



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

Bulletin - Research & Academic Publications

October-December, 2025

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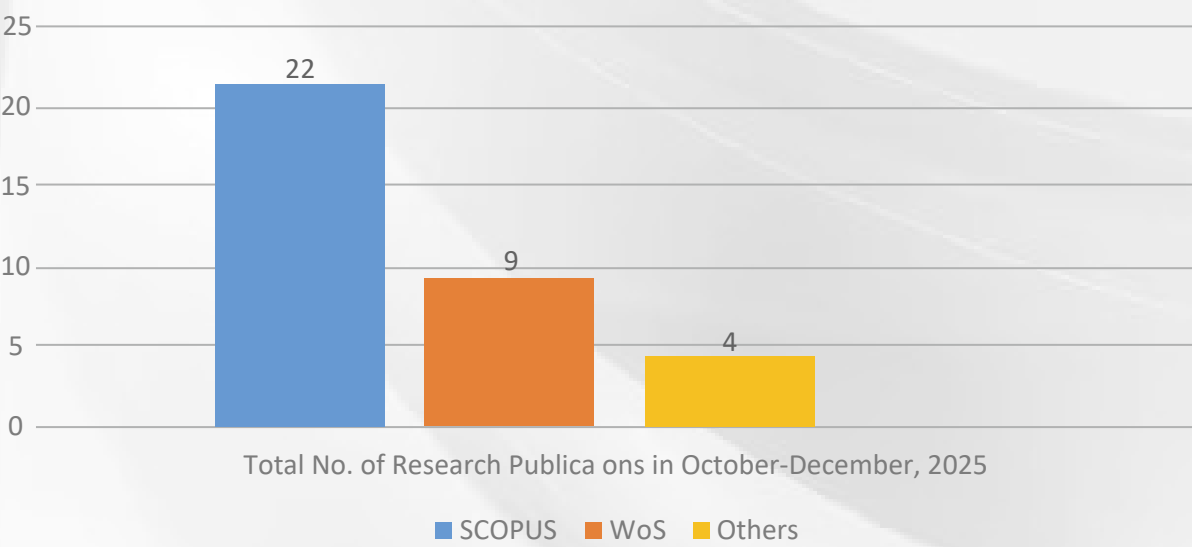
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SUMMARY (October-December, 2025)

Sr. No.	Title	No.
01	Research Papers	SCOPUS 22
		WoS 9
		Others 4
02	Patents	Utility 3
		Design 1
03	Books	4
04	Awarded Ph.D. Thesis Abstract	40

Total No. of Research Publications in October-December 2025



MESSAGE FROM HON'BLE VICE CHANCELLOR



Dear Faculty Members and Researchers,

We are releasing the tenth successive issue of the R&D Bulletin, showcasing your achievements and commitment to advance knowledge. Your consistent efforts continue to elevate our standing with respect to academic and research excellence in the region.

At GTU, we continue to nurture a dynamic and steadily growing research culture - by collaboration, innovation and through encouraging multidisciplinary research work. Your contributions across different domains of engineering, technology, pharmacy, management, applied sciences and other emerging disciplines is very crucial. Your contributions in the form of projects and publications are important to nurture a sustainable, inclusive and progressive future.

Through this bulletin, we try to share your accomplishments with others to flourish collectively and also to collaborate.

I congratulate all those whose work is featured in this bulletin and encourage others to keep submitting their achievements to GTU- R&D Cell, as we work together, to strengthen and enrich our research ecosystem in the state.

Best Wishes,

(Dr. R. K. Gajjar)
Vice Chancellor,
Gujarat Technological University,
Ahmedabad



MESSAGE FROM REGISTRAR



Dear Faculty Members, Students and Researchers,

Namaskar!!

You are aware that exploration and discovery are an integral part of research; and universities act as important pillar in achieving these through advancing knowledge and innovation.

By publishing your achievements in this quarterly bulletin, we showcase your attainments that are intended towards providing answers though rigorous enquiry. Your contributions reflected in this academic and research bulletin contribute towards our sustainable progress.

Your accomplishments in the form of research projects, publications, patents and other achievements reflect your dedication to achieve academic excellence. We encourage all faculty members to keep themselves engaged in collaborative research.

We would also like you to keep sharing your achievements regularly with the R&D Cell for improved visibility. We deeply appreciate your contributions that contribute to strengthen our research ecosystem. Let us work together to create positive transformation through our research endeavours.

My congratulations to all those whose work is reflected in this bulletin.

Best Wishes,

Dr. K. N. Kher

Registrar, GTU, Ahmedabad

MESSAGE FROM DIRECTOR, RDC



The R & D Cell of the University is presenting the forth issue (Volume-II) of Research and Academic publications; highlighting the comprehensive information of scholarly articles published by GTU's academic fraternity. It highlights research projects, research papers, patents, books and abstracts of Ph.D. thesis published by research scholars and research supervisors during the past three months (i.e. October and December, 2025).

R & D Cell-GTU have continued to publish this bulletin at regular intervals. It is a kind request to all our research scholars and research supervisors to provide the requested data to help us with the release of this bulletin.

We would request all the stakeholders of GTU to circulate this bulletin among the academic and scientific fraternity to enhance visibility of the research data of the university.

University has strong collaborations with SAC-ISRO, IPR, PRL, CSMCRI, INFLIBNET, and IIT – Gandhinagar. You may explore to associate with scientists/professors of these organizations which may provide an opportunity to contribute on projects of national importance and to come out with quality publications as well as access of state-of-the-art research facilities at these Institutes. We will make every efforts to facilitate connections and collaborations with the relevant experts from these organizations.

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	Government Engineering College, Bharuch (014)
Title of Article	Impact of distinct input variable on the performance indices of components of liquid desiccant-assisted forced convection indirect type solar drying system – a critical review
Name of Authors	Alpesh R. Patel and Kalpesh V. Modi
Name of Corresponding Author	Kalpesh V. Modi
Name of the Journal	Environmental Science and Pollution Research
Indexed	SCOPUS
ISSN No.	0944-1344
URL	https://doi.org/10.1007/s11356-025-37026-7
Date of Publication	18-10-2025
SDG	Affordable and Clean Energy

02

Name of Institute	Government Engineering College, Bharuch (014)
Title of Article	Impact of numbers of funnel integrated with wick materials on the performace of square pyramid solar still
Name of Authors	Kalpesh V. Modi and Shirish. K. Patel
Name of Corresponding Author	Kalpesh V. Modi
Name of the Journal	International Journal of Ambient Energy
Indexed	SCOPUS
ISSN No.	2162-8246
URL	https://doi.org/10.1080/01430750.2025.2573207
Date of Publication	22-10-2025
SDG	Clean Water and Sanitation, Affordable and Clean Energy

03

Name of Institute	Government engineering college, Bhavnagar (021)
Title of Article	Comparative Study of Hydrogen and Nitrogen Atmospheres in a Bell Annealing Furnace: Effects on Spheroidization and Mechanical Properties of Eutectoid Steel
Name of Authors	Patel Kishan Jayantibhai, D. B. Jani
Name of Corresponding Author	D.B. Jani
Name of the Journal	Journal of The Institution of Engineers (India): Series D
Indexed	SCOPUS
ISSN No.	2250-2122
URL	https://link.springer.com/article/10.1007/s40033-025-00958-y#citeas
Date of Publication	27-10-2025
SDG	Industry, Innovation and Infrastructure

04

Name of Institute	GTU- School of Engineering and Technology (137)
Title of Article	Attention-Enhanced Progressive Transfer Learning for Scalable Seismic Vulnerability Assessment of RC Frame Buildings
Name of Authors	Kaushik M. Gondaliya, Konstantinos Daniel Tsavdaridis, Aanal Raval, Jignesh A. Amin and Komal Borisagar
Name of Corresponding Author	Kaushik M. Gondaliya
Name of the Journal	Buildings, MDPI
Indexed	SCOPUS
ISSN No.	2075-5309
URL	https://www.mdpi.com/2075-5309/15/23/4383
Date of Publication	03-12-2025
SDG	Industry, Innovation and Infrastructure, Sustainable Cities and Communities

05

Name of Institute	GTU- School of Engineering and Technology (137)
Title of Article	Attention-Enhanced Progressive Transfer Learning for Scalable Seismic Vulnerability Assessment of RC Frame Buildings
Name of Authors	Gondaliya, Kaushik M, Tsavdaridis Konstantinos Daniel, Raval, Aanal, Amin Jignesh A, Borisagar Komal
Name of Corresponding Author	Tsavdaridis Konstantinos Daniel
Name of the Journal	Buildings
Indexed	SCOPUS
ISSN No.	2075-5309
URL	https://openaccess.city.ac.uk/id/eprint/36356/
Date of Publication	03-12-2025
SDG	Industry, Innovation and Infrastructure, Sustainable Cities and Communities

06

Name of Institute	GTU- School of Engineering and Technology (137)
Title of Article	Yielding brace system as a next-generation lateral load mechanism for seismic resilient cities
Name of Authors	Bush Rc, Varsha Rani, Anoop I. Shirkol, Rohit Vyas, Kaushik Gondaliya, Pranoy Debnath, Ayed E. Alluqmani, Yewuhalashet Fissha, N. Rao Cheepurupalli, Refka Ghodhbani, Pranjal Mandhaniya, Abdullah Ansari
Name of Corresponding Author	Bush Rc
Name of the Journal	Scientific Reports
Indexed	WoS
ISSN No.	2045-2322
URL	https://www.nature.com/articles/s41598-025-26603-y
Date of Publication	27-11-2025
SDG	Industry, Innovation and Infrastructure, Sustainable Cities and Communities

Name of Institute	Shri K. J. Polytechnic, Bharuch (645)
Title of Article	Parameter optimization of solid oxide fuel cell parameters using quasi-affine transformation evolution with evolution matrix and selection operation algorithm
Name of Authors	Sundaram B. Pandya, Mohammad Aljaidi, Sanjeev Maheshwari, Gowrishankar J., Kanika Manchanda, S. Sudhirvarma, A. C. Santha Sheela, Gulothungan G., Arpita, Pradeep Jangir, Reena Jangid, Anil Parmar
Name of Corresponding Author	Gulothungan G.
Name of the Journal	Ionics
Indexed	WoS
ISSN No.	1862-0760
URL	https://link.springer.com/article/10.1007/s11581-025-06767-3
Date of Publication	11-12-2025
SDG	Affordable and Clean Energy

Research Papers (Pharmacy-Supervisors)

01

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Anti-arthritic and antioxidant potential of Citrus medica L. fruit extract in Freund's complete adjuvant-induced wistar rats
Name of Authors	Sonal Vasava, Tanvi H. Desai, Vipul Gajera, Devesh U. Kapoor, Tejas Patel, Dhara Parekh, Priyanka Chaudhari
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	Cytotechnology, Springer
Indexed	SCOPUS
ISSN No.	0920-9069
URL	https://link.springer.com/article/10.1007/s10616-025-00874-9
Date of Publication	05-12-2025
SDG	Good Health and Well-being

02

Name of Institute	GTU- School of Pharmacy (288)
Title of Article	Development and Validation of a Stability-Indicating RP-HPLC Method for the estimation of Mercaptopurine in Pharmaceutical Formulation
Name of Authors	Bhoomi Panchal, Neha Chauhan, Minal Ninama, Ravisinh Solanki, Rajesh Patel
Name of Corresponding Author	Rajesh Patel
Name of the Journal	Journal of Molecular Science
Indexed	SCOPUS
ISSN No.	1000-9035
URL	https://jmolcularsci.com/uploadedArticles/Volume-35/Issue-3/113_Journal%20of%20Molecular%20science_Mercepto.pdf
Date of Publication	15-12-2025
SDG	Good Health and Well-being, Responsible Consumption and Production

03

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Design and Optimization of Tetrahydrocurcumin-Loaded Nanostructured Lipid Carriers for Intranasal Delivery: A Box - Behnken Approach
Name of Authors	Pranjal Sharma, Jai Bharti Sharma, Manisha Bhatia, Vishal Sharma, Devesh U. Kapoor
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	Bionanoscience
Indexed	SCOPUS
ISSN No.	2191-1630
URL	https://link.springer.com/article/10.1007/s12668-025-02318-2
Date of Publication	20-12-2025
SDG	Good Health and Well-being

04

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Catalytic Application of Ionic Liquids for the Green Synthesis of Aromatic Five-Membered Nitrogen Heterocycles
Name of Authors	Jaya Dwivedi , Shivangi Jaiswal , Devesh U. Kapoor, Swapnil Sharma
Name of Corresponding Author	Jaya Dwivedi
Name of the Journal	Catalysts, MDPI
Indexed	WoS
ISSN No.	2073-4344
URL	https://www.mdpi.com/2073-4344/15/10/931
Date of Publication	01-10-2025
SDG	Good Health and Well-being

05

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Liposomal systems for targeted drug delivery to hair follicles in the topical treatment of androgenetic alopecia
Name of Authors	Sonam M. Gandhi, Sambhavi Swarn, Uttam A. More, Vipin Saini, Devesh U. Kapoor, Bhupendra G. Prajapati
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	Journal of Drug Delivery Science and Technology
Indexed	WoS
ISSN No.	1773-2247
URL	https://www.sciencedirect.com/science/article/pii/S1773224725010275
Date of Publication	09-10-2025
SDG	Good Health and Well-being

06

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Laminarin-Based nanocarriers: a paradigm shift in biopolymer engineering for advanced drug delivery and therapeutics
Name of Authors	Devesh U. Kapoor, Devendra Vaishnav, Sanjesh Kumar, Bhupendra G. Prajapati, Omar Awad Alsaidan, Sami I. Alzarea
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	Journal of Biomaterials Science, Polymer Edition
Indexed	WoS
ISSN No.	0920-5063
URL	https://www.tandfonline.com/doi/full/10.1080/09205063.2025.2578204
Date of Publication	01-11-2025
SDG	Good Health and Well-being

07

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Carbon nanodots in breast cancer management: emerging tools for diagnosis and therapy
Name of Authors	Vrutti Parmar, Krina Patel, Sachin Sharma, Kundan Kumar Chaubey, Shailendra Thapliyal, Devesh U. Kapoor
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	Journal of drug Targeting, Taylor & Francis
Indexed	WoS
ISSN No.	1029-2330
URL	https://www.tandfonline.com/doi/full/10.1080/1061186X.2025.2581988
Date of Publication	10-11-2025
SDG	Good Health and Well-being

08

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	mRNA-Based Therapeutics: Advances in Drug Delivery, Comparative Innovations, and Biomedical Applications
Name of Authors	Radhika Joshi, Swapnil Sharma, Devesh U.Kapoor,Bhupendra G.Prajapati, Kampanart Huanbutta, Pornsak Sriamornsak
Name of Corresponding Author	Pornsak Sriamornsak
Name of the Journal	Molecular Pharmaceutics, ACS
Indexed	WoS
ISSN No.	1543-8384
URL	https://pubs.acs.org/doi/10.1021/acs.molpharmaceut.5c00774
Date of Publication	31-12-2025
SDG	Good Health and Well-being

Research Papers (Management-Supervisors)

01

Name of Institute	GTU- School of Management Studies (839)
Title of Article	Delineating Philanthropy and Responsibility in Parsi Businesses: An Analysis across Timelines
Name of Authors	Srushti Govilkar, Sarika Srivastava, Ruchi Tewari
Name of Corresponding Author	Dr. Sarika Srivastava
Name of the Journal	International Journal of Indian Culture and Business Management
Indexed	WoS
ISSN No.	1753-0814
URL	https://www.inderscienceonline.com/doi/10.1504/IJICBM.2025.150427
Date of Publication	13-12-2025
SDG	No Poverty, Zero Hunger, Quality Education, Gender Equality, Responsible Consumption and Production

Research Papers (Biotechnology-Supervisors)

01

Name of Institute	GTU - School of Applied Sciences & Technology (145)
Title of Article	Evaluating the impact of natural fertilizers on growth dynamics and yield performance of Solanum melongena L.
Name of Authors	Ashish Warghane, Jigisha Thakkar, Kartik Chauhan, Dolatsinh Zala, Harsh Patel, Vaibhav Bhatt, B. A. Chopade
Name of Corresponding Author	Ashish Warghane
Name of the Journal	Frontiers in Sustainable Food Systems
Indexed	SCOPUS
ISSN No.	2571-581X
URL	https://doi.org/10.3389/fsufs.2025.1668080
Date of Publication	01-10-2025
SDG	Good Health and Well-being, Clean Water and Sanitation, Sustainable Cities and Communities, Responsible Consumption and Production

Research Papers (Engineering-Scholars)

01

Enrollment No.	231379913001
Title of Article	Artificial intelligence-based classification for waste management: a systematic review and future direction
Name of Authors	Dhanashree Vipul Yevle, Palvinder Singh Mann
Name of Corresponding Author	Palvinder Singh Mann
Name of the Journal	Iran Journal of Computer Science
Indexed	SCOPUS
ISSN No.	2520-8438
URL	https://link.springer.com/article/10.1007/s42044-025-00336-7
Date of Publication	01-10-2025
SDG	Good Health and Well-being, Affordable and Clean Energy, Sustainable Cities and Communities

02

Enrollment No.	229999911001
Title of Article	Techno-enviro-economic analysis of industrial carbon capture process via multi-criteria optimization and retrofitting approach
Name of Authors	Swaprabha P. Patel, Ashish M. Gujarathi, Piyush B. Vanzara
Name of Corresponding Author	Ashish M. Gujarathi
Name of the Journal	Energy
Indexed	SCOPUS
ISSN No.	1873-6785
URL	https://doi.org/10.1016/j.energy.2025.138912
Date of Publication	14-10-2025
SDG	Affordable and Clean Energy, Industry, Innovation and Infrastructure, Climate Action

03

Enrollment No.	189999917006
Title of Article	Adaptive super twisting algorithm using gated recurrent unit blended RBF NN structure
Name of Authors	Vishal Mehra, Dipesh Shah , AxayKumar Mehta
Name of Corresponding Author	Vishal Mehra
Name of the Journal	Journal of Control and Decision
Indexed	SCOPUS
ISSN No.	2330-7706
URL	https://doi.org/10.1080/23307706.2025.2546099
Date of Publication	16-10-2025
SDG	Industry, Innovation and Infrastructure

04

Enrollment No.	239999919010
Title of Article	Comparative Study of Hydrogen and Nitrogen Atmospheres in a Bell Annealing Furnace: Effects on Spheroidization and Mechanical Properties of Eutectoid Steel
Name of Authors	Patel Kishan Jayantibhai, D.B. Jani
Name of Corresponding Author	D.B. Jani
Name of the Journal	Journal of The Institution of Engineers (India): Series D
Indexed	SCOPUS
ISSN No.	2250-2122
URL	https://doi.org/10.1007/s40033-025-00958-y
Date of Publication	27-10-2025
SDG	Industry, Innovation and Infrastructure, Responsible Consumption and Production

05

Enrollment No.	239999912001
Title of Article	Offshore Wind Turbine Towers in India: Design considerations, Technological Advancements, Challenges and Opportunities
Name of Authors	Chauhan Mita M. , Shah Hemal J.
Name of Corresponding Author	Chauhan Mita M.
Name of the Journal	Disaster Advances
Indexed	SCOPUS
ISSN No.	2278-4543
URL	https://doi.org/10.25303/1811da065075
Date of Publication	01-11-2025
SDG	Affordable and Clean Energy, Industry, Innovation and Infrastructure

06

Enrollment No.	199999919518
Title of Article	Numerical Analysis of Micromixing in Conceptual Combustor
Name of Authors	Jayeshkumar R. Parekh, Digvijay Kulashreshth, Vijay Dhimana
Name of Corresponding Author	Vijay Dhiman
Name of the Journal	Journal of Chemical Technology and Metallurgy
Indexed	SCOPUS
ISSN No.	1314-7471
URL	http://193.30.228.65/index.php/JCTM/article/view/715
Date of Publication	02-11-2025
SDG	Affordable and Clean Energy

07

Enrollment No.	219999913013
Title of Article	Identifying glaucoma with deep learning by utilizing the VGG16 model for retinal image analysis
Name of Authors	Vaibhav C. Gandhi, Priyesh P. Gandhi, Ankit D. Oza, Ahmed Kateb Jumaah Al-Nussairi, Ahmed Adnan Hadi, Ahmed A. Alamiery, Amanuel Zewdie
Name of Corresponding Author	Amanuel Zewdie
Name of the Journal	Intelligence-Based Medicine
Indexed	SCOPUS
ISSN No.	2666-5212
URL	https://doi.org/10.1016/j.ibmed.2025.100307
Date of Publication	12-11-2025
SDG	Good Health and Well-being

08

Enrollment No.	201049819002
Title of Article	Evaluating seasonal dynamics: a 4E analysis of optimized spiral baffles in a solar air heater
Name of Authors	Yogeshkumar Khimsuriya, D. K. Patel, Vivek Patel, Vinay Pandit, Lav Kumar Kaushik, Hashim Sahar Mohaisen, Pranav Mehta, Ravishankar Sathyamurthy
Name of Corresponding Author	Pranav Mehta
Name of the Journal	Journal of Thermal Analysis and Calorimetry
Indexed	SCOPUS
ISSN No.	1588-2926
URL	https://doi.org/10.1007/s10973-025-15114-7
Date of Publication	07-12-2025
SDG	Affordable and Clean Energy, Sustainable Cities and Communities, Climate Action

09

Enrollment No.	229999915007
Title of Article	Reliability aware design of complementary cascode current mirror based physically unclonable functions and characterization
Name of Authors	Shreeji H. Shah, Rajesh A. Thakker
Name of Corresponding Author	Rajesh A. Thakker
Name of the Journal	Microelectronics reliability
Indexed	SCOPUS
ISSN No.	0026-2714
URL	https://doi.org/10.1016/j.microrel.2025.115988
Date of Publication	30-12-2025
SDG	Decent Work and Economic Growth, Industry, Innovation and Infrastructure

10

Enrollment No.	209999919018
Title of Article	A Computational Study on the Effect of Geometrical Configurations OnAxisymmetric Solar Chimney Performance
Name of Authors	Birju Yagnik
Name of Corresponding Author	Bharat Ramani
Name of the Journal	Journal of Solar Energy Research
Indexed	SCOPUS
ISSN No.	2588-3097
URL	https://jser.ut.ac.ir/article_105122.html
Date of Publication	31-12-2025
SDG	Affordable and Clean Energy, Industry, Innovation and Infrastructure

11

Enrollment No.	189999915028
Title of Article	A Comprehensive Review of SIW PIN Diode Attenuators for High Frequency Wireless Communications
Name of Authors	Shilpa Rana and Ashish Sarvaiya
Name of Corresponding Author	Shilpa Rana
Name of the Journal	Analog integrated Circuits and Signal Processing
Indexed	WoS
ISSN No.	0925-1030
URL	https://link.springer.com/article/10.1007/s10470-025-02543-5
Date of Publication	12-12-2025
SDG	Industry, Innovation and Infrastructure

12

Enrollment No.	189999917006
Title of Article	Intelligent Sliding Mode Control: A Comprehensive Review
Name of Authors	Vishal Mehra ,Dipesh Shah
Name of Corresponding Author	Vishal Mehra
Name of the Journal	International Journal for Scientific Research and Development
Indexed	Others
ISSN No.	2321-0613
URL	https://ijsrd.com/Article.php?manuscript=IJSRDV13I90044
Date of Publication	01-12-2025
SDG	Industry, Innovation and Infrastructure

Research Papers (Pharmacy-Scholars)

01

Enrollment No.	209999901043
Title of Article	Formulation Development and Characterization of Solid Lipid Nanoparticles of Dabigatran Etexilate
Name of Authors	Sejal Solanki, Kunal Patel
Name of Corresponding Author	Kunal Patel
Name of the Journal	Journal of Molecular Science
Indexed	SCOPUS
ISSN No.	1000-9035
URL	https://jmolcularsci.com/uploadedArticles/Volume-35/Issue-3/109_manuscript%20-1.pdf
Date of Publication	05-12-2025
SDG	Industry, Innovation and Infrastructure

Research Papers (Management-Scholars)

01

Enrollment No.	239999903023
Title of Article	From Opinions to Decisions: Understanding the Impact of Electronic Word of Mouth on Consumer Behavior
Name of Authors	Ravikant Kishorbhai Padhiyar , Prof. (Dr.) Vikas Arora
Name of Corresponding Author	Prof. (Dr.) Vikas Arora
Name of the Journal	International Journal of Research and Analytical Reviews
Indexed	Others
ISSN No.	2349-5138
URL	https://ijrar.org/viewfull.php?p_id=IJRAR25D1432
Date of Publication	25-10-2025
SDG	Industry, Innovation and Infrastructure

02

Enrollment No.	239999903023
Title of Article	A Study on the Key Factors Influencing Mobile Phone Purchase Decision among the Generation Y And Z With Reference to Rajkot City
Name of Authors	Mr. Ravikant Kishorbhai Padhiyar, Prof. (Dr.) Vikas Arora
Name of Corresponding Author	Prof. (Dr.) Vikas Arora
Name of the Journal	International Journal of Recent Advances in Multidisciplinary Research
Indexed	Others
ISSN No.	2350-0743
URL	https://doi.org/10.64485/ijramr.6203.10.2025
Date of Publication	08-11-2025
SDG	Industry, Innovation and Infrastructure

Research Papers (Science-Scholars)

01

Enrollment No.	229999906004
Title of Article	Sustainable inventory policies for green cosmetic products with combined advantages of the exhibition and free sample of products
Name of Authors	Ritu Pujara, Kunal T. Shukla, Dharmesh K. Katariya
Name of Corresponding Author	Kunal T. Shukla
Name of the Journal	International Journal of Procurement Management
Indexed	SCOPUS
ISSN No.	1753-8432
URL	https://www.inderscience.com/info/inarticle.php?artid=149402
Date of Publication	29-10-2025
SDG	Good Health and Well-being, Sustainable Cities and Communities, Climate Action

02

Enrollment No.	219999906009
Title of Article	Analytical Solution of Co-Current Capillary Imbibition in Homogeneous Porous Media using the Homotopy Analysis Method
Name of Authors	Anuj Pankajbhai Raval, Mitesh Sureshbhai Joshi
Name of Corresponding Author	Anuj Pankajbhai Raval
Name of the Journal	Improved Oil and Gas Recovery
Indexed	SCOPUS
ISSN No.	2688-8246
URL	https://www.smartscitech.com/index.php/IOGR/article/view/1450
Date of Publication	20-12-2025
SDG	Clean Water and Sanitation, Industry, Innovation and Infrastructure, Climate Action

Enrollment No.	209999902002
Title of Article	Forecasting stock prices : Endeavors in the renewable energy sphere for a greener future
Name of Authors	Sarfaraj Patel , Jignesh Doshi
Name of Corresponding Author	Sarfaraj Patel
Name of the Journal	Journal of Statistics and Management Systems
Indexed	Others
ISSN No.	0972-0510
URL	https://www.tarupublications.com/doi/10.47974/JSMS-1542
Date of Publication	25-10-2025
SDG	No Poverty, Good Health and Well-being, Affordable and Clean Energy, Decent Work and Economic Growth, Reducing Inequality

PATENTS

Patents (Engineering-Supervisors)

01

Name of Institute	Government Engineering College, Bharuch (014)
Types of Patent	Utility
Title of Patent	Portable Hexagonal Air Cooler
Name of Inventors	Prerna P. Shah, Kalpesh V. Modi, Rohan P. Parida, Aakash V. Ahir, Sahil S. Mansuri, Aayush B. Patel
Name of Applicant	Prerna P. Shah, Kalpesh V. Modi, Rohan P. Parida, Aakash V. Ahir, Sahil S. Mansuri, Aayush B. Patel
Patent No.	202521088769
Status of Patent	Published
Country of Filing	India
Date of Publication	03-10-2025
SDG	Industry, Innovation and Infrastructure

02

Name of Institute	Government Engineering College, Bharuch (014)
Types of Patent	Utility
Title of Patent	System for Household Gas Leakage Protection and Method Thereof
Name of Inventors	Mihir D. Chauhan, Meet C. Soni, Atharva R. Lonkar, Sachin V. Baria, Kunj J. Dalal, Kalpesh V. Modi
Name of Applicant	Mihir D. Chauhan, Meet C. Soni, Atharva R. Lonkar, Sachin V. Baria, Kunj J. Dalal, Kalpesh V. Modi
Patent No.	202421009034
Status of Patent	Granted
Country of Filing	India
Date of Publication	15-10-2025
SDG	Industry, Innovation and Infrastructure

03

Name of Institute	Government Engineering College, Bharuch (014)
Types of Patent	Design
Title of Patent	Dustbin
Name of Inventors	Prerna P. Shah, Kalpesh V. Modi, Harsh H. Mistry, Nirmal S. Rana, Vedant V. Sonar
Name of Applicant	Prerna P. Shah, Kalpesh V. Modi, Harsh H. Mistry, Nirmal S. Rana, Vedant V. Sonar
Patent No.	478223-001
Status of Patent	Filed
Country of Filing	India
Date of Publication	28-10-2025
SDG	Good Health and Well-being, Climate Action

Patents (Biotechnology-Supervisors)

01

Name of Institute	GTU - School of Applied Sciences & Technology (145)
Types of Patent	Utility
Title of Patent	An Innovative Asthma Attack Prediction and Monitoring Device
Name of Inventors	Saif Saad Fakhruddin, Vaibhav Bhatt
Name of Applicant	Saif Saad Fakhruddin, Vaibhav Bhatt
Patent No.	202321061792
Status of Patent	Granted
Country of Filing	India
Date of Publication	16-12-2025
SDG	Good Health and Well-being

BOOKS

01

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Book/Chapter	Nanodots for Cancer Diagnosis and Treatment
Name of Authors	Bhupendra G. Prajapati, Devesh U. Kapoor, Nemat Ali
ISBN No.	9780443275111
URL	https://shop.elsevier.com/books/nanodots-for-cancer-diagnosis-and-treatment/prajapati/978-0-443-27511-1
Date of Publication	29-10-2025
SDG	Good Health and Well-being

02

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Book/Chapter	Nanocarriers in Prostate Cancer Advanced Diagnosis and Treatment Strategies
Name of Authors	Bhupendra G. Prajapati, Devesh U. Kapoor, Nemat Ali, Anand Krishnan
ISBN No.	9780443332081
URL	https://shop.elsevier.com/books/nanocarriers-in-prostate-cancer/prajapati/978-0-443-33208-1
Date of Publication	28-11-2025
SDG	Good Health and Well-being

03

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Book/Chapter	Myasthenia Gravis Disease, Diagnosis and Management
Name of Authors	Bhupendra G. Prajapati, Devesh U. Kapoor, Jaimin R. Shah
ISBN No.	9780443366475
URL	https://shop.elsevier.com/books/myasthenia-gravis/prajapati/978-0-443-36647-5
Date of Publication	08-12-2025
SDG	Good Health and Well-being

04

Name of Institute	GTU - School of Applied Sciences & Technology (145)
Title of Book/Chapter	Sustainable Food Fortification
Name of Authors	Mukesh N. Kher, Ashish Warghane, Sandip P. Dholakia, Vidhi V. Shah, and Vaibhav D. Bhatt
ISBN No.	978-981-95-1216-4
URL	https://link.springer.com/book/10.1007/978-981-95-1217-1
Date of Publication	10-01-2025
SDG	Good Health and Well-being, Clean Water and Sanitation, Decent Work and Economic Growth, Industry , Innovation and Infrastructure, Life below Water, Peace, Justice and Strong Institutions

AWARDED PHD THESIS ABSTRACTS

Ph.D. Thesis Abstract (Engineering)

01

Name	Ardeshana Mayankkumar Arvindhbai
Enrollment No	199999915502
Title of Thesis	Design and Development of Meta-Material Absorber for GNSS and 5G Communication Applications
Faculty/Discipline	Electronics & Communication Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_559412.pdf

02

Name	Sevak Mayurkumar Mahendrakumar
Enrollment No	179999915017
Title of Thesis	Development of Wearable ECG Recorder
Faculty/Discipline	Electronics & Communication Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_992554.pdf

03

Name	Raiyani Hitesh Ratilal
Enrollment No	189999919060
Title of Thesis	Experimental Investigation on Fracture Characteristic of Natural Fiber Metal Laminates
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_Raiyani%20Hitesh%20Ratilal_189999919060_755378.pdf

04

Name	Dabhi Shyam Kantilal
Enrollment No	179999919006
Title of Thesis	Development of A Pilot-Scale Solar-Powered Pasteurizer for Milk Pasteurization System
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_179999919006_920859.pdf

05

Name	Panchal Jugalkumar Mukeshbhai
Enrollment No	159997119015
Title of Thesis	Enhancement of Heat Transfer Behavior of a Phase Change Material
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20JMP%20159997119015%20R1_716734.pdf

06

Name	Tandel Aniket Kishanbhai
Enrollment No	199999919548
Title of Thesis	Design and Programming of Interrelated Network-Based Controller for Motor and Hybrid Energy Storage System
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis%20(2)_472881.pdf

07

Name	Patel Dharmin Maheshkumar
Enrollment No	209999919004
Title of Thesis	Parametric Investigation on Forming of Magnesium Alloy Using Single Point Incremental Forming
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis%20V1%2028%2010%202025_354817.pdf

08

Name	Chaudhari Vimalkumar Natvarbhai
Enrollment No	209999919012
Title of Thesis	Design, Development and Experimental Investigation on Savonius Hydrokinetic Turbine.
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(1)_827448.pdf

09

Name	Desai Chiragkumar Rajendrasinh
Enrollment No	199999919508
Title of Thesis	Combined Experimental and Numerical Investigations of Joint Strength & Fracture Parameter of Adhesive Joint.
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis 199999919508 258649.pdf

10

Name	Solanki Prashant Hasmukhray
Enrollment No	169999919020
Title of Thesis	Process Parameters Optimization and Experimental Investigation of Resistance Spot Welding on Weld Quality
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract 975353.pdf

11

Name	Yogeshkumar Devjibhai Khimsuriya
Enrollment No	201049819002
Title of Thesis	Experimental analysis for heat transfer enhancement in a solar air channel by using rotating spiral-shaped baffles
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis%20(3)_983380.pdf

12

Name	Damor Alpeshkumar Babubhai
Enrollment No	189999919010
Title of Thesis	Characterization of Compliance Joints for Full Size Humanoid Robot
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20of%20the%20Thesis 189999919010 Damor%20Alpeshkumar B 416402.pdf

13

Name	Janki Naitik Chotai
Enrollment No	179999917002
Title of Thesis	Energy harvesting based sensor application
Faculty/Discipline	Instrumentation and Control Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_JNC_313858.pdf

14

Name	Bhargav Shashikant Raval
Enrollment No	199999912528
Title of Thesis	Vibration Control of Tall Building using Dampers
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract_Bhargav%20Raval_199999912528_704313.pdf

15

Name	Gohil Kashyapkumar Babubhai
Enrollment No	189999912011
Title of Thesis	Irrigation Strategies and Water Resource Management in the Shetrunji Right Bank Canal Command Area
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20of%20the%20Thesis_Updated_544812.pdf

16

Name	Jagad Girishkumar Dhirajlal
Enrollment No	189999912013
Title of Thesis	Coastal Vulnerability Analysis due to Tsunami along The Coastline of Gujarat by Generating Different Scenario using Geospatial Technique
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis%2024_11_25_327975.pdf

17

Name	Jignesh Rajenrakumar Joshi
Enrollment No	189999911004
Title of Thesis	Extraction of Stevioside and Rebaudiana A from Stevia leaves
Faculty/Discipline	Chemical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-abstract_237725.pdf

18

Name	Saif Saad Fakhruddin
Enrollment No	211459918001
Title of Thesis	Intelligent Air Pollution Prediction for Patient with Asthma Attack Based on Wireless Sensor Technology
Faculty/Discipline	Biomedical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract_Saif%20Saad_585119.pdf

19

Name	Rakesh D. Motka
Enrollment No	199999918502
Title of Thesis	Non-Invasive Short Time Prediction of Glucose Using Neural Network for Glycaemia Control in Type-1 Diabetes
Faculty/Discipline	Biomedical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract_158054.pdf

20

Name	Shweta Jayvadan Doctor
Enrollment No	179999920001
Title of Thesis	Studies on Production of Techno-Economic Enviro-friendly Nonwoven Fabrics using Textile Waste
Faculty/Discipline	Textile Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_Final-179999920001_554235.pdf

21

Name	Manish Vikrambhai Mehta
Enrollment No	189999921001
Title of Thesis	A Comparative Analysis of Hastelloy Weld Overlay on Austenitic Stainless Steel using Conventional and Advanced Welding Processes
Faculty/Discipline	Metallurgy Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(1)_345741.pdf

22

Name	Mrs. Dhvani Rajkumar Hakani
Enrollment No	211379913001
Title of Thesis	An Optimization Approach for Firewall Rules in Cloud Based Environment
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(1)_671860.pdf

23

Name	Bhavesh Ashokkumar Tanawala
Enrollment No	199999913506
Title of Thesis	Music Synthesis Using Deep Convolutional GANs
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis-199999913506_974808.pdf

24

Name	Kirtikumar Jashavantbhai Sharma
Enrollment No	159997107015
Title of Thesis	Resource Management & Scheduling in a Cloud Environment
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_159997107015_202275.pdf

25

Name	Parekh Rikita Dhaval
Enrollment No	199999913540
Title of Thesis	Enhancing Visual Question Answering for Medical Images using Transformers
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_824717.pdf

26

Name	Rachana Shrikant Oza
Enrollment No	199999913542
Title of Thesis	Explainable Deep Learning-based Surgical Action Prediction in Minimally Invasive Surgery
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis%20(5)_248321.pdf

27

Name	Rathod Amit Hemantlal
Enrollment No	189999913037
Title of Thesis	Enhancing Security against Power Analysis Attacks using Internal Re-keying based Modified AES
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis-189999913037%20(1)_484376.pdf

28

Name	Priyankaben Suryakant Panchal
Enrollment No	199999913554
Title of Thesis	Social Tag Recommendation for Video Content Using Deep Learning
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_Priyankaben%20Suryakant%20Panchal_Final-199999913554_319477.pdf

Ph.D. Thesis Abstract (Pharmacy)

01

Name	Nirav Rajendrakumar Soni
Enrollment No	189999901009
Title of Thesis	Impurity Profiling and Quantification of Selected Anti-Hiv Drugs In Their Dosage Forms By Chromatography Technique
Faculty/Discipline	Pharmacy
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(1)_668482.pdf

Ph.D. Thesis Abstract (Management)

01

Name	Vipani Kajal Jitendrakumar
Enrollment No	219999903006
Title of Thesis	Financial Sustainability of Microfinance Institutions: A Critical Analysis on NBFC – MFIs in India
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/1-Abstract%20of%20%20kajal_675470.pdf

02

Name	Kajalkumari Manojbhai Patel
Enrollment No	209999903035
Title of Thesis	A Study on Determinants of Investment Decision of Women Investor with Special Reference to Gujarat State
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis%20(4)_507674.pdf

Ph.D. Thesis Abstract (Biotechnology)

01

Name	Bhumika Bhatt
Enrollment No	201459910002
Title of Thesis	Biosynthesis of Cellulolytic Enzyme from Bacterial Isolate Using Various Agro-Industrial Residues
Faculty/Discipline	Biotechnology
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_742844.pdf

Ph.D. Thesis Abstract (Science-Mathematics)

01

Name	Tejal Natvarlal Nagar
Enrollment No	199999906506
Title of Thesis	Mathematical Analysis of MHD Nanofluid Flow Considering Different Physical Conditions
Faculty/Discipline	Science-Mathematics
Abstract	http://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20the%20Thesis_Tejal%20Nagar_998527.pdf

02

Name	Kariya Shruti Shaileshbhai
Enrollment No	210079906001
Title of Thesis	Study on generalizations of Lupaş operators
Faculty/Discipline	Science-Mathematics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20thesis_816382.pdf

03

Name	Patoliya Ramesh Karashanbhai
Enrollment No	219999906010
Title of Thesis	Study of Magnetic Field Effects on 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(1)_810671.pdf

Ph.D. Thesis Abstract (Science-Physics)

01

Name	Khatsuriya Keyurkumar Gunavantray
Enrollment No	199999907505
Title of Thesis	A Study of Scattering of Light in Magnetic Field Responsive Colloids
Faculty/Discipline	Science-Physics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/0-Abstract%20of%20Thesis-199999907505_543575.pdf

02

Name	Rathod Prashant Kanjibhai
Enrollment No	199999907503
Title of Thesis	Characterization, fabrication and optimization of QDSSC based on composite of Carbon Quantum Dot + ZnO + TiO ₂
Faculty/Discipline	Science-Physics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(2)_407763.pdf

Ph.D. Thesis Abstract (Science-Mathematics)

01

Name	Gopal Hariram Nanda
Enrollment No	219999906007
Title of Thesis	Mathematical Study of Magnetohydrodynamics of Nano Fluids over Conventional Fluids
Faculty/Discipline	Science-Mathematics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(27)_131472.pdf

02

Name	Khan Sadikabanu Musirahmed
Enrollment No	219999906006
Title of Thesis	Some investigation on Conformal and Projective change in Finsler spaces and its Applications
Faculty/Discipline	Science-Mathematics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/ABSTRACT_219999906006_957372.pdf

03

Name	Vijaykumar Keshubhai Patel
Enrollment No	199999906507
Title of Thesis	Numerical Investigation of Hybrid Nanofluid Flow over Exponentially Stretching/Shrinking Sheet
Faculty/Discipline	Science-Mathematics
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(1)_726752.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



**GUJARAT
TECHNOLOGICAL
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AN INTERNATIONAL INNOVATIVE UNIVERSITY
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GTU Website



GTU Social Media Platforms



GTU What's App Channel