

# Curriculum Vitae

**ANJALI MANUBHAI PATEL**

Research Scholar

Department of Physics

Faculty of Science

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([https://scholar.google.com/citations?view\\_op=list\\_works&hl=en&user=CJmJE00AAAAJ](https://scholar.google.com/citations?view_op=list_works&hl=en&user=CJmJE00AAAAJ))

## Objective

I would like to contribute in the growth of Scientific community using my technical, analytic, innovative, entrepreneurial and interpersonal skills. I enjoy working in a challenging environment, where I can utilize my skills towards accomplishing major Academic work and research projects.

## Personal Details

<b>First Name</b>	: Anjali
<b>Last Name</b>	: Patel
<b>Permanent Address</b>	: 1/Bagichavistar, near old busstation, Malpur, Di: Aravalli, Gujarat, India.
<b>Sex</b>	: Female
<b>Date of Birth</b>	: 28 <sup>th</sup> March 1993
<b>Nationality</b>	: Indian
<b>Marital status</b>	: Married
<b>Languages known</b>	: English, Gujarati, Hindi

## Educational Qualification

✧ **Ph. D. (Physics)** 2016 - Present

**Title:** In Silico Novel Identification of Anti-cancer Drugs using Density Functional Theory and Molecular Dynamics Simulation

**Ph.D. Supervisor:** Prof. Prafulla Kumar Jha

Degree	School/Institution	Year of passing	Class/Percentage
M.Sc. (Physics)	Pandit deendayal petroleum university, Gandhinagar.	April 2015	Second class (58.4%)
B.Sc. (hons. Physics)	Smt. S. M. Panchal Science college, Talod, Patan university.	April 2013	Second class (58.9%)
Higher Secondary (12 <sup>th</sup> )	Genius educational Institute, Modasa.	May 2010	First Class (54.60%)
Secondary (10 <sup>th</sup> )	P. G. Mehta School, Malpur.	May 2008	First Class with Distinction (74.46%)

## Teaching Experience

Sr. No	Post held	From	To	University/Institution
1	Physics teacher (UG Level)	2015 June	2016 January	Sir P T Science college, Modasa, Gujarat, India
2	Physics teacher (UG Level)	2016 January	2016 May	Janseva Charitable Trust, Malpur, Gujarat, India

## Research Skills

<b>Operating Systems:</b>	DOS, CentOS, Linux, Windows XP/8/10.
<b>Programming Languages:</b>	C, C++
<b>Simulation packages:</b>	Molecular dynamics codes: Gromacs and Schrödinger. Density functional theory Codes: Gaussian and Qunatum Espresso.
<b>Modeling/visualization packages:</b>	Visual molecular dynamics, UCSF Chimera, Virtual NanoLab, XCrySDen and OVITO.
<b>Plotting Packages:</b>	GNUplot, Xmgrace, Scilab, Origin.

## Research Area of Interest

My doctoral study was focused on the investigation of drug-target interaction mechanism by combining quantum mechanical and classical mechanical tools density functional theory and molecular dynamics simulations, respectively. My specific area of future research interest is to design and develop novel drugs for chronic diseases apart from cancer, utilizing the advanced molecular dynamics simulations.

## Attended Seminars/Conferences

- ✧ National Conference entitled DAE Computational Chemistry Symposium. (7<sup>th</sup>-9<sup>th</sup> November 2019)
- ✧ International Conference on Proteins, Mirna And Exosomes In Health And Disease, (11<sup>th</sup> - 13<sup>th</sup> December 2018)
- ✧ International conference on Nanomaterials for Energy Conversion and Storage Applications: NECSA (February 2018)
- ✧ National Conference entitled 62<sup>nd</sup> DAE Solid State Physics Symposium. (26<sup>th</sup>-30<sup>th</sup> December 2017)
- ✧ International Conference on Drug design, New Delhi. (7<sup>th</sup>-9<sup>th</sup> April 2017)
- ✧ National Conference on Interdisciplinary Approaches to Knowledge, Gandhinagar. (20<sup>th</sup>-21<sup>th</sup> August 2015)

## List of Publications

1. **Anjali Patel**, Snjay Tiwari, Prafulla K. Jha. “Temperature dependent drug delivery and inspection of interaction and mechanical behavior of SWCNT encapsulated Paclitaxel” (Submitted).
2. **Anjali Patel**, Snjay Tiwari, Prafulla K. Jha. “Molecular interaction between bi-antennary phenylboronic acid and sialic acid using density functional theory and multi-time scale trajectories” Journal of biomolecular Structure & Dynamics (2019)
3. Hardik Kagdada, **Anjali Patel**, Prafulla K Jha. “ Structural, magnetic and electronic properties of ferrimagnetic and non-magnetic cubic phase of  $\text{MnV}_2\text{O}_4$ ” AIP Conference Proceedings (2019)
4. **Anjali Patel**, Snjay Tiwari, Prafulla K. Jha. “Density functional theory based probe of the affinity interaction of saccharide ligands

- with extra-cellular sialic acid residues” Journal of biomolecular Structure & Dynamics (2018).
5. Deepak upadhyay, **Anjali Patel**, Arun Pratap, Prafulla K. Jha. “Electronic properties and stability criteria of rhombohedral HCoO<sub>2</sub>” AIP Conference Proceedings (2018).
  6. Anu Manhas, **Anjali Patel**, M Y Lone, Prafulla K Jha, P C Jha. “Identification of *Pf*ENR inhibitors: A hybrid structure-based approach in conjunction with molecular dynamics simulations” Journal of cellular biology (2018).
  7. **Anjali Patel**, Basant Roondhe, Prafulla K. Jha “Ni doping effect on the electronic and sensing properties of 2D SnO<sub>2</sub>” AIP Conference Proceedings (2018).
  8. Som, Narayan N. Venu Mankad. Shweta D. Dabhi. **Anjali Patel**, Prafulla K. Jha, "Magnetic behavior study of samarium nitride using density functional theory." Journal of Magnetism and Magnetic Materials (2017).

## Reference

1. **Prof. Prafulla K. Jha** (Ph.D. Supervisor)  
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The Maharaja Sayajirao University of Baroda,  
Vadodara-390002, India.  
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(<https://scholar.google.co.in/citations?user=PieZW1YAAAAJ&hl=en&oi=ao>).

**2. Asso. Prof. Sanjay Tiwari**

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## Declaration

I hereby declare that the information given in the document is correct to be the best of my knowledge.

Date: 27/11/2020

Place: Vadodara

(Anjali Patel)

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