

Resume

1. **Name:** Dr. Niyti
2. **Designation:** Assistant Professor, Department of Physics,
GMN College, Ambala Cantt.

3. **Educational Qualifications:**

S. No	Exam. Passed	Board/ Univ.	Year of Passing	% age of Marks.	Divison
1.	Ph.D	Deptt of Physics, P.U Chandigarh	2011		
2.	UGC-NET qualified in 2005.				
3.	M. Sc. Physics	Deptt of Physics, P.U.Chandigarh	2004	75.2%	First
4.	B.Sc.	Pbi. Univ.,Patiala	2002	73.0%	First (Appeared in merit list of Pbi. Univ.)
5.	XII	CBSE	1999	82.2%	First
6.	X	CBSE	1997	85%	First

4. **Awards/Recognition :**

- Selected by DST for **INSPIRE Faculty Award** in 2012 under which salary equivalent to that of Assistant Professor of IIT and a research grant of Rs. 35 Lakh is given over a period of 5 years.
- Selected for **DST AWARDS FOR PARTICIPATION** in the meeting of Nobel Laureates & Students held in Lindau, Germany in June, July, 2016.

5. **Teaching Experience:** 9 years

6. **Publications in International Journals:**

1. Clusters in light, heavy, super-heavy and super-superheavy nuclei, R. K. Gupta, S. K. Arun, D. Singh, R. Kumar, **Niyti**, S.K. Patra, P. Arumugam and B.K. Sharma, International Journal of Modern Physics E 17 (2008) 2244-2249.
2. Collective Clusterization in Hot and Rotating Nuclei: Preformed-cluster based Dynamical Cluster-decay Model, Raj K. Gupta, Sham K. Arun, Raj Kumar, and **Niyti**, International Review of PHYSICS 2 369(2008).
3. Role of static deformation and compact orientation of target nucleus in measured fusion, fusion-fission and capture cross-sections of $^{244}\text{Pu}+^{48}\text{Ca}$ reaction, R. K. Gupta,

Niyti, M. Manhas, Sigurd Hofmann, and Walter Greiner, International Journal of Modern Physics E 18 (2009) 601-619.

4. Island of stability for superheavy elements and the dynamical cluster-decay model for fusion evaporation residue cross sections: ${}^8\text{Ca}+{}^{238}\text{U}\rightarrow{}^{286}112^*$ as an example, Raj K Gupta, **Niyti**, Monika Manhas and Walter Greiner, Journal of Physics G: Nuclear and Particle Phys. 36 (2009) 115105 .

5. Establishing the island of stability for superheavy nuclei via the dynamical cluster-decay model applied to a hot fusion reaction: ${}^{48}\text{Ca}+{}^{238}\text{U}\rightarrow{}^{286}112^*$ **Niyti**, R. K. Gupta and Walter Greiner, Journal of Physics G: Nuclear and Particle Phys. 37 (2010) 115103 .

6. Probing Nuclear Matter at the Extremes through application of Dynamical Cluster-decay Model to Superheavy Nuclei, **Niyti**, Manoj K. Sharma, Kirandeep Sandhu, Sahila Chopra, Raj K. Gupta, International Review of PHYSICS **8**, 86 (2014).

7. Synthesis of ${}^{250-253}\text{No}$ in ${}^{206}\text{Pb}+{}^{48}\text{Ca}$ Reaction, **Niyti** and Raj K. Gupta, published in EPJ web of conferences, *Proceedings of 25th International Nuclear Physics Conference held in Firenze, Italy, June 2-7 2013*, **66**,03066(2014).

8. Synthesis of doubly deformed-magic nucleus ${}^{270}_{108}\text{Hs}_{162}$ in decay of ${}^{274}\text{Hs}^*$ formed via hot fusion reactions: Entrance channel effects and role of magicity of ${}^{48}\text{Ca}$ and ${}^{270}\text{Hs}$, **Niyti** and Raj K. Gupta, Phys. Rev. C **89** (2014) 014603.

9. Synthesis of Nobelium nucleus in ${}^{204,206,207,208}\text{Pb}+{}^{48}\text{Ca}$ reactions and isotopic dependence of its cross-section, Niyti , Raj K. Gupta, and Peter Otto Hess Nuclear Physics A, **938**, (2015) 22-44.

10. Alpha-decay chains of recoiled superheavynuclei: A theoretical study, **Niyti**, Gudveen Sawhney, Manoj K. Sharma, and Raj K. Gupta, Phys. Rev. C **91** (2015) 054606.

11. Application of Skyrme Forces to the Decay of ${}^{266}\text{Rf}^*$ formed in Fusion reaction ${}^{18}\text{O}+{}^{248}\text{Cm}$, **Niyti**, Aman Deep, Rajesh Kharab, Sahila Chopra and Raj K. Gupta, Applied Science Letter, 2 (4),122-125 (2016).

12. Skyrme forces and decay of the ${}^{266}_{104}\text{Rf}^*$ nucleus synthesized via different incoming channels, Niyti, Aman Deep, Rajesh Kharab, Sahila Chopra, and Raj K. Gupta, Phys. Rev. C 95, 03460 (2017).

13. Dynamical Cluster-decay Model Based on Skyrme Force KDE0(v1) and the Dynamics of ${}^{208,206,204}\text{Pb}+{}^{48}\text{Ca}\rightarrow{}^{256,254,252}\text{No}^*$ Reaction, Niyti, R. Singh, A. Deep, R. Kharab, S. Chopra, R.K. Gupta, Acta Physica Polonica B, 49, 639 (2018).