

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Given Name : **Pandey, Hem Chandra**
Date of Birth : 23rd February, 1972
Place of birth : Tarikhet (Ranikhet)
Citizenship : Indian
Degree : Doctorate in High Energy Physics
Position : Assidtant Ptofessor (Physics)
Address : Birla Institute of Applies Sciences, Bhimtal (263136),
Uttasrakhand, India

SCHOOL AND UNIVERSITY EDUCATION

1987 High School from GIC Tarikhet in I division
1989 Intermediate from RIC Ranikhet in I division
1992 Bachelor of Science (B.Sc.) from Kumaun University, Nainital, in I division
1994 Master of Science (M.Sc) in Physics from Kumaun University, Nainital, in I division

CONFERRAL OF A DOCTORATE

Title : Study of Role of Monopoles and Dyons in Dual Version of Color Gauge Theory.
Supervisor : Dr. H.C. Chandola, Department of Physics, Kumaun University, Nainital, India
Co-Supervisor : Prof. Dr. H. Dehnen, Department of Physics, Konstanz University, Konstanz, Germany.
Date of Award : 20.06.2004 from Kumaun University, Nainital, India

ACADEMIC AWARDS/FELLOWSHIPS

2000 **Senior Research Fellowship (SRF)** by Council of Scientific and Industrial Research (CSIR), New Delhi, India.
2002 **DAAD Research Sandwich Fellowship** by German Academic Exchange Service (DAAD), Germany.
2004 **Senior Research Fellowship (SRF) Extended** by Council of Scientific and Industrial Research (CSIR), New Delhi, India.
2005 **Young Scientist Fellowship** by Department of Science and Technology (DST), New Delhi.
2008 **DAAD Research Fellowship (reinvitation)** by German Academic Exchange Service (DAAD), Germany.

TEACHING EXPERIENCE (Nine years)

2004-2005 Postgraduate and undergraduate classes at the department of Physics, Kumaun University, Nainital, India.

2005- Countinue Actively engaged in teaching in undergraduate classes since 2005 at Birla Institute of Applied Sciences, Bhimtal (Nainital), affiliated with Uttarakhand Technical University, Dehradun, India

RESEARCH EXPERIENCE (Fourteen years)

1996-2000 **Research Scholar**, Department of Physics, Kumaun University, Nainital, India.
2000-2002, **Senior Research Fellow (CSIR)**, Department of Physics, Kumaun University, Nainital, India.
2002-2003 **DAAD Research Fellow**, Department of Physics, Konstanz University, Konstanz, Germany.
2003-2004 **Senior Research Fellow (Extended) (CSIR)**, Department of Physics, Kumaun University, Nainital, India.
2005-2008 **Fast Track Young Scientist** project (DST) at department of Physics, Birla Institute of Applied Sciences, Bhimtal, Nainital, India since 2005.
2008 (60 days) **Senior DAAD Research Fellow**, Department of Physics, Konstanz University, Konstanz, Germany.

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 (2000) 193-198.
- (2) H.C. Pandey and H.C. Chandola : Long range behavior of dual QCD vacuum.
International Journal of Theoretical Physics 40 (2001) 477-489.
- (3) 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 (2001) 339-345.
- (4) H.C. Chandola, H.C. Pandey and D. Yadav : Flux tube structure of dual QCD vacuum and confinement.
Indian Journal of Physics 75A (2001) 561-567.
- (5) H.C. Chandola, H.C. Pandey : Current correlators and dual description of long distance QCD.
Modern Physics Letters A17 (2002) 599-607.
- (6) H. Nandan, H.C. Pandey and H.C. Chandola : Magnetic symmetry and dual superconducting QCD vacuum.
Indian Journal of Physics 76A (2002) 467-471.
- (7) H.C. Chandola, H.C. Pandey and H. Nandan : Topology of QCD vacuum and confinement.
Canadian journal of Physics 80 (2002) 745-754.
- (8) H.C. Chandola and H.C. Pandey : Dyonic flux tube structure of nonperturbative QCD vacuum.
International Journal of Modern Physics A18 (2003) 1623-1635.
- (9) H.C. Pandey, H.C. Chandola and H. Dehnen : Color confinement and QCD phase transition.
International Journal of Modern Physics A19 (2004) 271-285.
- (10) 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 (2004) 2743-2752.

- (11) H. C. Pandey, Namita Pandey and H.C. Chandola : Color confinement in magnetically condensed QCD vacuum.
Americal Institute of Physics Conference Proceedings 939, 369 (2007).
- (12) H.C. Pandey : Abelian monopole dominance in quark confinement.
Phys. Rev. D (2014) communicated.

In proceedings of Conferences/Symposium/Seminars

- (1) H.C. Pandey and H.C. Chandola : QCD phase transition if dual QCD vacuum.
Proceedings of DESY Theory Workshop on Quantum Chromodynamics held at DESY, Humburg (Germany) during September 24-27, 2002.
- (2) 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), (2002) 74-78.
- (3) 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), (2002) 66-73.
- (4) H.C. Pandey and H.C. Chandola : Confinement potential and large scale structure of dual QCD.
Proceedings of International conference on Mathematical Physics, Nagpur (India) (2000).
- (5) H.C. Chandola and H.C. Pandey : Magnetic symmetry and color dielectrics of dual QCD.
Proceedings of International conference on Mathematical Physics, Nagpur (India) (2000).

PARTICIPATED AND TALK DELIVERED IN CONFERENCES/SYMPOSA/SCHOOLS

- (1) Participated in **International workshop on Theoretical High Energy Physics** held at Indian Institute of Physics (**IIT Roorkee (India)**) during March 15-20, 2007.
- (2) Participated in **Young Scientist Congress** sponsored by M.P. Council of Science and Technology, Bhopal, during 23-25 November 2007.
- (3) Participated in **DESY Theory Workshop on Quantum Chromodynamics held at DESY, Humburg (Germany)** during september 24-27, 2002
- (4) Participated in **XIV DAE Symposium on High Energy Physics held at School of Physics, University of Nagpur (India)** during 18-22 December, 2000.
- (5) Participated in **International Conference on Mathematical Physics held at University of Nagpur (India)** during January 1999.
- (6) Participated in **National Symposium on Supersymmetry Breaking held at Kumaun University Nainital (India)** during 17-18 May, 1999.
- (7) Participated in **Young Astonomers MEET (YAM) held at UPSO Nainital (India)** during june 1-3, 1999,
- (8) Participated in **XXX SERC School in Theoretical High Energy Physics held at Viswabharati University, Santiniketan (India)** during Febury 10 – March 2, 1998.
- (9) Participated in **UPSO 104 cm Sampuranand Silver Jubilee Workshop held at UPSO Nainital (India)** during April 7-8, 1997.