



**GUJARAT
TECHNOLOGICAL
UNIVERSITY**
AN INTERNATIONAL INNOVATIVE UNIVERSITY
(Accredited with A+ Grade by NAAC)
State Government University

Bulletin - Research & Academic Publications

April-June, 2025

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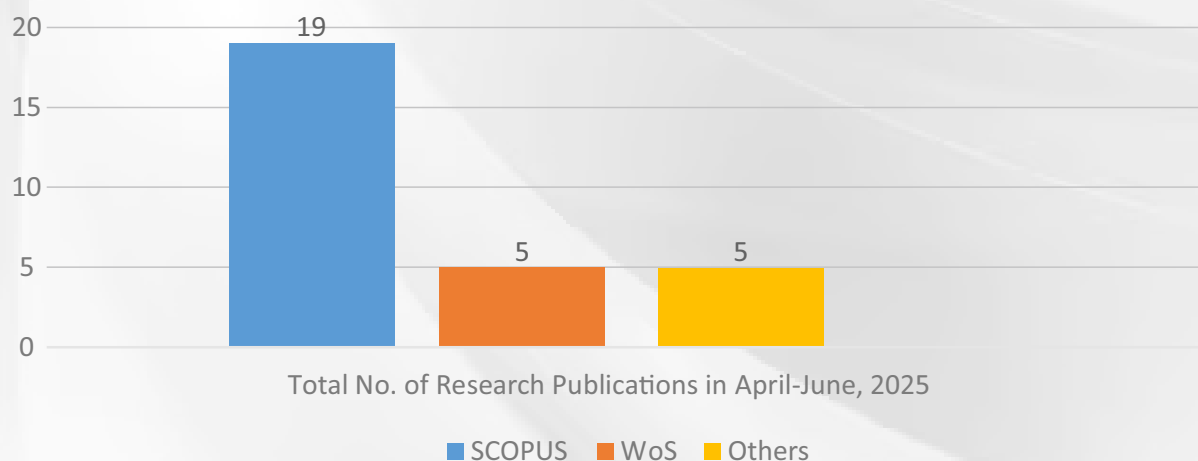
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SUMMARY (April-June, 2025)

Sr. No.	Title	No.
01	Research Papers	SCOPUS 19
		WoS 5
		Others 5
02	Patents	Utility 3
		Design 4
03	Books	7
04	Awarded Ph.D. Thesis Abstract	33

Total No. of Research Publications in April-June 2025



MESSAGE FROM HON'BLE VICE CHANCELLOR



Dear Faculty Members and Researchers,

It is a great pleasure to release the eight successive issue of R&D bulletin, which celebrates your remarkable achievements and also highlights the commitment to enhance knowledge. These accomplishments reflect your dedication towards achieving research excellence.

At GTU, we encourage a vibrant and dynamic research ecosystem. Thanks to your efforts, so that, we lay the right foundation of an encouraging future with thriving collaboration, international partnerships and associations.

It is worth mentioning that accomplishments with regards to research projects, publications, patents and other achievements are an important part of university ecosystem and helps showcase our achievements.

This bulletin serves to reach out to a wider and more diverse audience, including research organizations, academia and industry those that serve for the development of our state and nation.

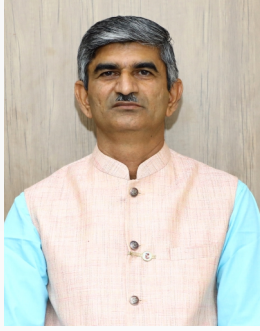
We take this opportunity to congratulate those whose work is featured in this bulletin and would request all to keep sending their accomplishments to GTU R&D Cell to help us collectively achieve the objective of a better research ecosystem.

Best Wishes,

Dr. Rajul K. Gajjar
Vice Chancellor,
GTU, Ahmedabad



MESSAGE FROM REGISTRAR



Dear Faculty Members, Students and Researchers,

Namaskar!!

I am pleased of showcasing your significant journey that you have made through your accomplishments in the form of research projects, publications, patents and other achievements which is published in this bulletin. Your dedication towards maintaining excellence and commitment towards publishing in reputable journals is instrumental in augmenting the University's thrust towards excellence.

With the release of this quarterly bulletin we are pleased to showcase your accomplishments. We encourage all our faculty members, especially those serving at GTU- Schools & GTU-ITR, to engage in collaborative and interdisciplinary research, brining out positive transformations that impacts and improves the quality of life. It is worth mentioning that GTU-Schools & GTU-ITR should specifically keep submitting their accomplishments regarding research projects, publications, patents and other achievements to R&D Cell.

This bulletin serves as an important source of information within the academic fraternity especially for ranking frameworks, and I congratulate to all those whose work is published in this bulletin.

I urge the faculty members especially those serving at GTU- Schools & GTU-ITR to remain persistent, keep submitting their accomplishments in order to excel and work collaboratively to enhance our ranking through our combined efforts.

Best Wishes,

Dr. K. N. Kher
Registrar, GTU, Ahmedabad

MESSAGE FROM DIRECTOR, RDC



Research and Development Cell of the university compiles publication data of all the faculty members as well as research scholars, and releases it in the form of Academic and Research Publications Bulletin on regular basis. We have started this activity from January – 2024, and this is the second issue of the year 2025.

In addition to the publication data, we also include information about granted research projects, and abstracts of Ph.D. thesis published by research scholars and research supervisors during the past three months.

The bulletin provides good visibility of university research outcomes across the academic institutions as well as industry connects. We request all research supervisors, faculty members and students of the university to provide research data such that we can compile and come out with the bulletin on regular interval.

We also request all the stakeholders of the GTU to circulate this bulletin among their network.

I congratulate the team of R & D Cell for their sincere efforts in collection of research data and bringing out this bulletin.

Dr. R. A. Thakker
Director – R & D Cell
GTU – Ahmedabad

RESEARCH PAPERS

Research Papers (Engineering-Supervisors)

01

Name of Institute	Dr. S. & S. S. Ghandhy Government Engineering College, Surat (023)
Title of Article	Understanding Climate Change Impacts on Streamflow by Using Machine Learning: Case Study of Godavari Basin
Name of Authors	Ravi Ande, Chandrashekar Pandugula, Darshan Mehta, Ravikumar Vankayalapati, Prashant Birbal, Shashikant Verma, Hazi Mohammad Azamathulla, Nisarg Nanavati
Name of Corresponding Author	Ravi Ande
Name of the Journal	MDPI Water
Indexed	WoS
ISSN No.	2073-4441
URL	https://doi.org/10.3390/w17081171
Date of Publication	14-04-2025
SDG	Climate Action

02

Name of Institute	Government Engineering College, Bharuch (014)
Title of Article	Investigation of augmentation of funnel integrated with wick material on yield of square pyramid solar still: A summertime experimental study
Name of Authors	Shirish K. Patel, Kalpesh V. Modi
Name of Corresponding Author	Kalpesh V. Modi
Name of the Journal	Journal of Cleaner Production
Indexed	WoS
ISSN No.	0959-6526
URL	https://doi.org/10.1016/j.jclepro.2025.145539
Date of Publication	19-04-2025
SDG	Clean Water and Sanitation

03

Name of Institute	V.V.P. Engineering College, Rajkot (047)
Title of Article	Vapor-liquid equilibrium, thermodynamic properties, process simulation and economic evaluation of CPME and methanol system
Name of Authors	Kedar Joshi, Vyomesh M. Parsana, Priyank Khirsariya, Mahinder Ramdin, Thijs J. H. Vlugt
Name of Corresponding Author	Vyomesh M. Parsana
Name of the Journal	AIChE Journal
Indexed	WoS
ISSN No.	1547-5905
URL	https://doi.org/10.1002/aic.18877
Date of Publication	03-05-2025
SDG	Good Health and Well-being; Responsible Consumption and Production

04

Name of Institute	Government Engineering College Bharuch (014)
Title of Article	Hybrid Optimization Approach for Optimal Location of Electric Vehicle Charging Station (EVCS) in Distribution Network Considering Voltage Stability
Name of Authors	Sarika S. Kanojia, Bhavik N. Suthar, Ashutosh K. Giri
Name of Corresponding Author	Sarika S Kanojia
Name of the Journal	Smart Grids and Sustainable Energy
Indexed	WoS
ISSN No.	2731-8087
URL	https://link.springer.com/article/10.1007/s40866-025-00264-2
Date of Publication	19-05-2025
SDG	Affordable and Clean Energy

Name of Institute	Dr. S. & S. S. Ghandhy Government Engineering College, Surat (023)
Title of Article	Integration of frequency analysis and HEC-RAS for probabilistic flood hazard mapping
Name of Authors	Mohamedmaroof P. Shaikh, Vijendra Kumar, Sanjaykumar M. Yadav, Vivek L. Manekar, Darshan Mehta, Arpan Deshmukh
Name of Corresponding Author	Mohamedmaroof P. Shaikh
Name of the Journal	Proceedings of the Institution of Civil Engineers - Water Management
Indexed	WoS
ISSN No.	1741-7589
URL	https://doi.org/10.1680/jwama.24.00046
Date of Publication	30-06-2025
SDG	Climate Action

Research Papers (Pharmacy-Supervisors)

01

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Alginate gels: Chemistry, gelation mechanisms, and therapeutic applications with a focus on GERD treatment
Name of Authors	Devesh U. Kapoor, Anil Pareek, Swapnil Sharma, Bhupendra G. Prajapati, Kasitpong Thanawuth, Pornsak Srimornsak
Name of Corresponding Author	Bhupendra G. Prajapati
Name of the Journal	International Journal of Pharmaceutics
Indexed	SCOPUS
ISSN No.	0378-5173
URL	https://www.sciencedirect.com/science/article/pii/S0378517325004077
Date of Publication	10-04-2025
SDG	Good Health and Well-being

02

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Exploring starch-based excipients in pharmaceutical formulations: Versatile applications and future perspectives
Name of Authors	Devesh U. Kapoor, Anil Pareek, Supakij Suttiruengwong, Mayank Sharma, Pornsak Srimornsak, Bhupendra G. Prajapati
Name of Corresponding Author	Bhupendra G. Prajapati
Name of the Journal	European Journal of Pharmaceutics and Biopharmaceutic
Indexed	SCOPUS
ISSN No.	0939-6411
URL	https://www.sciencedirect.com/science/article/pii/S0939641125001043
Date of Publication	30-04-2025
SDG	Good Health and Well-being

03

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Advancements in superparamagnetic nanogels: A dual-role platform for diagnosis and targeted drug delivery
Name of Authors	Anil Pareek, Sanjesh Kumar, Devesh U. Kapoor, Bhupendra G. Prajapati
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	International Journal of Pharmaceutics
Indexed	SCOPUS
ISSN No.	0378-5173
URL	https://www.sciencedirect.com/science/article/pii/S0378517325005204
Date of Publication	08-05-2025
SDG	Good Health and Well-being

04

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Natural sesquiterpene lactones in prostate cancer therapy: mechanisms and sources
Name of Authors	Keshav Kaushal, Devesh U. Kapoor, Sanjesh Kumar, Anakha Sony, Aswin Viswanath, M. V. N. L. Chaitanya, Mansi Singh, Sachin Kumar Singh, Avijit Mazumder
Name of Corresponding Author	M. V. N. L. Chaitanya
Name of the Journal	Medical Oncology
Indexed	SCOPUS
ISSN No.	1357-0560
URL	https://link.springer.com/article/10.1007/s12032-025-02740-2
Date of Publication	15-05-2025
SDG	Good Health and Well-being

05

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Nanomedicine-Based Treatments for Rare and Aggressive Ocular Cancers: Advances in Drug Delivery
Name of Authors	Devesh U. Kapoor, Geeta Patel, Bhupendra G. Prajapati
Name of Corresponding Author	Bhupendra G. Prajapati
Name of the Journal	Current Treatment Options in Oncology
Indexed	SCOPUS
ISSN No.	1534-6277
URL	https://link.springer.com/article/10.1007/s11864-025-01330-8
Date of Publication	22-05-2025
SDG	Good Health and Well-being

06

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Harnessing pectin nanoparticles for targeted drug delivery in cancer therapy
Name of Authors	Bhupendra G. Prajapati, Priyanka Uniyal, Sonam M. Gandhi, Summya Rashid, Shital R. Patel, Devesh U. Kapoor
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	Carbohydrate Polymers, Elsevier
Indexed	SCOPUS
ISSN No.	0144-8617
URL	https://www.sciencedirect.com/science/article/pii/S0144861725005983
Date of Publication	27-05-2025
SDG	Good Health and Well-being

07

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Reengineering infection treatment: Liposome-based innovations in antibacterial delivery
Name of Authors	Devesh U. Kapoor, Murtaza Ahmad Khanday, Anil Pareek, Bhupendra G. Prajapati
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	Results in Chemistry
Indexed	SCOPUS
ISSN No.	2211-7156
URL	https://www.sciencedirect.com/science/article/pii/S221171562500400X
Date of Publication	10-06-2025
SDG	Good Health and Well-being

08

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Advances in alginate-based nanoformulations: Innovative and effective strategies for targeting and treating brain disorders
Name of Authors	Ekta Rawat, Suman Sharma, Shweta Vyas, Omar Awad Alsaidan, Devesh U. Kapoo, Bhupendra G. Prajapati
Name of Corresponding Author	Bhupendra G. Prajapati
Name of the Journal	International Journal of Pharmaceutics
Indexed	SCOPUS
ISSN No.	0378-5173
URL	https://www.sciencedirect.com/science/article/pii/S037851732500688X
Date of Publication	13-06-2025
SDG	Good Health and Well-being

09

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	pH-Sensitive hydrogels for breast cancer therapy: Targeted drug delivery and controlled release approaches
Name of Authors	Anil Pareek, Bhumi Bhatt, Devesh U. Kapoor, Vrutti Parmar, Glowi Alasiri, Omar Awad Alsaidan, Bhupendra G. Prajapati
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	International Journal of Pharmaceutics
Indexed	SCOPUS
ISSN No.	0378-5173
URL	https://www.sciencedirect.com/science/article/pii/S0378517325007367
Date of Publication	24-06-2025
SDG	Good Health and Well-being

10

Name of Institute	Anand Pharmacy College, Anand (205)
Title of Article	Designing of industry friendly pastilles of Rosuvastatin and Piperine integrating green chemistry and advanced statistical approach
Name of Authors	Hardik Rana, Grishma Patel, Vaishali Thakkar, Chetna Modi
Name of Corresponding Author	Hardik Rana
Name of the Journal	Discover Chemistry
Indexed	Others
ISSN No.	3005-1193
URL	https://link.springer.com/article/10.1007/s44371-025-00172-5
Date of Publication	21-04-2025
SDG	Good Health and Well-being

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Enhancing solubility of exemestane through nanosuspension formulation and characterization
Name of Authors	Bhupendra G. Prajapati, Jaybharati Vasava, Devesh U. Kapoor, Himanshu Paliwal, Dignesh Khunt
Name of Corresponding Author	Bhupendra G. Prajapati, Jaybharati Vasava, Devesh U. Kapoor, Himanshu Paliwal, Dignesh Khunt
Name of the Journal	Next Research
Indexed	Others
ISSN No.	3050-4759
URL	https://www.sciencedirect.com/science/article/pii/S3050475925002180
Date of Publication	29-04-2025
SDG	Good Health and Well-being

Research Papers (Management-Supervisors)

01

Name of Institute	Srk Institute of Management and Computer Education, Anjar, Kutchh (781)
Title of Article	Digital and Remote Teams: Their Roles in Project Management
Name of Authors	Ms. Dipal Gohil, Dr. Vijay Pithadia
Name of Corresponding Author	Ms. Dipal Gohil
Name of the Journal	International Journal of Progressive Research in Engineering Management and Science (IJPREMS)
Indexed	Others
ISSN No.	2583-1062
URL	https://www.ijprems.com/paperdetail.php?paperId=9d8756946b96a83e9f2212779765f037&title=Digital+and+remote+teams%3A+Their+roles+in+project+management&authpr=Ms.+Dipal+Gohil
Date of Publication	01-01-2025
SDG	Decent Work and Economic Growth

Research Papers (Engineering-Scholars)

01

Enrollment No	179999915018
Title of Article	Design of High-Speed Current Comparator using SSF-Based CC-II
Name of Authors	Payal Shah, Saradadevi Mandalapu, Rajesh Thakker, Amisha Naik
Name of Corresponding Author	Payal Shah
Name of the Journal	Journal of Circuits, Systems and Computers
Indexed	SCOPUS
ISSN No.	0218-1266 ,1793-6454
URL	https://www.worldscientific.com/doi/10.1142/S0218126625502172
Date of Publication	07-04-2025
SDG	Industry, Innovation and Infrastructure

02

Enrollment No	199999913502
Title of Article	Harnessing Deep Learning for Crowdfunding Success Prediction: A Comparative Analysis on Kickstarter Dataset
Name of Authors	Ahmed Abuamer, Hiteishi Diwanji, Tamer Jarada
Name of Corresponding Author	Procedia Computer Science
Name of the Journal	Water Conservation Science and Engineering
Indexed	SCOPUS
ISSN No.	1877-0509
URL	https://doi.org/10.1016/j.procs.2025.04.580
Date of Publication	10-05-2025
SDG	Good Health and Well-being, Quality Education, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Peace, Justice and Strong Institutions, Partnerships for the Goals

03

Enrollment No	201049819002
Title of Article	Performance Assessment of Rotating Spiral-Shaped Baffles built-in Solar Air Heater: 4E and sustainability analysis
Name of Authors	Yogeshkumar Khimsuriya, DK Patel, Vivek Patel, Vinay Pandit, Hashim Sahar Mohaisen, Lav Kumar Kaushik, Pranav Mehta, Himesh Patel
Name of Corresponding Author	Pranav Mehta
Name of the Journal	Case Studies in Thermal Engineering
Indexed	SCOPUS
ISSN No.	2214-157X
URL	https://www.sciencedirect.com/science/article/pii/S2214157X25006057
Date of Publication	16-05-2025
SDG	Affordable and Clean Energy

04

Enrollment No	209999913004
Title of Article	Advancing Alzheimer's Disease Detection: A Multi-Modal Deep Learning Approach for Streamlined Clinical Diagnosis
Name of Authors	Dr. Mehul parikh, Heena panjwani
Name of Corresponding Author	Dr. Mehul parikh
Name of the Journal	Utilitas Mathematica
Indexed	SCOPUS
ISSN No.	0315-3681
URL	https://utilitasmathematica.com/index.php/Index/article/view/2309/406
Date of Publication	17-06-2025
SDG	Good Health and Well-being

05

Enrollment No	219999919006
Title of Article	Experimental Analysis of Cutting Parameters and their Effect on Surface Roughness in Advanced Method of Hard Turning using CBN Tools
Name of Authors	Hardik Nayak
Name of Corresponding Author	Kanti Rathod
Name of the Journal	International Journal of Modern Manufacturing Technologies
Indexed	SCOPUS
ISSN No.	2067-3604
URL	https://ijmmt.ro/international-journal-ijmmt/vol17no12025
Date of Publication	20-06-2025
SDG	Industry, Innovation and Infrastructure

06

Enrollment No	179999919031
Title of Article	Comprehensive thermodynamic equilibrium model with modified equilibrium constants for biomass downdraft gasifiers
Name of Authors	Dipakkumar J. Parmar, Vimal R. Patel, Shyam K. Dabhi, Mazar A. Shaikh
Name of Corresponding Author	Vimal R. Patel
Name of the Journal	Paliva (Fuels)
Indexed	SCOPUS
ISSN No.	1804-2058
URL	https://paliva.vscht.cz/en
Date of Publication	28-06-2025
SDG	Affordable and Clean Energy

Enrollment No	239999913002
Title of Article	Enhancing Network Intrusion Detection Using Semi-Supervised Deep Generative Models
Name of Authors	Bhargavbhai Bharvad
Name of Corresponding Author	Bhargavbhai Bharvad
Name of the Journal	The Academic International Journal of Multidisciplinary Research
Indexed	Peer Reviewed (Others)
ISSN No.	2583-973X
URL	https://zenodo.org/records/15661402
Date of Publication	10-06-2025
SDG	Decent Work and Economic Growth, Industry, Innovation and Infrastructure

Research Papers (Pharmacy-Scholars)

01

Enrollment No	209999901001
Title of Article	Enhanced Delivery of Posaconazole Using Novel Solid Self Nanoemulsifying Drug Delivery System: In Vitro Characterization and Pharmacokinetic Study in Wistar Rats
Name of Authors	Hardikkumar K. Patel, Naitikkumar D. Trivedi, Vaishali T. Thakkar, Alpesh D. Patel, Upama N. Trivedi, Devesh U. Kapoor
Name of Corresponding Author	Naitikkumar D. Trivedi
Name of the Journal	Journal of Pharmaceutical Innovation
Indexed	SCOPUS
ISSN No.	1939-8042
URL	https://doi.org/10.1007/s12247-025-09985-4
Date of Publication	14-04-2025
SDG	Good Health and Well-being, Quality Education

02

Enrollment No	199999901518
Title of Article	ECM-responsive PEGylated liposomal biomaterial for enhanced tumor penetration through Dual-Mechanism microenvironment remodeling in lung cancer
Name of Authors	Rajeshkumar S. Palva , Jolly R. Parikh , Rajnikant M. Suthar , Musaratafrin Saiyed , Mitali Patel , Prajesh Prajapati , Umang H. Shah
Name of Corresponding Author	Rajeshkumar S. Palva
Name of the Journal	International Journal of Pharmaceutics
Indexed	SCOPUS
ISSN No.	1873-3476
URL	https://www.sciencedirect.com/science/article/abs/pii/S0378517325006428
Date of Publication	30-05-2025
SDG	Industry, Innovation and Infrastructure

Enrollment No	209999901001
Title of Article	Toxicity Studies of Solid Self Nanoemulsifying Drug Delivery System (S-SNEDDS) Containing Posaconazole in Wistar Rats
Name of Authors	Hardikkumar K. Patel, Naitikkumar D. Trivedi, Vaishali T. Thakkar, Alpesh D. Patel, Upama N. Trivedi, Devesh U. Kapoor
Name of Corresponding Author	Naitikkumar D. Trivedi
Name of the Journal	Journal of Pharmaceutical Innovation
Indexed	SCOPUS
ISSN No.	1939-8042
URL	https://doi.org/10.1007/s12247-025-10010-x
Date of Publication	11-06-2025
SDG	Good Health and Well-being, Quality Education

Research Papers (Management-Scholars)

01

Enrollment No	229999903050
Title of Article	Mind Over Markets Analyzing Behavioral Bias and its Impact on Investors Decisions
Name of Authors	Prema M. Yadav , Dr Chetna Makwana
Name of Corresponding Author	Prema M. Yadav
Name of the Journal	IOSR Journal of Economics and Finance (IOSR-JEF)
Indexed	Others
ISSN No.	2321-5933
URL	https://www.iosrjournals.org/iosr-jef/papers/Vol16-Issue3/Ser-1/H1603015565.pdf
Date of Publication	13-05-2025
SDG	Quality Education

Research Papers (Science-Scholars)

01

Enrollment No	21999996007
Title of Article	Thermophoresis and Brownian Motion Effects on Inclined MHD Nano-Fluid Flow With Multi-Slip Condition
Name of Authors	Gopal Nanda, Harshad Patel
Name of Corresponding Author	Harshad Patel
Name of the Journal	Journal of Computational Analysis and Applications
Indexed	SCOPUS
ISSN No.	1521-1398
URL	https://eudoxuspress.com/index.php/pub/article/view/2386
Date of Publication	30-04-2025
SDG	Industry, Innovation and Infrastructure

PATENTS

Patents (Engineering-Supervisors)

01

Name of Institute	VVP Engineering College, Rajkot (047)
Types of Patent	Utility
Title of Patent	Method for clarification treatment of turbid water by using natural coagulants
Name of Inventors	Dr. Darshana Bhatti, Shyam Mandaliya, Dr. Piyush Vanzara
Name of Applicant	Dr. Darshana Bhatti, Shyam Mandaliya, Dr. Piyush Vanzara
Patent No.	202521005518
Status of Patent	Published
Country of Filing	India
Date of Publication	04-04-2025
SDG	Good Health and Well-being, Clean Water and Sanitation

02

Name of Institute	Government Engineering College, Bharuch (014)
Types of Patent	Utility
Title of Patent	Integrated Waste Segregation and Vertical Transport System for Highrise Buildings
Name of Inventors	Prernaben Pravinchandra Shah, Kalpeshkumar Vasantbhai Modi, Harsh Hiteshbhai Mistry, Nirmalkumar Sureshkumar Rana, Vedant Vinayak Sonar
Name of Applicant	Prernaben Pravinchandra Shah, Kalpeshkumar Vasantbhai Modi, Harsh Hiteshbhai Mistry, Nirmalkumar Sureshkumar Rana, Vedant Vinayak Sonar
Patent No.	202521028924
Status of Patent	Published
Country of Filing	India
Date of Publication	11-04-2025
SDG	Good Health and Well-being

03

Name of Institute	Government Engineering College, Bharuch (014)
Types of Patent	Design
Title of Patent	Automatic Grain Weighing Machine
Name of Inventors	Prerna Pravinchandra Shah, Kalpeshkumar Vasantbhai Modi, Karan Ravindrabhai Sutar, Virajsinh Shailendrasinh Borasiya, Jainesh Dharmesh Dindoliwala, Dhruvkumar Sunilkumar Chauhan, Bhavin Ketankumar Joshi
Name of Applicant	Prerna Pravinchandra Shah, Kalpeshkumar Vasantbhai Modi, Karan Ravindrabhai Sutar, Virajsinh Shailendrasinh Borasiya, Jainesh Dharmesh Dindoliwala, Dhruvkumar Sunilkumar Chauhan, Bhavin Ketankumar Joshi
Patent No.	454900-001
Status of Patent	Filed
Country of Filing	India
Date of Publication	10-04-2025
SDG	Industry, Innovation and Infrastructure

04

Name of Institute	GTU-School of Applied Sciences and Technology (145)
Types of Patent	Design
Title of Patent	Bourdeaux Paste Ready Apparatus
Name of Inventors	Dr. Ashish Warghane, Kartik Chauhan, Dr. Vaibhav Bhatt, Dr. Dilip Kumar Ghosh, Dr. Rashmi Saini, Dr. Dolatsinh Zala, Dr. Kshipra Chauhan, Jigisha Ashokbhai Thakkar
Name of Applicant	Ashish Warghane
Patent No.	390729-001
Status of Patent	Granted
Country of Filing	India
Date of Publication	21-05-2025
SDG	No Poverty, Zero Hunger, Good Health and Well-being, Life on Land

Patents (Engineering-Scholars)

01

Enrollment No.	159997111009
Types of Patent	Utility
Title of Patent	Novel Mamata Healthcare Cyber Physical System for Implementation and Integration of Rural Maternal Treatment Practices in Maternal Hospital Units and Pathology Labs
Name of Inventors	Pradeepkumar C. Dhage, Prof(Dr) Rajesh A. Thakker, Prof (Dr) Krishna K. Warhade
Name of Applicant	Pradeepkumar C. Dhage, Prof(Dr) Rajesh A. Thakker, Prof (Dr) Krishna K. Warhade
Patent No.	2022/04698
Status of Patent	Granted
Country of Filing	South Africa
Date of Publication	29-06-2025
SDG	Good Health and Well-being

02

Enrollment No.	219999919006
Types of Patent	Design
Title of Patent	Universal Fixture of Tool Wear Measurement for Optical Measuring Instrument
Name of Inventors	Mr. Nayak Hardik Bhupendrabhai, Dr. Kantibhai Bhikhubhai Rathod, Poojan Jayprakash Patil
Name of Applicant	Hardik B. Nayak
Patent No.	434730-001
Status of Patent	Published
Country of Filing	India
Date of Publication	15-04-2025
SDG	Industry, Innovation and Infrastructure

Enrollment No.	219999913023
Types of Patent	Design
Title of Patent	Cattle Remote Health Monitoring Belt
Name of Inventors	Kundankumar Karsanbhai Chaudhary
Name of Applicant	Kundankumar Karsanbhai Chaudhary, Dr. Madhavi Bharatbhai Desai, Mansinhbhai Institute of Dairy & Food Technology
Patent No.	458922-001
Status of Patent	Filed
Country of Filing	India
Date of Publication	15-05-2025
SDG	Good Health and Well-being

BOOKS

01

Name of Institute	V.V.P. Engineering College, Rajkot (047)
Title of Book/Chapter	Thermodynamics and Phase Equilibrium
Name of Authors	Vyomesh M. Parsana, Abhishek Gupta, Dharmesh Sur, Kedar Joshi
ISBN No.	978-1-3943-7234-8
URL	https://onlinelibrary.wiley.com/doi/10.1002/9781394372348.ch5
Date of Publication	25-04-2025
SDG	Affordable and Clean Energy, Responsible Consumption and Production

02

Name of Institute	APMC College of Pharmaceutical Education and Research (207)
Title of Book/Chapter	4 - Skin cancer: Advances in clinical research
Name of Authors	Anita Patel, Nisarg Patel, Sapna Rathod, Hardik Goswami, Jayvadan K. Patel
ISBN No.	978-0-443-30219-0
URL	https://doi.org/10.1016/B978-0-443-30219-0.00005-4
Date of Publication	01-05-2025
SDG	Good Health and Well-being

03

Name of Institute	APMC College of Pharmaceutical Education and Research (207)
Title of Book/Chapter	5 - Lung cancer: Advances in clinical research
Name of Authors	Anita Patel, Nisarg Patel, Sapna Rathod, Hardik Goswami, Jayvadan K. Patel, Rahi Patel
ISBN No.	978-0-443-30219-0
URL	https://doi.org/10.1016/B978-0-443-30219-0.00007-8
Date of Publication	01-05-2025
SDG	Good Health and Well-being

04

Name of Institute	GTU-School of Applied Sciences and Technology (145)
Title of Book/Chapter	Dialogue in the Dirt: Plant–Microbe Interaction in Soil
Name of Authors	Ashish Warghane, Meera Bharat Vaishnav, Lovelesh Singh Saini, Raksha Bawankar, Sanghdeep Gautam, Jigisha Thakkar, Vaibhav Bhatt, Rajeshkumar G. Chaudhari, Vandana Gupta, Balu Ananda Chopade & Manju Shri
ISBN No.	978-981-96-3424-8
URL	https://link.springer.com/chapter/10.1007/978-981-96-3425-5_4
Date of Publication	17-05-2025
SDG	No Poverty, Zero Hunger, Clean Water and Sanitation, Life on Land

05

Name of Institute	Anand Pharmacy College (205)
Title of Book/Chapter	Unravelling the impact of NLRP3 inflammasome in fibrosis: Molecular insights into the fibrosis of diverse tissues and potential therapeutic options
Name of Authors	Mihir Parikh, Arun Soni and Tejal R. Gandhi
ISBN No.	978-0-4432-2300-6
URL	https://www.sciencedirect.com/science/article/abs/pii/B978044322300600019X
Date of Publication	13-06-2025
SDG	Good Health and Well-being

06

Name of Institute	Anand Pharmacy College (205)
Title of Book/Chapter	Pathophysiology, diagnostics and promising therapies of polycystic ovary syndrome: A systematic review of scientific literature
Name of Authors	Arun Soni, Mihir Parikh and Tejal R. Gandhi
ISBN No.	978-0-4432-2300-6
URL	https://www.sciencedirect.com/science/article/abs/pii/B9780443223006000139
Date of Publication	13-06-2025
SDG	Good Health and Well-being

Name of Institute	GTU- School of Applied Sciences & Technology (145)
Title of Book/Chapter	Review on Advancement of AI in Synthetic Biology
Name of Authors	Ishita Mirchandani, Yaminee Khandhediya, Kshipra Chauhan
ISBN No.	978-1-0716-4690-8
URL	https://link.springer.com/protocol/10.1007/978-1-0716-4690-8_26
Date of Publication	25-06-2025
SDG	Zero Hunger, Good Health and Well-being, Industry, Innovation and Infrastructure, Responsible Consumption and Production, Climate Action, Partnerships for the Goals

AWARDED PHD THESIS ABSTRACTS

Ph.D. Thesis Abstract (Engineering)

01

Name	Domadia Sunayana Gandadal
Enrollment No	199999915507
Title of Thesis	Segmentation and Analysis of MRI images of Glioblastoma Brain Tumors using Deep Learning
Faculty/Discipline	Electronics and Communication Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(57)_804204.pdf

02

Name	Suthar Trilok Jayprakash
Enrollment No	219999913003
Title of Thesis	Novel approach for Weather forecasting using predictive analysis model
Faculty/Discipline	Computer /IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(50)_384376.pdf

03

Name	Jadav Jignaben Jagdishbhai
Enrollment No	199999913521
Title of Thesis	Heart Rate Variability Based Mental Stress Prediction via Non - invasive Devices Using Machine Learning Approach
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(47)_201547.pdf

04

Name	Dhadhal Hema Surendrakumar
Enrollment No	179999913008
Title of Thesis	Approach to Mitigate DDoS Attack in Software Define Network
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(59)_105231.pdf

05

Name	Nirali Anand Pandya
Enrollment No	179999913021
Title of Thesis	Multiview Object Detection and Tracking using Deep Learning Techniques
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(53)_428002.pdf

06

Name	Pritesh A. Pandey
Enrollment No	1799999913024
Title of Thesis	Image Representation with Caption Generators and Auto Tagging
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(58)_197730.pdf

07

Name	Rashmi Ramanand Rathi
Enrollment No	219999913022
Title of Thesis	Robust Multi-Resolution Change Detection for Remote Sensing Images
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(70)_146768.pdf

08

Name	Vala Jaydevsinh Baneshinh
Enrollment No	199999913563
Title of Thesis	Detection of Cyber Crimes via Digital Forensic Artifacts
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(65)_813983.pdf

09

Name	Ms. Maheriya Arpita Pareshkumar
Enrollment No	201379813001
Title of Thesis	An Effective Approach to Mitigate Security Challenges through Privacy Preservation for Machine Learning Techniques to Build Robust Healthcare Data
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(3)_567354.pdf

10

Name	Jivani Dipak Keshavjibhai
Enrollment No	189999912017
Title of Thesis	Performance of Friction Pendulum Isolated System Under Stochastic Ground Motions
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(42)_520023.pdf

11

Name	Bharvi Akin Shah
Enrollment No	189999912032
Title of Thesis	Evaluation Of Opportunities For Enhancement of Transit Modal Share With Respect To Integrated Feeder Service For Intra Urban Travel
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract-1_743038.pdf

12

Name	Bhavsar Zalak Aalap
Enrollment No	209999912008
Title of Thesis	Groundwater Quality and Vulnerability Assessment of Seawater Intrusion in Khambhat Coastal Region
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(1)_476715.pdf

13

Name	Mamta Ambalal Patel
Enrollment No	159997119019
Title of Thesis	Experimental Investigation for Development of Compacted Graphite Iron (Cgi) and its Characterization
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(56)_816314.pdf

14

Name	Rupal Paresh Vyasa
Enrollment No	159997119030
Title of Thesis	Multi-Objective Optimal Cutting Conditions and Prediction of Machining Parameters for Minimizing Vibration, Surface Roughness and Cutting Force in CNC Turning of AISI 1040 Steel
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(54)_364432.pdf

15

Name	Patel Amitkumar Manubhai
Enrollment No	199999919529
Title of Thesis	Investigation & Performance Analysis of Ethanol-Diesel Blend with Various Additives on a Diesel Engine
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/199999919529_Abtract_795363.pdf

16

Name	Khushbu Kamleshkumar Panchal
Enrollment No	189999919022
Title of Thesis	Experimental investigations on constitutive properties of fracture process zone(FPZ) for pure Titanium Grade 2 using essential work of fracture (EWF) approach
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract_189999919022_373180.pdf

17

Name	Pritesh Ratilal Patel
Enrollment No	159997119026
Title of Thesis	Continuous Improvement through Six Sigma Methodology at SME Manu-Facturing Plastic Products
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract_159997119026_226760.pdf

18

Name	Hormaz Zarir Amrolia
Enrollment No	1799999914005
Title of Thesis	Condition Monitoring of Induction Motor: Exploring Frequency Response Based Approach
Faculty/Discipline	Electrical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(64)_562939.pdf

19

Name	Khirsariya Priyank Dineshbhai
Enrollment No	199999911502
Title of Thesis	Isobaric Vapor-Liquid Equilibrium Studies for Separation of Acetic Acid from Aqueous Solutions
Faculty/Discipline	Chemical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(2)_784164.pdf

20

Name	Nayak Sunil Dineshchandra
Enrollment No	189999917007
Title of Thesis	Intelligent Observational Tool for Ergonomics Security and Safety to Enhance Human Functionalities and Operational Efficiency
Faculty/Discipline	Instrumentation and Control Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(49)_542000.pdf

Ph.D. Thesis Abstract (Management)

01

Name	Brahmbhatt Anandkumar Ashokbhai
Enrollment No	189999903004
Title of Thesis	A Study on Impact of Digital Marketing on Consumers' Buying Behaviour for Branded Fashion Products in Major Cities of Gujarat
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(44)_573244.pdf

02

Name	Chauhan Dhruvi Chhaganbhai
Enrollment No	199999903502
Title of Thesis	Predicting the Turnover Propensity by Examine the Antecedents of Employee Engagement in the Indian IT Sector
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(46)_963176.pdf

03

Name	Rashida Batterywala
Enrollment No	209999903058
Title of Thesis	A Key Issue in the BPO Industry
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(45)_879643.pdf

04

Name	Mr. Abhishek Abhani
Enrollment No	189999903002
Title of Thesis	A Comparative Study on Consumer Behavior (With Special Focus on Satisfaction Level) Towards Internet Banking and Mobile Banking Amongst the Customers of Selected Public Sector and Private Sector Banks in Porbandar District
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract-2_307691.pdf

05

Name	Jayswal Archita Kiritbhai
Enrollment No	199999903509
Title of Thesis	An Analytical Study on Organization Citizenship Behaviour (OCB) Among the Employees Working in the Selected Department of Government of Gujarat.
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract_307457.pdf

06

Name	Unadkat Krishna Kantilal
Enrollment No	169999903009
Title of Thesis	A Study on Customer Attitude towards E-Learning Apps
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract_529459.pdf

Ph.D. Thesis Abstract (Pharmacy)

01

Name	Manoj Bhima Jograna
Enrollment No	199999901534
Title of Thesis	Pharmaceutical science Title of the Thesis: Design, Development, Evaluation Of Self Emulsifying Drug Delivery System Of Calcium Channel Blockers And Its Pharmacological Study
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(68)_511991.pdf

02

Name	Rajendrakumar Ranchhodbhai Patel
Enrollment No	199999901521
Title of Thesis	Design and development of nanoparticles of BCS class II/IV drugs for dissolution enhancement
Faculty/Discipline	Pharmacy
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(60)_282824.pdf

Ph.D. Thesis Abstract (Science)

01

Name	Jogi Jayant Kishorbhai
Enrollment No	199999907501
Title of Thesis	Study of Physical Properties of Zinc Ferrite and Zinc Oxide Including Laser Irradiation Effects
Faculty/Discipline	Science-Physics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(51)_327473.pdf

02

Name	Patel Maitri Nandubhai
Enrollment No	219999907003
Title of Thesis	Optimizing Molecular Liquid Solvents for Tailormade Polymer Electrolytes for Sodium Battery Application
Faculty/Discipline	Science-Physics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(48)_230212.pdf

03

Name	Nileshkumar Mafatlal Patel
Enrollment No	209999906002
Title of Thesis	Magnetic Field Effect on Blood Flow in Stenosed Arteries
Faculty/Discipline	Science-Mathematics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(61)_306386.pdf

04

Name	Snehalkumar Dineshbhai Patel
Enrollment No	199999906504
Title of Thesis	Computational Study of Electrically Conducting Fluid Flow with Heat and Mass Transfer
Faculty/Discipline	Science-Mathematics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(67)_969781.pdf

Ph.D. Thesis Abstract (Humanities-English)

01

Name	Ms. Dipali Nisarg Dave
Enrollment No	189999904001
Title of Thesis	A Study of the Effects of Flipped Language Classroom on the Second Year Students of Selected Engineering Colleges of GTU
Faculty/Discipline	Humanities-English
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(69)_639067.pdf

"We need a spirit of victory, a spirit that will carry us to our rightful place under the sun, a spirit which can recognize that we, as inheritors of a proud civilization, are entitled to our rightful place on this planet. If that indomitable spirit were to arise, nothing can hold us from achieving our rightful destiny."

C. V. Raman"



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GTU Social Media Platforms



GTU What's App Channel