

**RKDF University,  
Bhopal Faculty  
Profile**



**Basic Information**

<b>Name</b>	<b>Dr. Arun Kumar Patel</b>
<b>Date of Birth</b>	<b>09/05/1978</b>
<b>Designation</b>	<b>Professor and Dean</b>
<b>Department</b>	<b>Department Civil Engineering</b>
<b>Experience</b>	<b>18</b>
<b>Email ID</b>	<b>arunpatel123@gmail.com</b>
<b>Contact No</b>	<b>9407144228</b>

**Educational Qualifications**

<b>Description</b>	<b>Year</b>	<b>%</b>	<b>Institute/University</b>
<b>(UG)-B.E (Civil)</b>	2000	58.9	<b>Amaravti University</b>
<b>(PG)-M.E(Construction Technology &amp; Management)</b>	2004	79.13	<b>R.G.P.V University</b>
<b>M. Phil.</b>	NA	NA	<b>NA</b>
<b>(Ph. D. )-Geoinformatic</b>	2017		<b>M.A.N.I.T. Bhopal</b>
<b>Post Doctorate</b>			
<b>NET Qualified/GATE</b>			

**Experience Detail**

<b>Experience (Teaching/Research)</b>	<b>Designation</b>	<b>Duration</b>		<b>Name of Institute/University</b>
		<b>From</b>	<b>To</b>	
<b>Organization of training and development program for construction industry</b>	Project Assistant	01/11/2004	31/10/2005	<b>Construction Industry Development Council</b>
<b>Project Management Consultant</b>	Project Co-Coordinator / Execution Engineer	01/11/2005	15/08/2007	<b>ARM &amp; Associates, Delhi</b>

<b>Project Management</b>	<b>Project Manager</b>	<b>16/08/2007</b>	<b>10/08/2008</b>	<b>EQUIS (India) Real Estate Pvt Ltd</b>
Consultant				
Teaching	Sr. Lecturer	12/08/2008	31/12/2009	KCBT Academy at Indore
Teaching	Assistant Professor	17/08/2014	30/06/2016	UIT-RGPV- Bhopal
Teaching	Assistant Professor	06/07/2016	31/05/2017	MANIT- Bhopal
Teaching	Associate Professor	01/06/2017	01/06/2022	Vedica Institute of Technology, RKDF University, Gandhi Nagar, Bhopal
Teaching	Professor	02/0/2022	Till Date	Vedica Institute of Technology, RKDF University, Gandhi Nagar, Bhopal
<b>Publications</b>				
<b>No. of Papers Published (Attach Annexure of papers published in peer-reviewed or refereed journals)</b>		24		
<b>No. of Books Published</b>		NA		
<b>Books Chapters Published (Provide print of 1<sup>st</sup> Page of Book)</b>		01		
<b>No. of Patents Published/Grant</b>		Nil		
<b>Ph. D/M. Phil Project supervised</b>				
<b>Research Program</b>		<b>Award</b>	<b>Under Supervision</b>	<b>Name of University</b>
<b>Ph. D (Provide detail i.e. name, title etc)</b>				
<b>M. Phil</b>				
<b>PG Thesis/Dissertation</b>				
<b>Area of Expertise (100 words)</b>				

Dr. Arun Kumar Patel possesses multidisciplinary expertise in Construction Technology and Management, Geoinformatics, and Sustainable Infrastructure. With a Ph.D. in Geoinformatics, his work integrates spatial data analysis with construction planning, project management, and infrastructure optimization. His research spans structural engineering, concrete technology, dynamic analysis of railway sleepers, and solid waste management strategies for urban sustainability. He is proficient in applying remote sensing and GIS tools for land use, site selection, and environmental assessment. Passionate about green construction and waste reduction, contributes to advancing sustainable practices, smart infrastructure development, and resilient urban planning in civil engineering.

**Award and Achievement**

<b>Name of Award</b>	<b>Description (With certified of Copy award)</b>	
<b>National</b>	NA	
<b>International</b>	NA	
<b>Conference/Seminar/Workshops/FDP</b>		
<b>Description</b>	<b>No.</b>	
<b>Conference/Seminar p a p e r presentation</b>	<b>03</b>	
<b>Conference/Seminar attended/ organized</b>	<b>13</b>	
<b>Work shop attended/ organized</b>	<b>04</b>	
<b>FDP Attended/ organized</b>	<b>03</b>	
<b>Research Project</b>		
<b>Name of Project</b>	<b>Funding Agencies</b>	<b>Amount</b>
A study to investigate the utilization of fly ash, rice husk ash & waste plastic as a partial replacement of cement and aggregate in paver blocks	Ayushmati Education and Social Society, Bhopal	6,35,000/- (Six Lakh Thirty Five Thousand only)

- **Any other Achievement**

**Signature**

## List of Publications

S.No	Title	Authors	Journal	Year	ISSN No.	Link of paper	Listed in GC/WOS/SCOPUS/Others
1.	Prediction of Water Demand from Land Use Information Using RS, GIS & DGPS Techniques and Its Comparison with the Conventional Methods: A Case Study for Bhopal City	Arun Patel, Dr.S.K.K atiyar and Dr. Vishnu Prasad	Conference Annual Convention of ISRS & National Symposium on GIS & Remote Sensing Infrastructure Development at Lonavala	December 1-3, 2010			
2.	Prediction Of Water Demand In Water Distribution System Using Geospatial Techniques	Arun Patel and Dr.S.K.K atiyar	European International Journal of Science and Technology (EIJST)	Vol.2.,No. 10,December 2013	ISSN: 2304-9693		
3.	Accuracy Assessment of Single- frequency DGPS,	Arun Patel, Ravi.S.S ingh, Dr.S.K.K atiyar and Dr Vishnu Prasad,	Coordinates	August 2014.		<a href="https://mycoordinates.org/accuracy-assessment-of-single-frequency-dgps/">https://mycoordinates.org/accuracy-assessment-of-single-frequency-dgps/</a>	

4.	Prediction of Water Demand & Water Storage Capacity of Municipal System by using Geospatial Techniques	Arun Patel and Dr.S.K.K atiyar	Journal of Geomatics C/O Space Applications Centre(ISRO) Ahmedabad - 380015	Vol.2.,No. 10,. April 2014	ISSN: 0976-1330 Google citation =1 h-index=1	<a href="https://isgindia.org/JOG/abstracts/april-2014/13.pdf">https://isgindia.org/JOG/abstracts/april-2014/13.pdf</a>	
5.	Utilization of E-Waste in High Strength Cement Concrete	Singh,S. S, and Arun Patel	International Journal for Scientific Research & Development	Vol. 3, Issue 09, 2015	ISSN (online): 2321-0613	<a href="https://ijsrd.com/Article.php?manuscript=IJSRDV3I90517">https://ijsrd.com/Article.php?manuscript=IJSRDV3I90517</a>	
6.	Vertical accuracy assessment of single frequency DGPS,	Arun Patel and Sudhir Kumar Raghav	International Journal for Scientific Research & Development	Vol. 3, Issue 03, 2015	ISSN (online): 2321-0613.	<a href="https://ijsrd.com/Article.php?manuscript=IJSRDV3I30398">https://ijsrd.com/Article.php?manuscript=IJSRDV3I30398</a>	
7.	Use of Sugarcane Bagasse Ash in Cement Concrete Paver Blocks for Medium Traffic	Arvind Kumar and Arun Patel	International Journal for Scientific Research & Development	Vol. 3, Issue 09. 2015	ISSN (online): 2321-0613.	<a href="https://www.academia.edu/20112862/Use_of_Sugarcane_BAGASSE_Ash_in_Cement_Concrete_Paver_Blocks_for_Medium_Traffic">https://www.academia.edu/20112862/Use_of_Sugarcane_BAGASSE_Ash_in_Cement_Concrete_Paver_Blocks_for_Medium_Traffic</a>	

8.	Performanc es Evaluation of different Open source DEM using Differential Global Positioning System (DGPS)	Arun Patel, Dr.S.K.K atiyar, and Dr. Vishnu Prasad	The Egyptian Journal of Remote Sensing and Space Sciences	Volume 19, Issue 1, June 2016, Pages 7-16	DOI: 10.1016/j.ejr.s.2015.12.004	<a href="https://www.sciencedirect.com/science/article/pii/S1110982315000745#:~:text=Performanc e%20evaluation%20of%20DEM%20can,RMSE)%20were%20performed%20on%20it.">https://www.sciencedirect.com/science/article/pii/S1110982315000745#:~:text=Performanc e%20evaluation%20of%20DEM%20can,RMSE)%20were%20performed%20on%20it.</a>	Scopus
9.	Bathymetri c Mapping of Bhopal City Lower Lake IRS-P6:Liss-4 Imagery Using Artificial Neural Network	Arun Patel Dr.S.K.K atiyar and Dr.Vish nu Prasad	Journal of the Indian Society of Remote Sensing	44, pages605–616 (2016)	DOI.10.1007/s12524-015-0523-8.	<a href="https://link.springer.com/article/10.1007/s12524-015-0523-8">https://link.springer.com/article/10.1007/s12524-015-0523-8</a>	Scopus
10.	Need of Landuse/Landcover Information Using Geoinformatic Techniques for Water Planning and Management	Sanjeev Ku. Gatum and Arun Patel	Internation al Journal of Trend in Research and Developme nt	Vol.4, Iss. 5, Sep. 2017.	Impact factor 4.04(Cal culated I2OR)	<a href="https://www.ijtrd.com/papers/IJTRD10858.pdf">https://www.ijtrd.com/papers/IJTRD10858.pdf</a>	
11.	Prediction of Water Demand from Landuse Information Using Geoinformatic Techniques and its Comparison with the Conventional Methods: A Case Study for Bhopal City	Sanjeev Ku. Gatum and Arun Patel	Internation al Journal of Trend in Research and Developme nt	Vol. 4, Iss.4, Aug.2017	Impact factor 4.04(Cal culated I2OR)		

12.	Geospatial technique in Water Distribution System- A Review	Arun Patel and Pramesh Pauranik	Research Journal of Engineering Technology and Management	Vol.01. Iss.01 PP.35-44	ISSN: 2582-0028	<a href="http://www.rjetm.in/RJETM/Vol01_Issue01/Geospatial%20Techniques%20in%20Water%20Distribution%20System%20-%20A%20Review.pdf">http://www.rjetm.in/RJETM/Vol01_Issue01/Geospatial%20Techniques%20in%20Water%20Distribution%20System%20-%20A%20Review.pdf</a>	
13.	Bathymetric Mapping For Shallow Water Using Landsat 8 Via Artificial Neural Network Technique	Arun Patel Dr.S.K.Katiyar, and Dr Vishnu Prasad	International Conference On Recent Trends And Innovations In Civil Engineering (ICRTICE-2019) Organized By:- SPRINGER and Department of Civil Engineering MEDI-CAPS UNIVERSITY , INDORE,	pp 717–733, September 2019	2366 - 2565	<a href="https://link.springer.com/chapter/10.1007/978-981-15-5195-6_55">https://link.springer.com/chapter/10.1007/978-981-15-5195-6_55</a>	Scopus
14.	Modeling Of Acceleration Behaviour Of Light Motor Vehicles	Sushant M. Gajbhiye and Dr. Arun Patel	Elementary Education Online	Volume 20, Issue 6, 2021	1305-3515	<a href="https://ilkogretim-online.org/index.php/pub/article/view/5106">https://ilkogretim-online.org/index.php/pub/article/view/5106</a>	Scopus
15.	Analysis of Acceleration Behaviour of Light Motor Vehicles	Sushant M. Gajbhiye and Dr. Arun Patel	European Journal of Advances in Engineering and Technology,	Volume 9 Issue 4s 2022	2394 - 658X	<a href="https://ejaet.com/PDF/9-4s/EJAET-9-4s-55-62.pdf">https://ejaet.com/PDF/9-4s/EJAET-9-4s-55-62.pdf</a>	-
16.	Analysis of Acceleration Behaviour of Light Motor Vehicles	Sushant M. Gajbhiye and Dr. Arun Patel	International Conference on Tech Trends in Science & Engineering	25 <sup>th</sup> – 26 <sup>th</sup> Feb.22	-		
17.	Simulation Model for High Motor Vehicles for Heterogeneous Traffic	Sushant M. Gajbhiye and Dr. Arun Patel	International Conference on Scientific Computing in Innovation	6 <sup>th</sup> – 8 <sup>th</sup> April.22	ISBN 978-93-91077-04-4		

18.	Analysis & Modeling of Deceleration Behaviour of Light Motor Vehicles	Satish Kene	International Conference on Smart Environment Management and Solutions	21 <sup>st</sup> – 22 <sup>nd</sup> April.22	-		
19.	Experimental Investigation On Paver Block Using Fly Ash, Rice Husk Ash And Plastic	Satish Kene and Dr. Arun Patel	Elementary Education Online	Volume 20, Issue 6, 2021	1305-3515	<a href="https://ilkogretim-online.org/index.php/pub/article/view/5116">https://ilkogretim-online.org/index.php/pub/article/view/5116</a>	Scopus
20.	Sustainable Construction Using Mineral Admixtures In Light Weight Blocks To Form Innovative Concrete As A Green Building Material	Satish Kene and Dr. Arun Patel	International Conference on Tech Trends in Science & Engineering	25 <sup>th</sup> – 26 <sup>th</sup> Feb.22	-		
21.	Experimental Investigation With Natural Minerals & Foaming Agent to make Special Sustainable Building Construction Material”	Satish Kene	International Conference on Scientific Computing in Innovation	6 <sup>th</sup> – 8 <sup>th</sup> April.22	ISBN 978-93-91077-04-4		
22.	Sustainable Construction Using Natural Mineral & EPS Beads In Light Weight Blocks To Form Innovative Concrete As A Green Building Material	Ashish Moon and Dr. Arun Patel	International Conference on Smart Environment Management and Solutions	21 <sup>st</sup> – 22 <sup>nd</sup> April.22	-		
23.	Experimental Investigation By Using Natural Minerals As New Edge Sustainable Building Material	Ashish Moon and Dr. Arun Patel	Elementary Education Online	Volume 20, Issue 6, 2021	1305-3515	<a href="https://ilkogretim-online.org/index.php/pub/article/view/5113">https://ilkogretim-online.org/index.php/pub/article/view/5113</a>	Scopus

24.	Sustainable Construction Using Mineral Admixtures In Light Weight Blocks To Form Innovative Concrete As A Green Building Material	Ashish Moon and Dr. Arun Patel	International Conference on Tech Trends in Science & Engineering	25 <sup>th</sup> – 26 <sup>th</sup> Feb.22	2394-658X		
25.	Experimental Investigation With Natural Minerals & Foaming Agent to make Special Sustainable Building Construction Material	Ashish Moon and Dr. Arun Patel	International Conference on Scientific Computing in Innovation	6 <sup>th</sup> – 8 <sup>th</sup> April.22	ISBN 978-93-91077-04-4		
26.	Sustainable Construction Using Natural Mineral & EPS Beads In Light Weight Blocks To Form Innovative Concrete As A Green Building Material	Ashish Moon and Dr. Arun Patel	International Conference on Smart Environment Management and Solutions	21 <sup>st</sup> – 22 <sup>nd</sup> April.22	-		
27.	Advance Technologies for treatment of Municipal Solid Waste	Varun Singh Bundela , Arun Patel	International Journal for Research Trends and Innovation	Volume 7 Issue 7, July-2022	ISSN: 2455-2631,	<a href="https://ijrti.org/papers/1JRTI2207153.pdf">https://ijrti.org/papers/1JRTI2207153.pdf</a>	
28.	MSW Management and Best Suitable Option Virtually Waste to Energy Plant for Resource and Energy Recovery for Bhopal (M.P.) India	Varun Singh Bundela , Arun Patel	International Journal of Management and Humanities (IJMH)	Volume-8 Issue-11, July 2022	ISSN: 2394-0913 (Online) ,	<a href="https://www.ijmh.org/wp-content/uploads/papers/v8i11/K15010781122.pdf">https://www.ijmh.org/wp-content/uploads/papers/v8i11/K15010781122.pdf</a>	

29.	Municipal Solid Waste Management in Bhopal city Madhya Pradesh India	Varun Bundela and Arun Patel	International Journal of Scientific Research in Engineering and Management (IJSREM)	Volume: 06 Issue: 06   June - 2022 Impact Factor: 7.185	ISSN: 2582- 3930	<a href="https://ijsrem.com/download/municipal-solid-waste-management-in-bhopal-city-madhya-pradesh-india/">https://ijsrem.com/download/municipal-solid-waste-management-in-bhopal-city-madhya-pradesh-india/</a>	
30.	Concrete mix rationalization through sustainable ingredient using coconut shell ash	Vishnu Prasad Dang, Sudesh Kumar Sohani and Arun Patel	International Journal of Advanced Technology and Engineering Exploration (IJATEE)	Volume-11 Issue-110 January- 2024	ISSN (Print):2 394- 5443 ISSN (Online): 2394- 7454	<a href="https://accentsjournals.org/PaperDirectory/Journal/IJATEE/2024/1/2.pdf">https://accentsjournals.org/PaperDirectory/Journal/IJATEE/2024/1/2.pdf</a>	scopus
31.	Experimental investigation on the utilization of e-waste, plastic waste, and crushed coconut shell as partial replacements for natural aggregates in concrete	Vishnu Prasad Dang, Sudesh Kumar Sohani and Arun Patel	Journal of Integrated SCIENCE & TECHNOLOGY	2025, 13(5), 1102, 1-10	DOI: <a href="https://doi.org/10.62110/sciencein.jist.2025.v13.1102">https://doi.org/10.62110/sciencein.jist.2025.v13.1102</a>	<a href="https://pubs.thesciencein.org/journal/index.php/jist/article/view/a1102">https://pubs.thesciencein.org/journal/index.php/jist/article/view/a1102</a>	Scopus Scopus and SCI
32.	Quantification and prediction of solid waste generation based on socio-economical parameters	Arun Kumar Patel & Varun Singh Bundela	Journal of Material Cycles and Waste Management, Springer Nature	Volume 26, pages 3962– 3980, (2024)	DOI <a href="https://doi.org/10.1007/s10163-024-02046-x">https://doi.org/10.1007/s10163-024-02046-x</a>	<a href="https://link.springer.com/article/10.1007/s10163-024-02046-x">https://link.springer.com/article/10.1007/s10163-024-02046-x</a>	
33.	Prediction of Compressive Strength by Considering Practical Consideration Non-destructive Test by Artificial Neural Network	Priyesh Gangele And Arun Kumar Patel	Journal Of Materials And Engineering Structures	12 (2025) 47–62		<a href="https://revue.ummtto.dz/index.php/JMES/article/view/3637">https://revue.ummtto.dz/index.php/JMES/article/view/3637</a>	Scopus and SCI

Google citation link :- <https://scholar.google.com/citations?user=3EzdabsAAAAJ>

List of Workshop Organized/Training program/Summer/Winter School attend/Award

S.No	Type of program	Topic	Organized by	Date
1.	Training	GIS and Modern Surveying Course	Geomatics Academy	15 <sup>th</sup> Aug to 15 <sup>th</sup> Sep 2009
2.	Workshop	GPS and Its Application & DGPS Training	MANIT	16 <sup>th</sup> - 18 <sup>th</sup> April 2010
3.	Work Shop	Principles and Application of GIS	School of Planning and Architure, Bhopal	27 <sup>th</sup> -28 <sup>th</sup> sep 2010
4.	Pre-symposium Tutorial	Soft Classification Techniques & Geospatial for Infrastructure	Indian Society of Remote Sensing	29 <sup>th</sup> -30 <sup>th</sup> Nov 2010
5.	Basic Training	Remote sensing, GIS and GPS	ISRO	1 <sup>st</sup> Aug to 8 <sup>th</sup> Sep 2011
6.	Training Program	ArcGIS 2010	ESRI India	1 <sup>st</sup> -2 <sup>nd</sup> Mar 2012
7.	Workshop	Writing Effective Conference paper for Engineering/Science Teachers	IIT-Bombay	18 <sup>th</sup> -19 <sup>th</sup> Feb 2012
8.	Seminar	Clean Energy options & Nuclear Safety	Dept of Energy MANIT-Bhopal	27 <sup>th</sup> Mar 2012
9.	One Week Faculty Development Program	Seismic Vulnerability of Structure	UIT-RGPV Bhopal	27 <sup>th</sup> Nov- 1 <sup>st</sup> Dec 2017
10.	One Week Faculty Development Program	Sustainable Solid Waste Management	UIT-RGPV Bhopal	2 <sup>nd</sup> to 6 <sup>th</sup> April 2018
11.	Model Making	Utilization of Water	Design Contest on Gross Root Technology/ Local Innovation :- Organized by REGIONAL SCIENCE CENTRE	22-23 Feb 2019
12.	One day Workshop	Multichannel Analysis of surface Waves(MASW)	UIT-RGPV Bhopal	20th September

				2019
13.	One day Workshop	Vastu Solution-A Scientific Approach In Civil Engineering	UIT-RGPV Bhopal	31st January 2020
14.	Academic and Research	Certificate of Recognition	RKDF University	Session 2020-21
15.	Two day Industry	Industrial Visit To Nhdc Hydro Power Plant Omkareshwar	VIT-Civil Engineering Department	19-20 April 2022
16.	Research Excellence Award		Academic Council of RKDF University Bhopal	5 <sup>th</sup> sept 2023
17.	Webinar	Latex Tool for scientific Writing	Poornima College of Engineering	Feb 22, 2024
18.	FDP	Construction Tomorrow : Advancements in Construction Engineering and Structural Design	Poornima College of Engineering	8-13 March
19.	FDP	Design of building using ETABS	SkillDzire in collaboration with AICTE	1 month(02 July 2024)
20.	Senior	Case study on condition Assessment of Existing RCC Structure using Infra-Red Technology	Ultratech	Apr 27,2024
21.	FDP	Constructing Tomorrow: Advancements in Construction Engineering and Structural Design	Poornima College of Engineering	08-13 March 2024
22.	Training Program	TVAS-The Promise of Green Hydrogen : A Comprehensive Overview	TPSI Skill Qualification Framework Conducted By TDPSI-Mundra TATA POWER	Feb 1, 2025
23.	Training Program	Industrial Training Program on Electrical Vehicle	RKDF University and ISIEINDIA	21 <sup>st</sup> and 25 <sup>th</sup> April 2025

## List of Ph D Candidates Area/Topic and their Status of Research

S.No	Name of Student	Enr.No	Working/Contact details	Area/Topic	Status
1	Mr. Ashish .S.Moon	01078ET002	Head of Department Civil (SRPCE Nagpur) Mob No. +91 9860016004, 9673003304. Email:- ash04moon@gmail.com	Investigation on Innovative Foam Concrete As a Green Building Material	Awarded
2	Mr. Sushant Madhukar Gajbhiye	01078ET003	Asst. Professor GNIT Nagpur Mobile No. 909659895 Email:- sushant20011986@gmail.com	Modeling of Traffic Simulation System for Dynamic Traffic with Multi Agent Frame Work	Awarded
3	Mr. Satish Deoraoji Kene	010718ET001	Asst. Professor SVP CET, Nagpur Mobile No. 9665037669 Email:- satishkene2285@gmail.com	Utilization of Fly Ash, Rice Husk Ash and Plastic Waste in Paver Blocks	Awarded
4	Mr. Varun Singh Bundela	01078ET006	Email:- bundelavarun@gmail.com	Suitability of Waste to Energy Plant for MSW Management Bhopal City	Awarded
5	Mrs Vibha Joshi	1807PHD062	Director, FOA, RKDF, University Mob:-9893647981 email:- vibha_joshi4360@rediffmail.com	Frame Work for the Sustainable Development of Village Toward Improvement of Sanitation ,Drain and Water Supply	RDC Completed