



InnoVista

BI-ANNUAL NEWSLETTER BY THE
DIRECTORATE OF RESEARCH

KMCT Group of Institutions, Corporate Office, KMCT Medical College Campus,
Manassery, Makkam, Kozhikode-673602, Kerala, SouthIndia

VOLUME 1 ISSUE 1

ABOUT THE NEWSLETTER

KMCT Group of Institutions is one of the largest groups of educational institutions in Kerala, with campuses spanning across Calicut and Malappuram districts. It includes professional institutions in fields such as medicine, dentistry, pharmacy, nursing, engineering, management, law, design, architecture and more.

The Directorate of Research at KMCT has been established to streamline and enhance research activities across the institutions, providing necessary support, resources, and infrastructure to faculty and student researchers. With the management's guidance, the Directorate aims to not only build a strong research culture but also to achieve global recognition through groundbreaking research with focus given to incorporate sustainability development goals.

This bi-annual newsletter highlights our collective achievements of our academic community, and keeps readers informed about the latest research breakthroughs, as well as tips on successful research publication and more.



Dr. Vijish Venugopal
Chairman



Dr. Dhanya Muralidharan
Research Officer



Dr. S. Kathirvel
Research Officer



Dr. Shamnas. M
Research Officer



Mrs. Sujatha. S
Office Administrator



Mr. Suraj. P
Manager, HR & Legal



Mrs. Thahira Shirin. V. K
Research Librarian



Low-cost system developed for detection of diseased cells

The Hindu Bureau
Kozhikode

A team consisting of doctors at KMCT Medical College, Makkam, Kozhikode, and an Assistant Professor at the National Institute of Technology Calicut (NITC) has claimed to have developed a low-cost system for the staining and detection of diseased cells, including those caused by cancer.

According to the doctors, histopathology, the diagnosis and study of diseases of tissues, plays a pivotal role in identifying cellular structure and those morphology. However, the automated staining system currently being used are costly and unsuitable for healthcare institutions with limited financial resources.

Against this backdrop, a team led by Irfan P.P., Professor and Head of the Department of Pathology at KMCT Medical College, collaborated with C.K. Rajan, Assistant Professor, Electronics and Communication Engineering, NITC, to develop a low-cost system for the automated staining and detection of diseased cells.

The new automated hematoxylin and eosin staining system is designed to enhance efficiency, minimize manual labour, and ensure valid results, they claimed.

The prototype is built with a Cartesian robotic system, whose three principal axes of control move in a straight line, incorporating stepper motors and an end-effector for precise movement.

It is powered by a Reduced Instruction Set Computing (RISC-V) processor-based control system, and automated staining algorithm; extrusions, making it both durable and cost-effective.

RISC-V is an open-source instruction set architecture for designing custom processors.

The team members claimed that unlike traditional automated staining machines, which are often inaccessible due to high costs, this affordable alternative has the potential of being advanced diagnostic capabilities to smaller laboratories and hospitals.

By making automation in histopathology affordable, this can greatly improve diagnostic accuracy and accessibility, they said, adding that as medical technology advances, affordable solutions like this help connect institutions with accessibility in disease diagnosis.

The project received the first prize at the 2023 IASISTE, the Innovation and Patent Exposition organized by the Centre for Innovation, Entrepreneurship & Incubation at NITC.





Message from the Chairman

Research has always been at the heart of human progress. It's our natural curiosity, our desire to understand, improve, and innovate, that has shaped the world we live in today. In earlier times, doing research and getting it published was a long and difficult journey. While the dedication and effort required remain the same, advancements over the years have made the process more accessible. Today, with various tools, training programs, and platforms available, more individuals are inspired to pursue research in their areas of interest.

However, research still demands strong support, financially, materially, and in terms of human resources. Without this, the process can be overwhelming. That's why I'm truly happy to announce the formation of the Directorate of Research at KMCT Group of Institutions. A dedicated team has worked around the clock over the past few months to shape a clear and

supportive research policy that will guide and strengthen research activities across KMCT.

I was also genuinely pleased to read the first issue of our new bi-annual research newsletter, 'Innovista'. It's a thoughtful and timely initiative by the Directorate of Research. This newsletter will not only showcase the achievements and updates of our research endeavours but will also provide valuable tips, insights, and guidance on conducting and publishing research.

I extend my best wishes for the success of this and future editions of Innovista. Congratulations to the team behind this.

Warm regards,
Dr. Navas K M

Chairman
KMCT Group of Institutions



Message from the Executive Trustee & Director

One thing I've always appreciated about the KMCT family, our staff and students alike, is the energy and passion they bring to research and innovation. Over the years, we've seen some truly inspiring work come from our campuses. Our faculty and students have come out of boundaries, explored new ideas, and achieved things that make us all proud.

We've often felt that if they had just a little more support and guidance, their work could have gone even further, reaching a wider audience and getting the recognition it so clearly deserves. That's why we're so excited to have established the Directorate of Research at KMCT. It's a step we've long wanted to take, and it marks a new chapter in how we support our research community.

I'm especially happy to see 'Innovista', the bi-annual

research newsletter, come to life through the efforts of the Directorate of Research. It's such a thoughtful initiative, one that celebrates our researchers, shares their achievements, and offers useful insights and guidance for those on their own research journeys.

To everyone involved, thank you, and to all our researchers, keep going. We can't wait to see what you discover next.

Warm regards,
Dr. Ayisha Nazreen
Executive Trustee & Director
KMCT Group of Institutions



Message from the Chairman, Directorate of Research

Out of the core areas that KMCT Group of Institutions focuses on, one of the most important is research. We have realized that the time has come to establish a strong framework that supports our researchers, both faculty and students, by providing direction to their research, helping them complete it on time without disrupting their regular work or studies, and assisting them through the publication process.

After months of discussions and planning, the Directorate has successfully constituted a Research Policy that includes the entire academic community, allowing everyone to benefit from it in their research pursuits.

With that in place, I am happy to introduce our newsletter, 'Innovista'. This publication aims to highlight the research and academic excellence taking place within KMCT, work that truly deserves the spotlight. We

believe it will inspire not only our internal community but also the wider scholarly world beyond KMCT.

I'm very happy to see this newsletter finally take shape. I deeply appreciate the Directorate's efforts in bringing this to life, and I would like to express my sincere gratitude to our Chairman and Director for their continued support in establishing the Directorate of Research and now for making the release of this newsletter possible.

We look forward to seeing your achievements featured in future editions and to showcasing the academic strength of KMCT through this platform.

Best regards,
Dr. Vijish Venugopal
Chairman, Directorate of Research
KMCT Group of Institutions



Editorial Message

It is with great pride and enthusiasm that I present to you the inaugural edition of the "INNOVISTA" - Newsletter by the Directorate of Research, KMCT Group of Institutions. This publication marks a significant step in our ongoing commitment to fostering a vibrant research culture across all our campuses and institutions.

The primary objective of this newsletter is to serve as a platform to showcase the remarkable research achievements, innovative projects, publications, and collaborations led by our students, faculty, and research scholars. It is a celebration of curiosity, creativity, and academic rigor that lie at the heart of KMCT's mission.

In an era where knowledge is both a tool and a resource, research plays a pivotal role in shaping the future. Through this newsletter, we aim to highlight the strides our institutions are making in diverse domains of

healthcare, science, technology, law, management, and beyond. It also provides a space to acknowledge the efforts of our researchers who continue to push boundaries and redefine excellence.

I take this opportunity to express my heartfelt gratitude to the editorial team, to everyone whose hard work contributed to our newsletter, and to the entire KMCT research community for consistently striving for excellence in research. I hope this newsletter will inspire many more to engage in meaningful research and collaborative pursuits.

Let us continue to inquire, innovate, and impact.

Dr. Shamnas M
M.Pharm, PhD
Chief Editor, Directorate of Research
KMCT Group of Institutions

KMCT: A Look Back In To The Past Six Months



KMCT Dental College has signed an MOU with MAHSA University, Malaysia, in an effort to strengthen our global partnership in academic excellence, research innovation, and student exchange initiatives



KMCT Centre for Digital Dentistry has been inaugurated, marking a new chapter in technology-driven dental services with accuracy, precision, and cost-effectiveness



KMCT Group of Institutions has signed an MoU with University Hasanuddin, Indonesia, to enhance academic exchange, research collaboration, faculty development, and student mobility programs

Innovation Breakthrough at KMCT



Dr. Sathi PP and her team's idea of developing a low-cost system for diseased cell detection has come to fruition through collaboration with NIT Calicut. This innovation is set to revolutionize healthcare by providing affordable diagnostic solutions

SAFE Project by KMCT Medical College



A survey among food handlers in the Calicut district was conducted by the Department of Community Medicine at KMCT Medical College under the SAFE (Sanitation and Fitness Evaluation) project. Health cards were issued as an initiative to ensure hygienic practices, food safety, and public health among food handlers in the district



Govind Gopinathan, 3rd year BDS student at KMCT Dental College, was awarded ICMR Short Term Studentship (STS) 3rd Year Grant 2024 under the HRD Scheme, Department of Health Research, Ministry of Health & Family Welfare, Government of India, with support from his guide Dr. Dhanya Muralidharan and the Research Committee.



Dr. Ravi was selected for the grant-in-aid under the GENESIS-EiR Scheme by MeitY, Government of India, in association with TBI-NIT Calicut, with a grant amount of Rs.10 lakhs



Dr. Binoy J. Paul and Dr. Reeta James, Professors in the Department of Internal Medicine at KMCT Medical College, have achieved global readership and significant download milestones for their academic publications:

- “New and Emerging Therapies in Gout”-published in Rheumatology and Autoimmunity (Wiley), and
- “Gout: An Asia-Pacific Update” - published in the International Journal of Rheumatic Diseases”



Dr. Sandeep S, Principal of KMCT College of Allied Health Sciences, has been honoured with the Har Gobind Khorana Best Scientist Award by the Tamil Nadu Scientific Research Organisation, in recognition of his outstanding contributions to scientific research and education



Dr. George Babu, Professor, Department of Pedodontics, KMCT Dental College, has been awarded a patent by the Government of India for his innovative design of the “Bifid Crescent-Tip Orthodontic Band Remover.”

The Scholar's Zone: Mastering Research and Publication

TOOLS FOR LITERATURE REVIEW

Writing Literature Review	Finding papers	Reading Papers
<ul style="list-style-type: none"> Paperpal ResearchPal Review-It Grammarly Overleaf Google Docs LaTeX Scrivener Evernote FocusWriter 	<ul style="list-style-type: none"> Undermind Product Hunt Litmaps Google Scholar Pub OIPub ArXiv Semantic Scholar R Discovery PubMed 	<ul style="list-style-type: none"> Scholarcy Enago Read SciSummary Scribe AI Petal AI Outread Paper Digest PubReader DeepDyve
Managing References	Data Extraction	Data Analysis
<ul style="list-style-type: none"> Zotero Mendeley Endnote Refworks 	<ul style="list-style-type: none"> SciSpace SciSummary AnswerThis 	<ul style="list-style-type: none"> Nvivo Julius AI MS Excel Google Sheets MyRA

Attention Researchers and Academicians!

Keeping track of journal indexing is crucial to ensure the credibility and visibility of your research. Recently, several journals have been discontinued from Scopus: an eye on global research in January. Before submitting your manuscript, always verify the indexing status to avoid predatory or delisted journals.

Discontinued Journals:

- Applied Mathematics of Nonlinear Sciences (@Walter de Gruyter)
- International Journal of Experimental Research and Review (International Academic Publishing House (IAPH))
- International Journal of Public Health Science (Intelektual Pustaka Media Utama)
- Journal of Ecohumanism (Creative Publishing House)
- Journal of Infrastructure, Policy and Development (EnPress Publisher, LLC)
- Journal of Management World (Editorial Team of JoMW)
- Journal of the Knowledge Economy (Springer/Springer Nature)
- Pakistan Journal of Criminology (Pakistan Society of Criminology)
- Pakistan Journal of Life and Social Sciences (Elite Scientific Publications)
- Pathology Research and Practice (Elsevier)
- RISTI - Revista Iberica de Sistemas e Tecnologias de Informacao (Associacao Iberica de Sistemas e Tecnologias de Informacao (AISTI))

Pro Tip:

- Always verify Scopus/WoS indexing before manuscript submission.
- Prioritize high-impact factor and reputed journals to maintain research integrity.
- Cross-check indexing status via Scopus, Web of Science, and DOAJ regularly.
- Stay informed, ensure research credibility, and make informed publishing choices.

Understanding the Differences Among Academic Publishing Venues

Key Factor	Journal	Conference Proceedings	Conference	Workshop	Book Chapters	Preprints	Theses/Dissertations	Patents
Purpose	Disseminate original, peer-reviewed research	Record of papers presented at conferences	Event to present and discuss research	Interactive sessions for all levels of development or discussion	Detailed exploration of specific topics	Early dissemination of research findings	Original research for academic degrees	Protect intellectual property
Publication Frequency	Periodic (e.g., quarterly, monthly) or annually	Published after the conference	Held periodically (e.g., annually)	Held periodically (e.g., annually)	As books are published	Immediate or near-immediate	One-time submission for degree completion	As filed and approved
Review Process	Rigorous peer review	Peer-reviewed by conference committee	Peer review or committee selection	Typically less formal review	Peer review by book editors	Often not peer-reviewed	Reviewed by academic committee	Reviewed by patent office
Length	Typically 5,000-10,000 words	Usually 4-10 pages	Varies, often short presentations	Short sessions or presentations	Varies, often 5,000-10,000 words	Varies	Typically 50,000+ pages	Detailed technical description
Audience	Researchers, academics, professionals	Researchers, students	Researchers, practitioners, scholars	Practitioners, students, researchers	Academics, researchers, students	Researcher & public	Academics, researchers	Industry professionals, legal entities
Depth of Content	In-depth analysis	Focused findings	Varied depth, often high-level summaries	Practical and interactive focus	In-depth exploration of a topic	Pragmatic findings	Comprehensive research and analysis	Technical and legal specifics
Accessibility	Subscription or open access platforms	Digital libraries or conference proceedings	Conference attendees or digital libraries	Workshop attendees or online repositories	Libraries, online bookstores	Open access repositories	University libraries, online repositories	Patent databases
Source/Indexed	Nature, IEEE Transactions	ACM Digital Library, IEEE Xplore	NeurIPS, ACM SIGGRAPH, etc.	Workshops at conferences like ICML, NeurIPS, etc.	Springer, Wiley, etc.	arXiv, bioRxiv	University libraries	US Patent and Trademark Office

Journal Indexing Status: What You Need to Know Before Publishing

Scopus periodically releases a list of journals, indicating whether they are active or inactive, and whether they are still indexed. It is essential to verify whether a journal is still indexed on Scopus before submitting your paper to ensure that it receives the recognition, value, readership, and visibility it deserves. Here are a few journals that have been discontinued from Scopus. You can access the full list by downloading it from the Scopus website or by searching using the link below: https://downloads.ctfassets.net/o78em1y1w414/7xtaTxNiNcWRTeZkV86eNy/3a70407663dc267accb7124a375a1719/ext_list_February_2025.xlsx

Key Metrics Every Researcher Should Understand for Success

Metric	Type	Description
h-index	Author-level	Measures impact based on the number of papers (h) with at least h citations each
h5-index	Author-level	Similar to h-index but considers only citations in the last 5 years
i10-index	Author-level	Counts the number of papers with at least 10 citations
Impact Factor (IF)	Journal-level	The average number of citations per paper in a journal over two years (Web of Science)
CiteScore	Journal-level	Average citations per document in a journal over 4 years
SCImago Journal Rank (SJR)	Journal-level	Measures journal influence based on weighted citations
Field-Weighted Citation Impact (FWCI)	Article-level	Compares article citations to the global average for similar papers
Altmetric	Article-level	Tracks online attention (mentions in news, blogs, social media)

Some of the recent Scopus publications by KMCT faculty in the past six months

Department of Obstetrics & Gynaecology, KMCT Medical College

Shameema Puthuprakkat (Junior Resident) | Dr. Chellamma V K (Professor & HOD) | Dr. Lisha Govind (Professor) | Dr. Naseema Beevi A (Professor)

1. Puthuprakkat, Shameema, et al. "Correlation of Symptoms and Its Effects in Pelvic Organ Support Defects by Pelvic Organ Prolapse - Quantification {POP-Q} in a Teaching Institution in North Kerala, India." Indian Journal of Obstetrics and Gynecology Research, vol. 12, no. 1, Feb. 2025, pp. 28-33. <https://doi.org/10.18231/ijogr.2025.005>.

Department of Psychiatry, KMCT Medical College

Dr. Pranav V Nair (Senior Resident) | Dr. Bindhiya Babu (Associate Professor) | Dr. Zoheb Raj (Associate Professor) | Dr. Rajmohan (Professor)

2. Nair, Pranav V., et al. "ERR ON THE SIDE OF CAUTION WITH ENDOXIFEN? – a CASE SERIES." Asian Journal of Psychiatry, vol. 106, Feb. 2025, p. 104414. <https://doi.org/10.1016/j.ajp.2025.104414>.

Department of Periodontics, KMCT Dental College

Dr. Soumya Gopal (Reader)

3. Thirumoorthy, Soumya Narayani, et al. "Application of Pulp Tissue Genetic Profile in Orthodontic Tooth Movement: A Needle in a Haystack?" Evidence-Based Dentistry, Mar. 2025, <https://doi.org/10.1038/s41432-025-01131-w>.

Before Publishing: Key Ethical Aspects Your Research Should Meet

WHAT ARE THE ETHICAL CONSIDERATION IN RESEARCH PAPER PUBLISHING CHEAT SHEET

ETHICAL CONSIDERATION	PRINCIPLE	EXAMPLE
Plagiarism Prevention	Always attribute ideas, data, and quotes to the original authors.	In the Social Sciences, proper citation is crucial to distinguish between your analysis and existing theories.
Data Fabrication and Falsification	Do not manipulate, fabricate, or falsify data. Always report results truthfully.	In Biomedical Research, falsifying clinical trial data can endanger lives and violate regulatory standards.
Authorship Integrity	Ensure that all listed authors have made a significant intellectual contribution.	In Engineering, listing an author who was not involved in technical aspects of a paper but only in writing it. Authorship should be based on real contribution.
Conflict of Interest Disclosure	Declare any potential conflicts of interest (financial or personal) that may affect the research.	In Pharmaceuticals, disclose if you have any ties to drug companies that might influence the study's outcome.
Informed Consent and Participant Privacy	If your research involves human subjects, ensure informed consent is obtained and privacy is maintained.	In Data Science, ensure that participants are fully aware of how their data will be used and that anonymity will be protected.
Respect for Copyright and Licensing	Adhere to copyright laws when using text, figures, or content from other sources.	In the Humanities, citing a historical text correctly and reporting intellectual property is a key ethical consideration.
Peer Review Integrity	Adhere to copyright laws when using text, figures, or content from other sources.	In STEM Fields, peer review should assess the quality of research without bias, avoiding conflicts of interest with authors.
Plagiarism Check and Use of Turnitin/Other Software	Use plagiarism detection tools to ensure your work doesn't inadvertently overlap with others.	In Law, where citations and case law are critical, make sure your citations are properly placed and any paraphrased content is appropriately referenced.
Reproducibility of Research	Provide enough detail so that others can reproduce your research findings.	In Environmental Science, if you're publishing a study on climate models, ensure that your methodology is fully documented for reproducibility.

CHECKLIST FOR ETHICAL RESEARCH PUBLISHING

- Have you given proper credit to all authors and sources?
- Are your data and findings accurately reported without manipulation?
- Did you disclose all conflicts of interest?
- Have you obtained informed consent from participants and protected their privacy?
- Are you adhering to copyright laws and intellectual property rights?
- Did you ensure your study is reproducible and transparent?
- Are you following ethical guidelines specific to your research field?

PITFALLS TO AVOID

- Plagiarism or Unacknowledged Borrowing: Avoid using someone else's work without proper credit.
- Data Manipulation: Never alter your results to fit a desired outcome.
- Overstating Claims: Avoid making exaggerated claims that are not supported by your data.
- Lack of Informed Consent: Don't publish research involving human subjects without proper consent.
- Unethical Use of Data: Avoid using data for purposes not intended by the original researchers.

Most-cited journals in Medicine according to Scopus data

Medicine	Journal	Citation Count
1.	New England Journal of Medicine	336463
2.	Lancet	266752
3.	Journal of Clinical Medicine	139523

