energy Physics held at School of Physics, University of Nagpur (India)** during 18-22 December, 2000.
- (15) Participated in **International Conference on Mathematical Physics held at University of Nagpur (India)** during January 1999.
- (16) Participated in **National Symposium on Supersymmetry Breaking held at Kumaun University Nainital (India)** during 17-18 May, 1999.
- (17) Participated in **Young Astronomers MEET (YAM) held at UPSO Nainital (India)** during june 1-3, 1999,
- (18) Participated in **XXX SERC School in Theoretical High Energy Physics held at Viswabharati University, Santiniketan (India)** during Febury 10 – March 2, 1998.
- (19) Participated in **UPSO 104 cm Sampuranand Silver Jubilee Workshop held at UPSO Nainital (India)** during April 7-8, 1997.

## 16 References

- (1) Prof. H.C. Chandoola  
Head, Department of Physics  
Kumaun University, Nainital  
Email: [chandolahc@gmail.com](mailto:chandolahc@gmail.com)  
Phone: +91 9412986369
- (2) Dr. B.S, Bisht  
(Former Vice Chancellor, GBPAU)  
Director  
Birla Institute of Applied Sciences  
Bhimtal (India)  
Email: [bsbisht@gmail.com](mailto:bsbisht@gmail.com)  
Phone: +91 9410905454
- (3) Prof. Afsar Abbas  
Retired Prof. IISC Bhubaneswar  
Azim Green Home  
New Sir Sayed Nagar  
Aligarh (India)  
Email : [drafसारabbas@gmail.com](mailto:drafसारabbas@gmail.com)  
Phone: +91 9971838975