



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

Bulletin - Research & Academic Publications

JULY-AUGUST, 2024

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DISCLAIMER

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SUMMARY (JULY-AUGUST, 2024)

Sr. No.

Title

No.

01

Research Papers

SCOPUS

17

WoS

6

UGC- Care

0

Others

9

02

Patents

Utility

1

Design

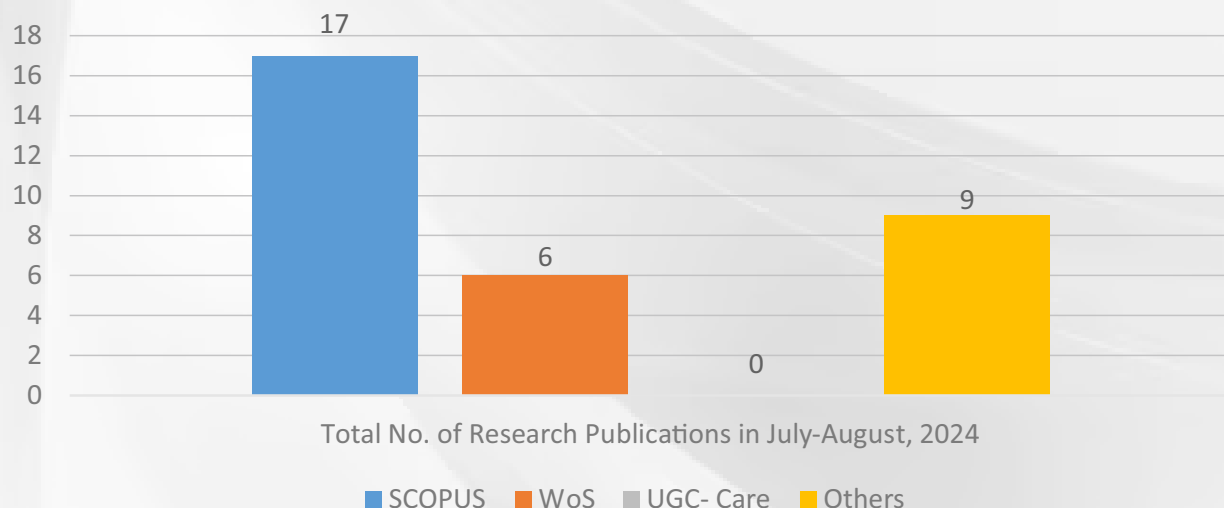
2

03

Awarded Ph.D. Thesis Abstract

38

Total No. of Research Publications in July-August, 2024



MESSAGE FROM HON'BLE VICE CHANCELLOR



Dear Faculty members and Research Scholars,

I am delighted to announce the release of this Research and Academic Bulletin, which is celebration of your remarkable achievements. This bulletin reflects your hard work, dedication and intellect.

I extend my congratulations to all those who continue to strive for excellence by publishing their work in reputable journals. Your commitment will surely elevates the standing of our university and will bring advancement of knowledge within your respective fields. By adhering to the scholarly standards, you embody the values of

academic integrity and intellectual rigor.

These scholarly contributions serve as an inspiration to both your colleagues and students, bringing in a culture of academic excellence, innovation and research across our university. We are privileged to have a vibrant research ecosystem, driven by dedicated faculty and committed researchers. Each research initiative, whether through interdisciplinary collaboration, community engagement, or knowledge dissemination, brings us closer to realizing our vision of a more inclusive and sustainable world.

All are encouraged to continue publishing in high quality journals. Let us collectively strive to make meaningful contributions to our respective disciplines and leave an impression on the academic landscape. Once again, congratulations to all whose work is highlighted in this edition of the bulletin. Together, we can continue to drive improvement and make a significant impact on society.

Best Wishes

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



MESSAGE FROM REGISTRAR



Dear Faculty and Researchers,

Namaskar!!

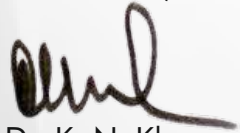
Research is a very important tool in shaping a progressive and equitable society. It serves as a powerful catalyst for bringing reforms. As part of our ongoing commitment to nurture a research culture, we publish this bi-monthly Academic and Research Bulletin. This publication highlights the latest advancements, achievements, and collaborative efforts from our university's research community. It serves as a platform for sharing knowledge, celebrating innovation, and inspiring further inquiry.

We continue to encourage our faculties, students, and researchers to strive for excellence by publishing their work in esteemed national and international journals. Their contributions not only elevate our university's standing in the academic community but also enhance the reach and impact of our research efforts.

I would like to extend my heartfelt congratulations and gratitude to everyone who has contributed to advancing our endeavors. I urge all researchers to continue this momentum.

Together, we can continue to create lasting impacts, ensuring that our research not only shapes a better future but also strengthens the role of our university as an example of knowledge and innovation.

Best Wishes,



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

MESSAGE FROM DIRECTOR, RDC



It is really matter of pride that we are able to release the fourth successive issue of R & D Academic and Research Publications bulletin. We thank all the supervisors and research scholars who provided publications data within the time-limit for compilation in the form of bulletin.

It is very much required that university should maintain all research related data readily available for efficient planning of research activities as well as for exploring opportunities for collaboration with external organizations. These data are also very important from the perspectives of NAAC and NIRF.

These data reflects that our supervisors and research scholars are continuously investing their efforts to publish their research work in quality journals. It will allow other researchers working in the same domain to refer to these published articles and use the same in their on-going projects and research assignments.

It is a kind request to all to circulate this bulletin in your network for wide publicity. We are sure to keep the trend of releasing the bulletin every two months with the support of all of you.

Congratulations to the R & D team for compilation of collected data and put it in the shape of good-looking bulletin.



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

RESEARCH PAPERS

Research Papers (Engineering-Supervisors)

01

Name of Institute	Government Engineering College, Patan (022)
Title of Article	Towards 6G: Next Generation Wireless Systems
Name of Authors	Haresh L. Judal, Kishor G. Maradia
Name of Corresponding Author	Haresh L. Judal
Name of the Journal	Journal of Electrical Systems (JES)
Indexed	SCOPUS
ISSN No.	1112-5209
URL	https://journal.esrgroups.org/jes/article/view/4847
Date of Publication	05-07-2024
SDG	Industry, Innovation and Infrastructure

02

Name of Institute	B and B Institute of Technology - Govt., V. V. Nagar (604)
Title of Article	Study of Self-Sovereign Identity Management System Incorporating Blockchain
Name of Authors	Dixa Koradia, Dr. Vikram Agrawal
Name of Corresponding Author	Dixa Koradia
Name of the Journal	International Journal of Intelligent Systems and Applications in Engineering
Indexed	SCOPUS
ISSN No.	2147-6799
URL	https://ijisae.org/index.php/IJISAE/article/view/6396
Date of Publication	09-07-2024
SDG	Quality Education, Industry, Innovation and Infrastructure

03

Name of Institute	Government Engineering College, Bharuch (014)
Title of Article	Leaky-Momentum Control Algorithm for Voltage Control and Power Balance Operation of a Grid-Connected PMSG System
Name of Authors	Devang B. Parmar and Ashutosh K. Giri
Name of Corresponding Author	Devang B. Parmar
Name of the Journal	International Journal of Ambient Energy, Taylor and Francis
Indexed	SCOPUS
ISSN No.	0143-0750
URL	https://www.tandfonline.com/doi/abs/10.1080/01430750.2024.2393233
Date of Publication	29-08-2024
SDG	Affordable and Clean Energy

04

Name of Institute	Shri K. J. Polytechnic, Bharuch (645)
Title of Article	Many-Objective Whale Optimization Algorithm for Engineering Design and Large-Scale Many-Objective Optimization Problems
Name of Authors	Kanak Kalita, Janjhyam Venkata Naga Ramesh, Robert Cep, Pradeep Jangir, Sundaram B. Pandya, Ranjan Kumar Ghadai, Laith Abualigah
Name of Corresponding Author	Kanak Kalita
Name of the Journal	International Journal of Computational Intelligence Systems
Indexed	WoS
ISSN No.	1875-6883
URL	https://link.springer.com/article/10.1007/s44196-024-00562-0
Date of Publication	02-07-2024
SDG	Industry, Innovation and Infrastructure

05

Name of Institute	Shri K. J. Polytechnic, Bharuch (645)
Title of Article	Enhancing brushless DC motor wheel design using single and multi-objective heat transfer search optimization approach
Name of Authors	Sundaram B. Pandya, Kanak Kalita, Pradeep Jangir, Jasgurpreet Singh Chohan, Laith Abualigah
Name of Corresponding Author	Kanak Kalita
Name of the Journal	International Journal on Interactive Design and Manufacturing (IJIDeM)
Indexed	WoS
ISSN No.	1955-2513 / 1955-2505
URL	https://link.springer.com/article/10.1007/s12008-024-01960-6
Date of Publication	14-07-2024
SDG	Industry, Innovation and Infrastructure

06

Name of Institute	Shri K. J. Polytechnic, Bharuch (645)
Title of Article	Many-Objective Grasshopper Optimization Algorithm (MaOGOA): A New Many-Objective Optimization Technique for Solving Engineering Design Problems
Name of Authors	Kanak Kalita, Pradeep Jangir, Robert Cep, Sundaram B. Pandya, Laith Abualigah
Name of Corresponding Author	Kanak Kalita
Name of the Journal	International Journal of Computational Intelligence Systems
Indexed	WoS
ISSN No.	1875-6883
URL	https://link.springer.com/article/10.1007/s44196-024-00627-0
Date of Publication	14-08-2024
SDG	Industry, Innovation and Infrastructure

Name of Institute	Government Engineering College, Bharuch (014)
Title of Article	Decision Making in Multi-Objective DG Planning for Distribution System via Shannon's Entropy
Name of Authors	Shubham Gupta, Vinodkumar Yadav, Madhusudan Singh and Ashutosh K. Giri
Name of Corresponding Author	Shubham Gupta
Name of the Journal	Electrical Engineering, Springer
Indexed	WoS
ISSN No.	0948-7921 / 1432-0487
URL	https://link.springer.com/article/10.1007/s00202-024-02684-2
Date of Publication	29-08-2024
SDG	Affordable and Clean Energy

Research Papers (Pharmacy-Supervisors)

01

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Algae as third -generation materials: Exploring the emerging role in pharmaceutical applications
Name of Authors	Devesh U. Kapoor, Mona R. Kukkar, Mansi Gaur, Bhupendra G. Prajapati , Supakij Suttiruengwong, Pornsak Sriamornsak
Name of Corresponding Author	Pornsak Sriamornsak
Name of the Journal	Materials Today Sustainability, Elsevier
Indexed	SCOPUS
ISSN No.	2589 -2347
URL	https://doi.org/10.1016/j.mtsust.2024.100935
Date of Publication	26-07-2024
SDG	Good Health and Well-being

02

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Carbon Nanodots: An Illuminating Paradigm in Production, Characterization, and Oncological Targeting Methodologies- A Review
Name of Authors	Bhupendra G. Prajapati, Vani Pandey, Swapnil Sharma, Suhaskumar Patel, Dhiren P. Shah, Devesh U. Kapoor
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	BioNanoScience, Springer
Indexed	SCOPUS
ISSN No.	2191-1649
URL	https://link.springer.com/article/10.1007/s12668-024-01567-x
Date of Publication	07-08-2024
SDG	Good Health and Well-being

03

Name of Institute	GTU- School of Pharmacy (288)
Title of Article	Novel method for monitoring of carcinogenic impurity of N-nitrosamine in nizatidine pharmaceutical products using ultra high-pressure liquid chromatography triple quadrupole mass spectrometry
Name of Authors	Shivani Dhorajiya, Janki Goswami, Bhumika Dudhatra, Kashyap Thummar
Name of Corresponding Author	Kashyap Thummar
Name of the Journal	Rapid Communications in Mass Spectrometry
Indexed	SCOPUS
ISSN No.	1097-0231
URL	https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/epdf/10.1002/rcm.9884
Date of Publication	11-08-2024
SDG	Good Health and Well-being

04

Name of Institute	N.R.Vekaria Institute of Pharmacy, Junagadh (231)
Title of Article	Pharmaceutical Cocrystals for Enhancing the Physicochemical properties of API: An Overview
Name of Authors	Dr.Sai Sivam Srinivasan
Name of Corresponding Author	Mr.Tulasi Ashwin Kumar
Name of the Journal	High Technology letters
Indexed	SCOPUS
ISSN No.	1006-6748
URL	https://drive.google.com/file/d/1pxBZD4qwPcBMJCikmDvLTx3D6obq7Ey/view
Date of Publication	11-08-2024
SDG	Good Health and Well-being

05

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Unlocking potential of zinc oxide nanoparticles in enhancing topical drug delivery
Name of Authors	Bhupendra G. Prajapati, Deepak Sharma, Gehan M. Elossaily, Narendra Sharma , Ajay Bilandi , Devesh U. Kapoor
Name of Corresponding Author	Devesh U. Kapoor
Name of the Journal	Nano-Structures and Nano-Objects
Indexed	SCOPUS
ISSN No.	2352-507X
URL	https://kuey.net/index.php/kuey/article/view/3221
Date of Publication	14-08-2024
SDG	Good Health and Well-being

06

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Bioactive Milk Peptides as a Nutraceutical Opportunity and Challenges
Name of Authors	Devesh U. Kapoor, Mansi Gaur, Akash Kumar, Mohd Nazam Ansari and Bhupendra Prajapati
Name of Corresponding Author	Bhupendra G. Prajapati
Name of the Journal	Current Protein & Peptide Science, Bentham Science
Indexed	SCOPUS
ISSN No.	1389-2037
URL	https://www.eurekaselect.com/article/142393
Date of Publication	20-08-2024
SDG	Good Health and Well-being

Name of Institute	Dr. Dayaram Patel Pharmacy College, Bardoli (406)
Title of Article	Retinoic acid in Parkinson's disease: Molecular insights, therapeutic advances, and future prospects
Name of Authors	Ashutosh Pareek, Runjhun Singhal, Aaushi Pareek, Terisha Ghazi, Devesh U. Kapoor, Yashumati Ratan, Arun Kumar Singh, Vivek Jain, Anil A. Chuturgoon
Name of Corresponding Author	Ashutosh Pareek
Name of the Journal	Life Sciences, Elsevier
Indexed	SCOPUS
ISSN No.	0024-3205
URL	https://doi.org/10.1016/j.lfs.2024.123010
Date of Publication	21-08-2024
SDG	Good Health and Well-being

Research Papers (Management-Supervisors)

01

Name of Institute	Shree Swaminarayan Institute of Management & I.T., Porbandar (810)
Title of Article	Financial Engineering and Its Impact on BPO in India
Name of Authors	Dr. Vijay Pithadia, Ms. Priyanka Mehta
Name of Corresponding Author	Dr. Vijay Pithadia
Name of the Journal	International Journal of Innovative Research in Technology (IJIRT)
Indexed	Other
ISSN No.	2349-6002
URL	https://ijirt.org/Article?manuscript=166512
Date of Publication	12-07-2024
SDG	Industry, Innovation and Infrastructure

02

Name of Institute	Shree Swaminarayan Institute of Management & I.T., Porbandar (810)
Title of Article	An Analysis on Sustainability and Circular Economy
Name of Authors	Dr. Vijay Pithadia, Priyanka Mehta
Name of Corresponding Author	Dr. Vijay Pithadia
Name of the Journal	International Journal of Innovative Research in Technology (IJIRT)
Indexed	Others
ISSN No.	2349-6002
URL	https://ijirt.org/Article?manuscript=166513
Date of Publication	13-07-2024
SDG	Responsible Consumption and Production

03

Name of Institute	Shree Swaminarayan Institute of Management & I.T., Porbandar (810)
Title of Article	Science and Technology for Rural Development
Name of Authors	Dipal Gohil, Dr.Vijay Pithadia
Name of Corresponding Author	Dipal Gohil
Name of the Journal	Organization Development Journal
Indexed	Others
ISSN No.	0889-6402
URL	https://odpublisher.com/volume-12-issue-2-2024/
Date of Publication	15-07-2024
SDG	Good Health and Well-being

04

Name of Institute	The Mandvi Education Society Institute of Business Management & Computer Studies (812)
Title of Article	To Identify Entrepreneurship Intent Among Scheduled Caste and Scheduled Tribe in South Gujarat: Stand Up India Scheme
Name of Authors	Dr. Seema Harshad Kadam, Dr. Mahammad Rafique Meman
Name of Corresponding Author	Dr. Seema Harshad Kadam
Name of the Journal	International Journal of Advanced Research in Management and Social Sciences (IJARMSS)
Indexed	Others
ISSN No.	2278-6236
URL	https://garph.co.uk/IJARMSS-vol13-no8.html
Date of Publication	01-08-2024
SDG	Decent Work and Economic Growth

Research Papers (Biotechnology-Supervisors)

01

Name of Institute	GTU-School of Applied Sciences & Technology (145)
Title of Article	Melodious tuning of microbial dynamics in biofloc, cage, and pond culturing system: a study on Pangasius pangasius fish gut microbiome
Name of Authors	Foram D. Vala, Smit R. Lende, Vishal K. Solanki, Kiran Jora, Riya Desai, Parth Sharma, Neelam Nathani, Chandrashekar Mootapally
Name of Corresponding Author	Neelam Nathani & Chandrashekar Mootapally
Name of the Journal	Frontiers in Microbiology
Indexed	SCOPUS
ISSN No.	1664-302X
URL	https://www.frontiersin.org/journals/microbiology/articles/10.3389/fmicb.2024.1434312/full
Date of Publication	10-07-2024
SDG	No Poverty, Good Health and Well-being, Decent Work and Economic Growth, Sustainable Cities and Communities, Life below Water

Research Papers (Science-Supervisors)

01

Name of Institute	Government Engineering College Palanpur-061
Title of Article	Study of structural and magnetic properties of laser-irradiated zinc ferrite material
Name of Authors	Jayant K. Jogi, S.K. Singhal, Rajan Mishra, Ashish R. Tanna, Ravindra Jangir, Amarjeet Singh, Madan Singh & T. Balaganapathi
Name of Corresponding Author	S.K. Singhal
Name of the Journal	Radiation Effects and Defects in Solids
Indexed	WoS
ISSN No.	10420150
URL	https://www.tandfonline.com/doi/abs/10.1080/10420150.2024.2381228
Date of Publication	22-07-2024
SDG	Affordable and Clean Energy

Research Papers (Engineering-Scholars)

01

Enrollment No	189999913037
Title of Article	Review of Side Channel Attacks and Comparison of Masking and Re-keying Countermeasures
Name of Authors	Amit Rathod, Kajal S. Patel
Name of Corresponding Author	Amit Rathod
Name of the Journal	Journal of Electrical Systems
Indexed	SCOPUS
ISSN No.	1112-5209
URL	https://journal.esrgroups.org/jes/article/view/4988
Date of Publication	05-07-2024
SDG	Sustainable Cities and Communities

02

Enrollment No	229999913014
Title of Article	Study Of Self-Sovereign Identity Management System Incorporating Blockchain
Name of Authors	Dixa Koradia, Vikram Agrawal
Name of Corresponding Author	Dixa Koradia
Name of the Journal	International Journal of Intelligent Systems and Applications in Engineering
Indexed	SCOPUS
ISSN No.	2147-6799
URL	https://ijisae.org/index.php/IJISAE/article/view/6396
Date of Publication	09-07-2024
SDG	Quality Education, Industry, Innovation and Infrastructure

03

Enrollment No	219999912012
Title of Article	Temporal evaluation of scouring around compound bridge pier
Name of Authors	Piyush Dhimmar, Reena Popawala
Name of Corresponding Author	Piyush Dhimmar
Name of the Journal	Journal of Technology
Indexed	SCOPUS
ISSN No.	1012-3407
URL	https://drive.google.com/file/d/1mSQ3sivj1iT5DXazsh0TWAQEudPqVlxW/view?pli=1
Date of Publication	19-07-2024
SDG	Sustainable Cities and Communities

04

Enrollment No	201049819002
Title of Article	Experimental study of the thermal efficiency of Solar air heater equipped with rotating spiral shape baffles: Using Solar Simulator
Name of Authors	Yogeshkumar D. Khimsuriya, D. K. Patel, Vivek Patel, Hitesh Panchal and Lav Kumar Kaushik
Name of Corresponding Author	Lav Kumar Kaushik
Name of the Journal	Journal of Physics: Conference Series
Indexed	SCOPUS
ISSN No.	1742-6596
URL	https://iopscience.iop.org/article/10.1088/1742-6596/2818/1/012022
Date of Publication	01-08-2024
SDG	Affordable and Clean Energy

05

Enrollment No	229999915008
Title of Article	Novel Compact UWB Antenna Design with Notch Filter Characteristics: Development and Performance Enhancement
Name of Authors	Ujval Dave, Shahidmohammed Modasiya, Abhinav Dave, Rahul Kumar Patel
Name of Corresponding Author	Ujval Dave
Name of the Journal	Progress In Electromagnetics Research C
Indexed	SCOPUS
ISSN No.	1937-8718
URL	doi:10.2528/PIERC24061705
Date of Publication	26.08.2024
SDG	Good Health and Well-being , Industry, Innovation and Infrastructure, Sustainable Cities and Communities

06

Enrollment No	209999915006
Title of Article	Advanced Lightweight AI Model for Indian Fruit Quality Evaluation using Computer Vision
Name of Authors	Anita N. Bhatt and Maulin Joshi
Name of Corresponding Author	Anita N. Bhatt
Name of the Journal	Indian Journal of Natural Sciences
Indexed	WoS
ISSN No.	0976-0997
URL	https://tnsroindia.org.in/JOURNAL/issue86/IJONS%20-%20ISSUE%2086%20-%20OCTOBER%20%202024%20-%20FULL%20TEXT%20PART%20-%20PART%20-%20001.pdf
Date of Publication	14-08-2024
SDG	Industry, Innovation and Infrastructure

07

Enrollment No	219999921004
Title of Article	An Extensive Overview of Al Mg Si Alloy's Electrochemical Behavior
Name of Authors	Tushal K. Kyada, Indravadan B. Dave, Sonam M. Patel
Name of Corresponding Author	Indravadan B. Dave
Name of the Journal	International Journal of Metallurgy and Alloys
Indexed	Others
ISSN No.	2456-5113
URL	https://doi.org/10.37628/ijma.v9i2.1078
Date of Publication	25-07-2024
SDG	Industry, Innovation and Infrastructure

Research Papers (Management-Scholars)

01

Enrollment No	209999903041
Title of Article	A Study on Net Banking and Mobile Banking
Name of Authors	Dr. Vijay Pithdia, Ms.Priyanka Mehta
Name of Corresponding Author	Dr. Vijay Pithdia
Name of the Journal	International Journal of Research and Analytical Reviews
Indexed	Others
ISSN No.	2348-1269
URL	http://ijrar.org/viewfull.php?&p_id=IJRAR24B4264
Date of Publication	19-06-2024
SDG	Industry, Innovation and Infrastructure

Research Papers (Pharmacy-Scholars)

01

Enrollment No	212889901003
Title of Article	Validated UV-Spectrophotometric Method for Pirfenidone Estimation in Bulk Drug, Marketed Tablet, and Nanoparticle Formulation
Name of Authors	Kiran Dudhat, Janki Goswami & Dr. Harsha Patel
Name of Corresponding Author	Kiran Dudhat
Name of the Journal	Pharmaceutical Chemistry Journal
Indexed	SCOPUS
ISSN No.	1573-9031
URL	https://link.springer.com/article/10.1007/s11094-024-03196-w#citeas
Date of Publication	16-08-2024
SDG	Good Health and Well-being

02

Enrollment No	212889901003
Title of Article	Novel method for monitoring of carcinogenic impurity of N-nitrosamine in nizatidine pharmaceutical products using ultra high-pressure liquid chromatography triple quadrupole mass spectrometry
Name of Authors	Shivani Dhorajiya, Janki Goswami, Bhumika Dudhatra, Kashyap Thummar
Name of Corresponding Author	Kashyap Thummar
Name of the Journal	Rapid Communications in Mass Spectrometry
Indexed	Others
ISSN No.	1097-0231
URL	https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/epdf/10.1002/rcm.9884
Date of Publication	11-08-2024
SDG	Good Health and Well-being

Research Papers (Management-Supervisors)

01

Enrollment No	229999903010
Title of Article	Role of NGO's in Rural Development
Name of Authors	Ms. Dipal Gohil
Name of Corresponding Author	Dr. Vijay Pithadia
Name of the Journal	International Journal of Research and Analytical Reviews
Indexed	Others
ISSN No.	E-ISSN 2348-1269, P- ISSN 2349-5138
URL	https://ijrar.org/viewfull.php?&p_id=IJRAR24C1145
Date of Publication	05-07-2024
SDG	Decent Work and Economic Growth

Research Papers (Architecture-Supervisors)

01

Enrollment No	229999908001
Title of Article	Understanding the Sacred Meanings in Geometric Patterns
Name of Authors	Prof. Meghna Tushar Sutaria, Prof. Nigam Oza
Name of Corresponding Author	Prof. Meghna Tushar Sutaria
Name of the Journal	International Journal of Multidisciplinary Research Review, Vol.10, Issue-8, Aug - 2024 (IJMDRR)
Indexed	Others
ISSN No.	2395-1885, 2395-1877
URL	http://www.ijmdrr.com/admin/ecertificate.php?id=2187
Date of Publication	30-08-2024
SDG	Good Health and Well-being

PATENTS

Patents (Engineering-Scholars)

01

Enrollment No.	1999999913564
Types of Patent	Utility
Title of Patent	Cost Optimization System for Mobile Ad-Hoc Network (MANET) using Particle Swarm Optimization (PSO)
Name of Inventors	Vishal Polara, Dr. Jagdish Rathod, Devang Rathod
Name of Applicant	Vishal polara
Patent No.	202421054863
Status of Patent	Published
Country of Filing	India
Date of Publication	09-08-2024
SDG	Responsible Consumption and Production

02

Enrollment No.	2099999919047
Types of Patent	Design
Title of Patent	E-Tractor Chasis
Name of Inventors	Dainik Prakash Patel, Harshal Koli, Kartik Makwana, Kavya Kapadiya, Mandar Sumant
Name of Applicant	Dainik Prakash Patel
Patent No.	414405-001
Status of Patent	Published
Country of Filing	India
Date of Publication	26-07-2024

Patents (Pharmacy-Scholars)

01

Enrollment No.	229999901067
Types of Patent	Design
Title of Patent	Herbal Medication Dispensing Medical Patch
Name of Inventors	Sigma University, Divya Gupta, Nensi Raytthatha, Sonal Bansal, Lalit Chaudhary Venarambhai, Sonam Chourasia
Name of Applicant	Nensi Raytthatha
Patent No.	418131-001
Status of Patent	Granted
Country of Filing	India
Date of Publication	02.08.2024
SDG	Good Health and Well-being

AWARDED PHD THESIS ABSTRACTS

Ph.D. Thesis Abstract (Engineering)

01

Name	Zalakben Yogeshkumar Patel
Enrollment No	189999915032
Title of Thesis	Electronics and Communication
Faculty/Discipline	Design and Development of Compact Dual Band RHCP Antennas for Navigational Satellite System Receivers
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(13)_837192.pdf

02

Name	Choksi Amit Harishchandra
Enrollment No	189999915003
Title of Thesis	Electronics and Communication
Faculty/Discipline	Machine Learning-based Energy Efficient Routing Protocols for VANET Applications via Dynamic Clustering Model
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(12)_970826.pdf

03

Name	Vasava Priteshkumar Bhikhubhai
Enrollment No	179999915023
Title of Thesis	Link handling Due to atmospheric Turbulence in Free Space Optical Communication for Optical Wireless Terrestrial Networks
Faculty/Discipline	Electronics and Communication
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(14)_644047.pdf

04

Name	Pandya Jay Sudhirbhai
Enrollment No	189999915019
Title of Thesis	Optimization of Improved Energy Detection Based Spectrum Sensing in Cognitive Radio
Faculty/Discipline	Electronics & Communication
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(12)_741297.pdf

05

Name	Parmar Shankar Kantilal
Enrollment No	189999915021
Title of Thesis	A Machine Learning Approach for Primitive Stage Detection of Dyslexia Using Electroencephalogram Signal Analysis
Faculty/Discipline	Electronics and Communication Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(6)_295426.pdf

06

Name	Miloni Mayur Ganatra
Enrollment No	189999915009
Title of Thesis	An Area and Power Efficient Signal Denoising and Morphological Feature Extraction Architectures for ECG Signal Analysis
Faculty/Discipline	Electronics and Communication Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(11)_615414.pdf

07

Name	Zala Dharmendrasinh Dasharathsinh
Enrollment No	179999915025
Title of Thesis	Improve Performance of TCP Congestion Control Using Queue Modification Over Wireless Network
Faculty/Discipline	Electronics and Communication Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(8)_622669.pdf

08

Name	Dave Nakul Rajnikant
Enrollment No	169999913003
Title of Thesis	Effective Stemmers using Trie Data Structure for Enhanced Processing of Gujarati Text
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(5)_896904.pdf

09

Name	Pandya Jaymit Bharatbhai
Enrollment No	189999913025
Title of Thesis	Deep Learning Approach for Stock Market Trend Prediction and Pattern Finding
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(1)_598007.pdf

10

Name	Dave Jashvantkumar Rajnikant
Enrollment No	179999913006
Title of Thesis	Efficient Traffic Signal Control in VANETs: Integrating Local Traffic Dynamics and Emergency Vehicle Prioritization
Faculty/Discipline	Computer/IT Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(9)_478606.pdf

11

Name	Shaikh Mazar Afzalbhai
Enrollment No	179999919054
Title of Thesis	Experimental Studies on Combustion, Emission and Performance of CI Engine Fueled with Diesel, Ethanol and Nanoparticles
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(3)_395143.pdf

12

Name	Momin Altafhussain Gulamdastagir
Enrollment No	189999919001
Title of Thesis	Experimental Investigations and analysis on cladding Process through Plasma transferred arc welding
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(4)_548368.pdf

13

Name	Patel Vijaykumar Dasharathbhai
Enrollment No	189999919055
Title of Thesis	Experimental Investigation of Baffled Solar Dryer with Paraffin Wax as an Energy Storage Material
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(8)_123592.pdf

14

Name	Solanki Ankursinh Pravinsinh
Enrollment No	179999919058
Title of Thesis	Experimental Investigation on Flexible Pulsating Heat Pipe using Nanofluid for Heat Transfer Enhancement
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(4)_743643.pdf

15

Name	Ashvinkumar Dahyabhai Patel
Enrollment No	189999919040
Title of Thesis	Performance Analysis of Smaw Welded Novel Cruci-Trap Joint Over Conventional Cruciform Joint For Steel Structures Application
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(11)_389488.pdf

16

Name	Shradhdha Abhijeet Modi
Enrollment No	189999919065
Title of Thesis	Experimental Investigations of Size Effect on Fracture of Hybrid Natural Fiber Composites
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(7)_946936.pdf

17

Name	Savalia Pradip Vithalbhai
Enrollment No	189999919064
Title of Thesis	Experimental Investigation on Shape Accuracy, Surface Roughness and Machining Time of Freeform Curves Using Macro Programming.
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(3)_886569.pdf

18

Name	Ashishkumar Mahendrabhai Desai
Enrollment No	189999919003
Title of Thesis	Experimental Investigations on Friction Stir Welding of AZ91 Magnesium Alloys for Structure and Property Evaluations
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(18)_416152.pdf

19

Name	Mistry Ghanshyambhai Dashrathbhai
Enrollment No	179999919027
Title of Thesis	Analytical Approximation of Roll Separating Force in Bar Rolling
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract_706438.pdf

20

Name	Soni Nimesh Kanaiyalal
Enrollment No	179999919029
Title of Thesis	Investigation and Design Automation for Engineering to Order Process in Pressure Vessel Industries with Help of Internet of Things
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(1)_964744.pdf

21

Name	Harshul B Brahmbhatt
Enrollment No	179999919015
Title of Thesis	Using Design Methodology to Develop Mobility Solution for Person with Lower Body Disability
Faculty/Discipline	Mechanical Engineering (Industrial Design)
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(10)_712790.pdf

22

Name	Pradipkumar Kiritkumar Gajjar
Enrollment No	199999919538
Title of Thesis	Experimental Investigation on the Effect of Post Weld Heat Treatment Parameters on Sensitization Recovery of Auto TIG Welded Austenitic Stainless Steels Tube
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(2)_882594.pdf

23

Name	Hiren Arvindbhai Shah
Enrollment No	189999919018
Title of Thesis	Experimental & Numerical Investigation Of Modified Pelton Runner
Faculty/Discipline	Mechanical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(13)_350592.pdf

24

Name	Sareriya Kajal Jimmy
Enrollment No	179999911009
Title of Thesis	Solar Thermal Steam Distillation for Essential Oil Production
Faculty/Discipline	Biomedical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(17)_332448.pdf

25

Name	Manan Nanavati
Enrollment No	189999918002
Title of Thesis	Decision Support System for Diagnosis and Treatment Planning of Lower Back Pain using Image Fusion Techniques
Faculty/Discipline	Biomedical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(2)_129610.pdf

26

Name	Aarti Narendra Bokade
Enrollment No	189999917001
Title of Thesis	Image Processing Using Deep Convolutional Neural Network
Faculty/Discipline	Instrumentation & Control Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(10)_474042.pdf

27

Name	Sanjaykumar Kalidas Parmar
Enrollment No	159997127001
Title of Thesis	Development of Woven and 3-D Woven Composites Using High Tenacity Yarns for Various Applications
Faculty/Discipline	Textile Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(9)_460456.pdf

28

Name	Nakum Abhay Virabhai
Enrollment No	139997106005
Title of Thesis	Characterization of Self Compacted Geopolymer Concrete Containing Fibers
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(16)_811154.pdf

29

Name	Mehta Kamlesh Arvindbhai
Enrollment No	189999912002
Title of Thesis	Study of Wind Interference Effects for Tall Buildings Resting on Hill Top Using Computational Fluid Dynamics
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(15)_235473.pdf

30

Name	Yogesh Jagdishbhai Chauhan
Enrollment No	189999912040
Title of Thesis	Dynamic Analyses of Offshore Triceratops subjected to Hurricane-driven Metocean conditions
Faculty/Discipline	Civil Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(7)_608182.pdf

31

Name	Ankurkumar Pramodbhai Desai
Enrollment No	189999914003
Title of Thesis	Performance Analysis of Six-Phase Asymmetrical Induction Motor Drive using Advanced Control Techniques
Faculty/Discipline	Electrical Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract%20(6)_213452.pdf

32

Name	Khyati Kishorchandra Modi
Enrollment No	179999916002
Title of Thesis	Studies on the Treatment of Wastewater using Combined Advance Oxidation Processes and Modified Rotating Biological Contactor process
Faculty/Discipline	Environmental Engineering
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculares/uploads/Abstract_491572.pdf

Ph.D. Thesis Abstract (Pharmacy)

01

Name	Arunabahen Rajapara
Enrollment No	149997390002
Title of Thesis	Bioactivity Guided Extraction and Fractionation of Onosma Bracteatum with Specific Reference to Its Anti-Cancer Activity Against Lung Cell Cancer
Faculty/Discipline	Pharmacy
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(15)_618274.pdf

02

Name	Jain Payalkumari Sureshkumar
Enrollment No	189999901004
Title of Thesis	Synthesis of New Thiazole Derivatives as Potential Anticancer Agents
Faculty/Discipline	Pharmacy
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(1)_523627.pdf

03

Name	Limabahen Kanubhai Patel
Enrollment No	189999901006
Title of Thesis	Development and Evaluation of Herbal Formulation for Anti-Asthmatic Activity
Faculty/Discipline	Pharmacy
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(14)_563385.pdf

Ph.D. Thesis Abstract (Management)

01

Name	Mr. Badheka Gaurang Tusharkant
Enrollment No	179999903003
Title of Thesis	A Study of Capital Structure Determinants of Selected Listed Companies in India
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract%20(5)_212181.pdf

02

Name	Vidani Jignesh Naresh
Enrollment No	189999903015
Title of Thesis	A Study on the Impact of Influencer Marketing on Online Purchase Intention of Consumers towards Branded Apparels in Gujarat
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract_603196.pdf

03

Name	Neha Pandey
Enrollment No	189999703023
Title of Thesis	A study on the relationship between personality, work life balance and its impact on employee performance.
Faculty/Discipline	Management
Abstract	https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Abstract_425115.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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