

## Curriculum Vitae

*Dr. Ramesh Chandra  
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*Department of Applied Physics  
School for Physical Sciences,  
Babasaheb Bhimrao Ambedkar University  
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Lucknow – 226 025 (U.P.), India*



### **(I) EDUCATION**

**Ph.D.** (Theoretical Nuclear Physics) in 2007

### **(II) AWARDS & FELLOWSHIPS**

1. Junior Research Fellowship (NET) by CSIR, India (01.01.2001 – 31.12.2002).
2. Senior Research Fellowship (NET) by CSIR, India (01.01.2003 – 31.12.2005).
3. Post-doctoral fellowship by Institute of Physics, Bhubaneswar, India (22.01.2007 – 03.03.2008).
4. Research Associateship in a project sponsored by DST, India, undertaken in the Department of Physics & Meteorology, IIT Kharagpur, India (04.03.2008 – 06.05.2011).

### **(III) RESEARCH INTEREST**

- Nuclear double beta decay
- Nuclear and particle astrophysics

### **(IV) COMPUTATIONAL SKILLS**

- **Operating systems:** Dos, Windows, Unix, Linux.
- **Programming language:** FORTRAN for scientific applications.
- **Application software:** MS-Office, Scientific WorkPlace, Fortran PowerStation, Microcal Origin, Mathematica, LaTeX, XmGrace, GnuPlot.
- **Acquaintance:** PDF, PostScript, EPS files, pictures, styles and macros in LaTeX.

### **(V) TEACHING EXPERIENCE**

**June 30, 2011 – present:** Assistant Professor, Department of Applied Physics, School for Physical Sciences, Babasaheb Bhimrao Ambedkar University, Lucknow – 226 025.

### **(VI) VISITS ABROAD - 2**

### **(VII) TALKS DELIVERED - 11**

### **(VIII) LIST OF PUBLICATIONS**

- A. In refereed journals - 11
- B. In various Conferences/Workshops/Symposia proceedings - 25

*Some recent publications:*

1. *Uncertainties in nuclear transition matrix elements for neutrinoless  $\beta\beta$  decay within the projected-Hartree-Fock-Bogoliubov model*, P. K. Rath, R. Chandra, K. Chaturvedi, P. K. Raina and J. G. Hirsch, *Phys. Rev. C* **82**, 064310 (2010).
2. *Quadrupolar correlations and deformation effect on two neutrino  $e\beta^*$  and  $e\epsilon$  modes of  $^{156}\text{Dy}$  isotope*, P. K. Rath, R. Chandra, S. Singh, P. K. Raina and J. G. Hirsch, *J. Phys. G: Nucl. Part. Phys.* **37**, 055108 (2010).
3. *Deformation effects and neutrinoless positron  $\beta\beta$  decay of  $^{96}\text{Ru}$ ,  $^{102}\text{Pd}$ ,  $^{106}\text{Cd}$ ,  $^{124}\text{Xe}$ ,  $^{130}\text{Ba}$  and  $^{156}\text{Dy}$  isotopes within a mechanism involving Majorana neutrino mass*, P. K. Rath, R. Chandra, K. Chaturvedi, P. K. Raina and J. G. Hirsch, *Phys. Rev. C* **80**, 044303 (2009).
4. *Multipolar correlations and deformation effect on nuclear transition matrix elements of double- $\beta$  decay*, R. Chandra, K. Chaturvedi, P. K. Rath, P. K. Raina and J. G. Hirsch, *Eur. Phys. Lett.* **86**, 32001 (2009).
5. *Nuclear deformation and neutrinoless double- $\beta$  decay of  $^{94,96}\text{Zr}$ ,  $^{98,100}\text{Mo}$ ,  $^{104}\text{Ru}$ ,  $^{110}\text{Pd}$ ,  $^{128,130}\text{Te}$  and  $^{150}\text{Nd}$  nuclei within a mechanism involving neutrino mass*, K. Chaturvedi, R. Chandra, P. K. Rath, P. K. Raina and J. G. Hirsch, *Phys. Rev. C* **78**, 054302 (2008).

### **(IX) PARTICIPATION IN CONFERENCES/SYMPOSIA/WORKSHOPS/SCHOOLS**

*International – 4*

*National – 21*

### **(X) PERSONAL PROFILE**

1. Date and place of birth : 17-12-1978, Lucknow (India)
2. Nationality : Indian
3. Sex : Male
4. Marital status : Married
5. Language known : Hindi, English