



VELS



INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM, THIALAMBUR, PERIYAPALAYAM-CHENNAI
ACCREDITED BY NAAC WITH 'A++' GRADE

2ND
ICCPR



TWO DAYS INTERNATIONAL CONFERENCE ON CLINICAL PHARMACY PRACTICE AND RESEARCH – 2025

"TRANSFORMATION IN
PHARMACY: EMPOWERING
FUTURE GENERATIONS OF
PHARMACISTS"

SEPTEMBER 25 & 26, 2025

VENUE: SHIVALAYA AUDITORIUM,
VISTAS

**CONFERENCE PROCEEDINGS
OF
2 ND ICCPR - 2025**

ORGANIZED BY

DEPARTMENT OF PHARMACY PRACTICE
SCHOOL OF PHARMACEUTICAL SCIENCES
VISTAS



RANKED **4** AMONG PRIVATE ENGINEERING INSTITUTES IN TAMIL NADU



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(NOV-2019)

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RANKED **4** **INDIA TODAY**
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IN TAMIL NADU AMONG
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ABOUT US



Vels Institute of Science, Technology & Advanced Studies (VISTAS), established in 2008, is committed to shaping individuals into well-rounded professionals with both character and competence, dedicated to nation-building and sustainable development. Recognized as a Deemed to be University by the Ministry of Human Resource Development (MHRD), Government of India, and the University Grants Commission (UGC), VISTAS offers a diverse range of undergraduate, postgraduate, and Ph.D. programs.

As a multidisciplinary university in Tamil Nadu, VISTAS provides academic programs across various fields, including Arts, Science, Engineering, Medicine, Nursing and Allied Health Sciences, Technology, Management Studies, Pharmaceutical Sciences, Physiotherapy, Maritime Studies, Education, Law, Hotel and Catering Management, Aviation, Agriculture, Music, and Fine Arts. All programs at VISTAS are accredited by the relevant statutory regulatory bodies, including the All India Council for Technical Education (AICTE), National Medical Commission (NMC), Indian Nursing Council (INC), Pharmacy Council of India (PCI), Bar Council of India (BCI), National Council for Teacher Education (NCTE), and the Directorate General of Shipping (DGS). The institution has been awarded an "A++" grade by the National Assessment and Accreditation Council (NAAC) and has been granted 12-B status by the UGC. Additionally, eleven programs have received accreditation from the National Board of Accreditation (NBA). In the NIRF University Rankings 2024, VISTAS secured a position in the 101-150 range, demonstrating its commitment to excellence in education and research. It has also been ranked in the 1201-1500 band in the Times Higher Education (THE) World University Rankings 2025 and has achieved a Diamond rating in the QS I-Gauge University Rating.

ABOUT SCHOOL



The School of Pharmaceutical Sciences was started by the Vels Educational Trust in the year 1992 as Vels College of Pharmacy and had grown by introducing undergraduate, post graduate and Doctoral programmes in Pharmacy. In the year 2008, the college was added as a member institution to Vels Institute of Science Technology and Advanced Studies (VISTAS), DEEMED TO BE UNIVERSITY ESTD U/S 3 OF THE UGC ACT, 1956.

The School of Pharmaceutical Sciences provides excellent infrastructural facilities to carry out research on par with International standards. The Programmes offered by the school are duly approved by AICTE/UGC/PCI. The School undertakes collaborative research projects with various organizations and hospitals. The B.Pharm degree run in this institution is duly accredited by National Board of Accreditation (NBA). It also has an approved Institutional Animal Ethics Committee framed as per the guidelines of the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) and a well-established Animal Room to cater to the experimental needs. The duly constituted Human Ethics Committee strictly follows the guidelines prescribed by ICMR and facilitates research involving human subjects. The School also runs a generic medicine store which provides the drugs at subsidized cost under Pradhan Mantri Janaushadhi Pariyojana (PMBJP) scheme.

VISION

Evolving the School into a Center of Academic and Research Excellence in Pharmaceutical Education.

MISSION

PHARMACEUTICAL CARE: To meet societal needs for safe and effective drug therapy by imparting advanced knowledge, aptitude and skills.

QUALITY EDUCATION: To provide quality education that effectively integrates outcome-based, self-learning strategies and leadership skills through practice and research.

MORAL AND ETHICAL VALUES: To inculcate core ethical values and enable the graduates to reflect human values in the health sector.



EDITOR'S DESK

It is with great pleasure that we present to you the proceedings of the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 with the theme of "Transformation in Pharmacy: Empowering Future Generations of Pharmacists", held from 25 & 26, September 2025 at the Vels Institute of Science & technology Advanced Studies Shivalaya Auditorium, Pallavaram, Chennai. This Collection represents the culmination of the hard work and dedication of the authors, speakers, and Organizers who have contributed to this significant event.

This conference was marked by the enthusiastic participation of various colleges from across India, reflecting the broad geographical interest and the diverse perspectives that enriched our discussions. The papers included in this volume explore a wide range of topics, capturing the dynamic nature of the field. Each paper has undergone a rigorous peer review process to ensure the highest standards of quality and relevance. The insights and findings shared here not only advance our understanding but also open new avenues for future research and collaboration.

We would like to extend our heartfelt thanks to all the contributors, reviewers, and the organizing committee for their invaluable efforts. Without their commitment, this publication would not have been possible. We also wish to acknowledge the support of our Chief patron, patrons, convenor, Organizing Secretary, co - convenors whose contributions have been vital in bringing this conference to fruition.

As you delve into the proceedings, we hope you find the discussions enriching and the ideas inspiring. It is our collective ambition that the knowledge shared here will contribute meaningfully to the ongoing dialogue in our field and encourage further exploration and innovation.

Thank you for your participation and continued engagement with our community.

ABOUT CONFERENCE

Two Days International Conference on Clinical Pharmacy Practice and Research - 2025

Theme: "Transformation in Pharmacy: Empowering Future Generations of Pharmacists"

This conference is conceived as a premier academic and professional event dedicated to exploring the dynamic evolution of the pharmacy profession. The event will serve as a critical platform for pharmacists, clinical researchers, academics, and aspiring students to engage in substantive discourse on the paradigm shift occurring within healthcare. The central tenet of the conference is to articulate and advocate for the transformation of the pharmacist's role from a traditional, product-centric function to an indispensable, patient-centric component of interprofessional healthcare teams.

The conference will feature expert-led sessions that underscore the pharmacist's expanding responsibilities in medication therapy management, comprehensive chronic disease management, and proactive public health initiatives. By fostering a collaborative environment, the conference aims to facilitate a robust exchange of knowledge and best practices. The overarching objective is to collectively define and shape the future of pharmacy by equipping the next generation of practitioners with the advanced clinical competencies, research acumen, and leadership skills essential for these expanded roles.

CONFERENCE HIGHLIGHTS & KEY TOPICS

- **Advance Clinical Practice:** Showcase innovations and best practices to optimize patient care.
- **Promote Research:** Provide a platform to present research, foster collaboration, and discuss future directions.
- **Enhance Professional Development:** Offer opportunities for pharmacists to update knowledge and skills.
- **Highlight Emerging Roles:** Explore expanding roles in areas like pharmacogenomics and digital health.
- **Facilitate Networking:** Create an environment for professional networking and idea exchange.
- **Foster Global Partnerships:** Strengthen partnerships among institutions, healthcare systems, and industry.



ICCPPR-VISTAS

Abstract Proceedings – 2025

Message from the Chancellor's desk

*Dr. IshariK. Ganesh,
Founder–Chancellor,
VISTAS.*



First, I would like to congratulate the Department of Pharmacy Practice, School of Pharmaceutical Sciences, for organizing Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025.

The International Conference on Clinical Pharmacy Practice and Research serves as a crucial platform for professionals, researchers, and stakeholders from around the globe to converge, exchange knowledge, and discuss advancements in the field of healthcare. This esteemed gathering brings together experts from various disciplines within medical and health sciences, including but not limited to medicine, nursing, pharmacology, public health, and biomedical sciences.

I believe this event will serve as a platform for students and faculties to interact and learn about recent advancements in the field. I extend my warmest wishes and greetings to all the organizers, delegates, and participants of ICCPPR- 2025, VISTAS

Message from the Pro Chancellor's desk

*Dr. Arthi Ganesh,
Pro Chancellor (Academics),
VISTAS.*



It is indeed an immense pleasure for me to thank the organizers for conducting the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025.

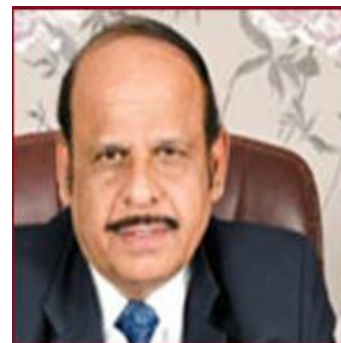
Such conferences typically feature keynote speeches by eminent researchers, panel discussions on cutting-edge research findings, and presentations of original research papers and posters. Participants benefit not only from the opportunity to present their work but also from networking with peers, fostering collaborations, and gaining insights into emerging trends and challenges in healthcare.

Remember to enjoy the experience and take this opportunity to learn from your fellow participants. You never know where inspiration may strike or what new ideas you may gain from networking with others.

I wish you all the very best of luck and hope that you have a successful and full filling ICCPPR-2025, VISTAS

Message from the Pro Chancellor's desk

*Dr. A. Jothi Murugan,
Pro Chancellor (Planning & Development),
VISTAS.*



It gives me immense pleasure to encapsulate the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025. It is a platform for shaping the future of Clinical Pharmacy Practice and Research by facilitating the dissemination of new ideas, innovations in healthcare technologies, and evidence- based practices

I encourage each and every one to utilize this opportunity and share your knowledge and network with industry professionals, and learn about the latest developments in your field.

I wish you all the very best for your presentations and hope that you will find ICCPPR- 2025, VISTAS as a valuable and rewarding experience. I wish the event a grand success.

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Message from the Vice President desk

*Dr. Preethaa Ganesh,
Vice President,
Vels Group of Institutions*



With immense pleasure, we welcome you all to the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025. Organizing such an event at this point in time reinforces provides platform for researchers, scientists, healthcare professionals, and academicians to present their latest research findings and innovations. This facilitates the exchange of knowledge and ideas among participants from around the world.

VISTAS has borne the mantle of excellence, committed to ensuring the students their own space to learn, grow and broaden their horizon of knowledge by indulging in diverse spheres of learning.

These conferences play a pivotal role in shaping the future of Clinical Pharmacy Practice and Research, health sciences by facilitating the dissemination of new ideas, innovations in healthcare technologies, and evidence-based practices. They contribute significantly to the advancement of medical knowledge and ultimately aim to improve global health outcomes through collaborative efforts and shared expertise

I extend my wishes to School of Pharmaceutical sciences for supporting ICCPPR- 2025, VISTAS. I also thank all the delegates and I am confident that this conference would be a rewarding experience for all the participants.

*Dr. M. Bhaskaran,
Vice-Chancellor FAC,
VISTAS*



I congratulate the School of Pharmacy for organizing the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025. I take this opportunity to sincerely appreciate the efforts and enthusiasm shown by the faculty for being very thoughtful to highlight the Clinical Pharmacy Practice and Research.

Indeed, this conference will embark the students to gain insights into cutting-edge research, emerging trends, and innovative practices in medical and health sciences.

I am sure that not only the students but also the faculties can get updated with the latest advancements, research findings, and innovations in their fields. Attending presentations, workshops, and seminars allows them to enhance their knowledge and skills, which they can subsequently incorporate into their teaching.

I convey my best wishes and support to all the participants of the ICCPPR-2025, VISTAS

Dr. P. Saravanan

Registrar

VISTAS



I am delighted to note that the Schools of Pharmaceutical Sciences of VISTAS are organizing Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025. I certainly believe this essence, the International Conference on Clinical Pharmacy Practice and Research stands as a cornerstone event in the field, promoting dialogue, collaboration, and progress towards addressing current health challenges and achieving better healthcare for all.

The multidisciplinary areas of Science have wide applications in daily walk of life. I trust that new knowledge and findings through this conference would invariably bring scientific solutions for the day to day problems of the society.

I wish the Organizing team all the very best. I hope that this address the current challenges, emerging trends, and issues in medical and health sciences. Through discussions, panels, and presentations, participants can explore potential solutions and strategies to tackle these challenges.

Message from the convenor desk

Dr. P. Shanmugasundaram
Dean,
School of Pharmaceutical Sciences,
VISTAS



It is our pleasure to announce the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025. organized by our School of Pharmaceutical sciences, VISTAS

The basic aim of this conference is to create a common platform for exchange of knowledge and research experience among the healthcare professionals. The focus is mainly on the Knowledge Exchange and Dissemination, Collaboration and Networking, Professional Development, Addressing Global Health Challenges, Promoting Research and Innovation, Policy Influence, Education and Capacity Building, Global Perspective

This conference will provide an opportunity to interact with eminent personalities to acquire the current development and challenges in the Global Scenario.

I welcome you to VISTAS - A center for learning and hope that this conference will challenge and inspire you, and result in new knowledge and collaborations.

Message from the Organizing Secretary desk

*Dr. K. Karthickeyan,
Prof & Head,
Department of Pharmacy Practice,
School of Pharmaceutical Sciences,
VISTAS*



Greetings from the School of Pharmaceutical Sciences, VISTAS.

The main motto of our Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025. is to impart the knowledge of novel development in Clinical Pharmacy Practice and Research. VISTAS is always pioneer in enhancing a novel ideas.

This two days International Conference is to address the needs of the budding scientists, eminent academics and structure in inculcating a necessity to share the research outcome in order to improve the knowledge and advance research in the field of Medical and health Sciences.

Hence, I expect all the delegates to cherish themselves in the research aspects. VISTAS is glad to host you all for this two days International Conference.

Message from the Co- Convenor desk

*Dr. C. Ronald Darwin,
Prof & Head,
Department of Pharmacology,
School of Pharmaceutical Sciences,
VISTAS*



It is with great pleasure and anticipation that I extend a warm welcome to each of you to the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025.

This conference serves as a pivotal platform for researchers, practitioners, and educators alike to exchange knowledge, share groundbreaking discoveries, and foster collaborations that will shape the future of healthcare.

I encourage each of you to actively participate, engage in discussions, and leverage this opportunity to forge lasting connections with peers who share our dedication to advancing Clinical Pharmacy Practice and Research.

*Dr. M. Sumithra,
Prof & Head,
Department of Pharmaceutical chemistry
and analysis,
School of Pharmaceutical Sciences,
VISTAS*



Dear Esteemed Colleagues and Participants, It is with immense pleasure and enthusiasm that I extend a warm welcome to all participants, esteemed speakers, and collaborators to the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025. organized by our School of Pharmaceutical sciences, VISTAS

As Co- Convenor of this distinguished gathering, I am honored to be part of an event that brings together leading minds and experts from around the world to delve into the latest advancements, challenges, and innovations in Clinical Pharmacy Practice and Research.

Our conference serves as a vital platform for exchanging knowledge, forging partnerships, and driving forward the frontiers of healthcare excellence.

Together, let us harness the power of collaboration to address the complex challenges facing our field and to pave the way for a healthier future for all.

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Message from the Co- Convenor desk

*Dr. D. Akiladevi,
Prof & Head
Department of Pharmaceutics,
School of Pharmaceutical Sciences,
VISTAS*



It is our pleasure to invite you all for this scientific occasion for the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025.

We are delighted to welcome all our national and international delegates to participate, interact and enrich their knowledge in the field of Clinical Pharmacy Practice and Research. We have taken special interest in our delegate and hence we have organized a scientific session (Oral & Poster presentation). We have received more than 150 research abstracts. We are extremely pleased with the interest shown by our delegates to exhibit their scientific findings before the eminent scientists.

I welcome you all to use this opportunity to learn from established experts, present their research, and engage in discussions with peers.

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Message from the Co- Convenor desk

*Dr. Malarkodi Velraj,
Prof & Head,
Department of Pharmacognosy,
School of Pharmaceutical Sciences,
VISTAS*



It is with great pleasure that I extend a warm welcome to the Two Days International Conference on Clinical Pharmacy Practice and Research - 2025 "Transformation in Pharmacy: Empowering Future Generations of Pharmacists" on 25th – 26th September 2025 organized by our School of Pharmaceutical sciences, VISTAS

Over the course of this conference, we will explore a diverse array of topics, ranging from cutting-edge research findings to practical applications that impact global health outcomes. I am confident that the discussions and interactions among our esteemed participants will spark new ideas, collaborations, and initiatives that will shape the future of medical and health sciences.

I look forward to the productive discussions, impactful outcomes, memorable experiences enriching exchanges and meaningful collaborations that will undoubtedly emerge from our time together.

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Abstract Proceedings – 2025

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*(Authors are solely responsible for their respective Abstract)

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ABSTRACT NO: ICCPPR-SPS-274

Comparing The Safety and Efficacy of Sitagliptin Vs Dapagliflozin and The Risk of Hyperkalaemia Among People with Type 2 Diabetes Mellitus and Kidney Disease

Hemashree V¹, Ranjith Kumar.R², Ganesh ³, Immanuel Jebastine^{*}

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ABSTRACT

Type 2 diabetes mellitus (T2DM) is a leading cause of chronic kidney disease (CKD), and the coexistence of both conditions complicates glycemic management. Novel oral antidiabetic agents, including dipeptidyl peptidase-4 (DPP-4) inhibitors such as sitagliptin and sodium-glucose co-transporter-2 (SGLT2) inhibitors such as dapagliflozin, have expanded therapeutic options. However, the risk of electrolyte disturbances, particularly hyperkalemia, remains an important consideration. To compare the safety and efficacy of sitagliptin and dapagliflozin in patients with T2DM and CKD, with emphasis on the risk of hyperkalemia. A narrative review of available clinical trial and observational data was conducted, focusing on glycemic efficacy, renal and cardiovascular outcomes, and electrolyte effects of sitagliptin and dapagliflozin in patients with varying degrees of CKD. Sitagliptin improves glycemic control by enhancing glucose-dependent insulin secretion and suppressing glucagon, with minimal effects on serum potassium. It is well tolerated in moderate-to-severe CKD when dose adjusted. Dapagliflozin exerts renoprotective and cardioprotective benefits by lowering intraglomerular pressure, promoting natriuresis, and improving metabolic parameters. Clinical evidence indicates dapagliflozin slows CKD progression and reduces hospitalization for heart failure, including in advanced CKD. However, by modulating the renin-angiotensin-aldosterone system, it may influence potassium balance, necessitating electrolyte monitoring, particularly in patients receiving concomitant renin-angiotensin inhibitors. Dapagliflozin appears to provide superior renal and cardiovascular outcomes compared to sitagliptin in T2DM with CKD, but requires vigilance for potential hyperkalemia. Sitagliptin remains a safe alternative for glycemic control with stable electrolyte effects. Individualized treatment should consider renal function, comorbidities, and concomitant therapies. Large-scale randomized controlled trials are needed to better define the relative hyperkalemia risk and guide optimal therapeutic strategies in this high-risk population.

Keywords: Type 2 diabetes mellitus, chronic kidney disease, sitagliptin, dapagliflozin, hyperkalemia, renal outcomes