

Curriculum Vitae

Dr. Vikas. K Patel

Department of Physics,

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ACADEMICS

- **Ph.D. in Spectroscopy of Heavy Flavoured Mesons** from Sardar Vallabhbhai National Institute of Technology (SVNIT) Suart-395007, Gujarat (India) – 2022
- **Master of Science (Physics) 2012- 2014 (CGPA 6.340)**
Sardar Patel University, Vallabh Vidhyanagar, Gujarat (India)
- **Bachelor of Science (Physics) 2010- 2012 (65.80 %)**
Veer Narmad South Gujarat University, B. P. Baria Science Institute, Navsari

RESEARCH SKILLS

- Calculate Mass spectroscopy and various decay properties in heavy, heavy-light and heavy-heavy mesons using mathematica, origin and latex.

TEACHING EXPERIENCE

- Diploma course on Engineering Physics: Teaching since July 2014.
- B.Tech. course on Engineering Physics: Teaching since February 2015 .
- B.Sc, M.sc in physics: Teaching since June 2015.
- Nursing in Bio Physics : Teaching since June 2015.

PAPER PRESENTED IN SEMINAR / CONFERENCE / SYMPOSIUM

List of Research Publications during PH.D time.

➤ **JOURNAL PAPERS**

1. **Vikas Patel** , Raghav Chaturvedi , A.K.rao “Spectroscopic Properties of D-meson using Screened Potential ” , Eur.Phys. J. Plus **D-20-02292** , (2021) 136:42.(**I.F(3.911)**)
<https://doi.org/10.1140/epjp/s13360-020-01039-7> (ISSN: 21905444)
2. **Vikas Patel**, Keval Gandhi, Ajay Kumar Rai : “Interpreting charm-strange mesons with a screened potential model” , Few-Body System **62:68** (2021) **I.F(1.392)**.

<https://doi.org/10.1007/s00601-021-01651-y> (ISSN: 1432-5411)

3. **Vikas Patel**, Raghav Chaturvedi, A.K.rai : “Study Spectroscopic Properties of B and Bs-mesons using Screened Potential“ , Eur.Phys. J. Plus (communicated) **I.F(3.228)** (ISSN: 21905444).

➤ **INTERNATIONAL CONFERENCE PROCEEDINGS**

1. **Vikas Patel**, Keval Gandhi, Raghav chaturvedi, Virendrashih Kher and A.K.Rai “Ground State Masses of D Mesons” (AIP Conference Proceedings 2020, 140028, 5 May (2020); <https://doi.org/10.1063/5.0005458>)
2. Raghav Chaturvedi ,**Vikas Patel**, N.R.Soni, A.N.Gadaria, J.J.Patel, J.N.Pandya and A.K.Rai “Computation of decay constant and digluon decay width of Charmonia” .(AIP Conference Proceedings 2020, 140048, 05 May(2020); <https://doi.org/10.1063/5.0005664>)

➤ **NATIONAL CONFERENCE PROCEEDINGS**

1. **Vikas Patel**, Keval Gandhi Virendrashih Kher and A.K.Rai “Decay Constant and Leptonic Branching Fraction of D Meson” (64th DAE Symp. on Nucl. Phys., **D16, 655** (2020)) (ISBN: 8183722083-8).
2. **Vikas Patel**, Raghav Chaturvedi and Ajay Kumar Rai: Decay constant and magnetic transition calculations of B meson using screened potential model.”(Proceeding in DAE HEP Odissa 2020).
3. Keval Gandhi, **Vikas Patel**, Virendrasinh Kher, and Ajay Kumar Rai “Magnetic properties of D^{*0} and $D^{*\pm}$ meson in the constituent quark model” (63th DAE Symp. On Nucl. Phys., **D3, 824** (2018)).
4. **Vikas Patel** and Ajay Kumar Rai : Masses of (S and P Wave) B and Bs mesons” (Proceeding Virtual International Conference Physical Sciences) (ICPS2021 at SVNIT).
5. **Vikas Patel** and Ajay Kumar Rai: The Masses and decay constant of Bc mesons (65th DAE Symp. on Nucl. Phys.) (2021)

➤ **INTERNATIONAL BOOK CHAPTER**

1. Keval Gandhi, **Vikas Patel**, Shailesh Pincha, Virendrasinh Kher, and Ajay Kumar Rai “Magnetic moments and decay properties of the D and Ds mesons. (DAE HEP(P. K. Behera et al. (eds.)) https://doi.org/10.1007/978-981-33-4408-2_20)(XXIII DAE High Energy Physics Symposium, Springer Proceedings in Physics 261, Springer Nature Singapore Pte Ltd. 2021) (481991_1_En_20_Chapter TYPESETDISKLECP Disp.:1/2/2021Pages:xxxLayout:T1-Standard) (2021).

➤ **TECHNICAL ACTIVITIES**

Attended Seminars	Recent Advances in Particle Physics	Gujarat Council on Science and Technology(GUJCOST),Gandhinagar August,2009
Attended Seminars	Condensed Matter Physics & Short Term Training School on X-Ray Diffraction Techniques	Sardar Patel University, Department of Physics March,2014
Paper/Poster presentation	Gravitation energy and force	Current Trends in Research and Applications of Physical Sciences in Gujarat(CTRAPSG-12)December,2012
Attended Expert Lectures	A Congregation of young scientific minds	GUJCOST sponsored Science Manthan-2014
IAPT	National Graduate Physics Examination 2010-2011	Indian Association of Physics Teachers. Successfully cleared examination, stood top 10% among enrolled candidates.
SCOPE	Gujarat English Language Test	University of Cambridge ESOL Examinations, January, 2011
ALTE	Business Language Testing Services(BULATS)	University of Cambridge ESOL Examinations, August, 2011

➤ **EXTRA CURRICULAR ACTIVITY**

- Obtained champion position in the Cricket during college annual sports competition held in the year 2010-11.
- Achieved champion position in the Valley ball during college annual sports competition held in the year 2010-11.
- Participated in the 12th National Children's Science Congress held at Assam Science Technology & Environment Council, Cottage College, and Guwahati in the year 2004.
- Obtained certificate for Philanthropism in National wide Cancer Control Program organized by Society for Cancer Awareness & Redemption in the year 2004.

PERSONAL INFORMATION

Name : Vikas. K Patel
Address : 129/B Dharmin Nagar Society, Greed Road, Navsari - 396445, Gujarat
India Date of Birth : 27th October, 1991
Nationality : Indian
Languages known : English, Hindi and Gujarati

REFERENCES

<p>1. Dr. A.K.Rai Associate Professor Department of Physics, Sardar Vallabhbhai National Institute of Technology (SVNIT), Suart- 395007 , Gujarat (India) Contact No: +91 9904003860 E-mail: raiajayk@gmail.com</p>	<p>2. Dr. Jaymin Ray Assistant Professor, Department of Physics, UKA Tarsadia University, Bardoli-Mahuva Road, Bardoli - 394120 Dist-Surat, Gujarat, INDIA Mob. : +91 9904829289 E-mail: jayminray@gamil.com</p>
	<p>3. Dr. Abhitosh Kedia Assistant Professor, Department of Physics, UKA Tarsadia University, Bardoli-Mahuva Road, Bardoli - 394120 Dist-Surat, Gujarat, INDIA Mob. : +91 9904829289 E-mail: abhitosh.kedia@utu.ac.in</p>