

Inaugural Program of the TWO Days International Conference on "Drug Design, Discovery & Development" (ICDDD 2024)

Date: 29 August 2024

Time: 11:30 AM

Venue: Tagore Engineering College Auditorium, Chennai

Event Overview

The TWO Days International Conference on "Drug Design, Discovery & Development" (ICDDD 2024) was organized by Tagore College of Pharmacy in association with the Antiviral Research Society (AVRS) and the Pharmaceutical Research Division. The event took place on August 29-30, 2024, at the Tagore Engineering College Auditorium, Chennai. This conference brought together a diverse group of experts, scholars, and practitioners in the field of pharmaceutical sciences to discuss recent advancements and innovations in drug design, discovery, and development.

Inauguration Ceremony

The inauguration ceremony was held on August 29, 2024, at 11:45 AM. The event commenced with an invocation, followed by the traditional lighting of the lamp, symbolizing the dispelling of ignorance and the spreading of knowledge.

Welcome Address

Dr. K. Ilango, the Principal of Tagore College of Pharmacy, warmly welcomed the attendees and provided an overview of the college's contributions to pharmaceutical education and research. He emphasized the importance of this conference in fostering collaboration and innovation in drug development.

Introduction to AVRS

Dr. P. Selvam, President of the Antiviral Research Society (AVRS), delivered a brief introduction to AVRS, highlighting its mission to advance antiviral research and its role in organizing the conference. He spoke about the society's initiatives in promoting research and collaboration among scientists worldwide.

Overview of ICDDD 2024

Dr. P. Balakrishnan, one of the key conveners of the event, provided an overview of the ICDDD 2024 conference. He outlined the objectives of the conference, the thematic areas to be covered, and the expected outcomes. Dr. Balakrishnan expressed hope that the discussions and presentations during the conference would lead to significant advancements in drug design and development.

Guest Honoring and Publication Release

The honored guests were acknowledged for their contributions to the field and their support of the conference. The event also featured the release of several key publications related to the conference theme, which are expected to serve as valuable resources for researchers and practitioners in the pharmaceutical sciences.

Presidential Address

Prof. Dr. M. Mala, Chairperson of the Tagore Educational Trust, delivered the presidential address. She emphasized the importance of innovation in pharmaceutical sciences and the role of academic institutions in driving research that addresses global health challenges. Prof. Mala also spoke about the need for interdisciplinary collaboration in drug discovery and development.

Special Address

Prof. N. Thajuddin, Pro-Vice Chancellor of B.S. Abdur Rahman Crescent Institute of Science & Technology, delivered a special address. He spoke about the current trends in drug discovery and the challenges faced by researchers in translating discoveries into viable therapeutic options. Prof. Thajuddin stressed the importance of conferences like ICDDD 2024 in providing a platform for knowledge exchange and networking.

Award Ceremony

The conference recognized outstanding contributions in the field of pharmaceutical sciences through an award ceremony. This included awards for research excellence, innovation, and lifetime achievement. The awards were presented by distinguished guests, acknowledging the efforts of individuals who have made significant impacts in the field.

Felicitation

Dr. Subesh Babu from NIH-NIRT, USA, and Dr. Mogana Sundari from UCSI, Malaysia, were among the prominent figures who delivered felicitation speeches. They shared insights from their respective fields and encouraged continued collaboration between researchers and institutions worldwide.

Inaugural Address

The inaugural address was delivered by Prof. Dr. K. Narayanasamy, Vice-Chancellor of The Tamil Nadu Dr. M.G.R. Medical University, Chennai. Prof. Narayanasamy highlighted the critical role of academic and research institutions in advancing pharmaceutical sciences. He also underscored the importance of such conferences in shaping the future of drug development.

Vote of Thanks

The inaugural session concluded with a vote of thanks by Dr. A. K. Gnanchandran, EC Member of AVRS and Chair of the Scientific Committee of ICDDD 2024. Dr. Gnanchandran expressed gratitude to all the guests, speakers, and participants for their contributions and support in making the conference a success. He also acknowledged the efforts of the organizing committee and volunteers in ensuring the smooth conduct of the event.

Conclusion

The inaugural program of the TWO Days International Conference on "Drug Design, Discovery & Development" set a strong foundation for the subsequent sessions of the conference. The event was marked by insightful speeches, recognition of excellence, and the release of valuable research publications. It successfully brought together leading minds in the field, fostering an environment of collaboration and innovation that is expected to drive significant advancements in pharmaceutical sciences

Session Details for the TWO Days International Conference on "Drug Design, Discovery & Development" (ICDDD 2024)

Day 1 - August 29, 2024

Scientific Session I

1. **Novel Approaches - Therapeutic Options for Treating and Preventing HIV/AIDS**
 - **Speaker:** Dr. Pachamuthu Balakrishnan, Professor & Chief Scientist - Infectious Diseases, Advanced Research Centre for Health Sciences, MAHER (Deemed to be University), Chennai.
 - **Overview:** This session explored innovative approaches to HIV/AIDS treatment and prevention. Dr. Balakrishnan discussed novel therapeutic options and highlighted recent advances in research, particularly focusing on how these developments can improve patient outcomes and address the ongoing challenges in HIV treatment.
2. **New Opportunities and Challenges in Antiviral Natural Products Research**
 - **Speaker:** Dr. Mogana Rajagopal, Professor & Dean, Faculty of Pharmaceutical Sciences, UCSI University, Kuala Lumpur, Malaysia.
 - **Overview:** Dr. Rajagopal presented emerging opportunities in the field of natural antiviral products. Her talk emphasized the potential of plant-based compounds in the development of new antiviral therapies, addressing both the promising breakthroughs and the challenges faced in translating these discoveries into clinical practice.
3. **Presentation by Dr. Ravishankar Ram Mani**
 - **Speaker:** Dr. Ravishankar Ram Mani, Assistant Professor, UCSI University, Kuala Lumpur, Malaysia.
 - **Overview:** Dr. Mani's session focused on his recent research findings in the field of antiviral drug development. His insights shed light on the practical applications of scientific research in the pharmaceutical industry and highlighted the importance of global collaboration in drug development efforts.

Inauguration Programme The official inauguration of the conference followed Scientific Session I. This included the lighting of the lamp, welcome speeches from distinguished guests, and the release of relevant publications for the benefit of the participants.

Scientific Session II

1. **Acute-Phase Protein Profiles as Predictive Markers of Inflammation in HIV-Positive Patients with Latent Tuberculosis Infection: Impact of Isoniazid Prophylaxis**
 - **Speaker:** Dr. S. Subash Babu, Scientific Director, ICER India, NIH-International Center of Excellence in Research, Chennai.
 - **Overview:** Dr. Babu discussed the role of acute-phase protein profiles in predicting inflammation in HIV-positive patients with latent tuberculosis infections. His session highlighted the use of isoniazid prophylaxis and its effects, providing new insights into managing co-infections and improving patient care strategies.

2. **AI in Dereplication of Phytocompounds**

- **Speaker:** Dr. V. Sathyanathan, Professor and Principal, Apollo College of Pharmacy, Chennai.
- **Overview:** This session introduced artificial intelligence (AI) as a powerful tool for dereplication, a process used to identify known compounds in complex mixtures, particularly in phytocompounds. Dr. Sathyanathan discussed how AI can accelerate the drug discovery process by enhancing the accuracy and efficiency of identifying bioactive compounds from natural sources.

3. **Nutrition as a Co-Drug in the Prevention and Treatment of Tuberculosis**

- **Speaker:** Dr. N. Saravanan, Scientist E & Head, Department of Biochemistry, ICMR-National Institute for Research in Tuberculosis (NIRT), Chennai.
- **Overview:** Dr. Saravanan emphasized the significance of nutrition as an adjunct therapy in the prevention and treatment of tuberculosis. He presented evidence on how proper nutrition can enhance the efficacy of anti-tuberculosis drugs and improve patient outcomes, particularly in low-resource settings.

Cultural Programs The day concluded with cultural events, providing participants with an opportunity to engage informally and experience the cultural heritage of the region.

Day 2 - August 30, 2024

Scientific Session III

1. **Human Pegivirus: A Potential Biotherapeutic Option Against HIV Disease Progression**

- **Speaker:** Dr. EM. Shankar, Professor & Dean, School of Life Sciences, Central University of Tamil Nadu.
- **Overview:** Dr. Shankar presented his research on the potential of human pegivirus as a biotherapeutic option to slow down HIV disease progression. His talk highlighted the virus's unique properties that could modulate immune responses and its implications for developing novel HIV treatments.

2. **Phytopharmaceuticals: A New Form of Drug**

- **Speaker:** Dr. Ashok Gnanasekaran, Associate Professor, Faculty of Medicine, Quest International University, Perak, Malaysia.
- **Overview:** Dr. Gnanasekaran explored the development of phytopharmaceuticals as a new class of drugs derived from plants. His presentation covered the challenges in standardizing and validating the efficacy of these natural compounds, as well as their growing significance in global healthcare.

Scientific Session IV - Women in Science (WIS) Special Lecture

1. **Investigation of Anti-HIV Activity of Terminalia Chebula (Kadukkai)**

- **Speaker:** Dr. Luke Elizabeth Hanna, Scientist F & Head, Department of Virology & Biotechnology, ICMR-National Institute for Research in Tuberculosis (NIRT), Chennai.
- **Overview:** Dr. Hanna focused on her research into the anti-HIV properties of Terminalia Chebula, a traditional medicinal plant. Her presentation covered

both the laboratory-based investigations and clinical potentials of this plant in HIV treatment, emphasizing the importance of exploring natural remedies in modern medicine.

Scientific Session V

1. Novel Therapeutic Strategies for HBV Cure - Advances and Perspectives

- **Speaker:** Dr. S. Saravanan, Professor, Centre for Infectious Diseases, Saveetha Medical College and Hospital, Chennai.
- **Overview:** Dr. Saravanan presented an overview of the latest therapeutic strategies being developed for the treatment and potential cure of Hepatitis B Virus (HBV). He discussed advancements in antiviral drugs and immunotherapies, providing insights into future directions for HBV research.

2. Harnessing IPR from AI-Based Inventions

- **Speaker:** Dr. Umesh Banakar, Professor and President, Banakar Consulting Services, USA.
- **Overview:** Dr. Banakar addressed the increasing role of artificial intelligence in drug discovery and the need for intellectual property rights (IPR) protection for AI-driven inventions. He provided strategies for pharmaceutical companies to harness the value of AI innovations while navigating the complexities of intellectual property law.

Scientific Session VI

1. A Decade of Discoveries: Advances in Acinetobacter Research through Molecular and In-Silico Approaches

- **Speaker:** Dr. A.S. Smiline Girija, Professor and Head, Dept. of Microbiology, Saveetha Dental College and Hospital, Chennai.
- **Overview:** Dr. Girija reviewed significant discoveries in Acinetobacter research, focusing on molecular and computational approaches. Her session provided insights into how these tools have enhanced our understanding of this opportunistic pathogen and informed the development of new therapeutic strategies.

2. The Role of AI in Drug Discovery: Challenges, Opportunities, and Strategies

- **Speaker:** Dr. K. Ilango, Secretary, AVRS, Professor and Principal, Tagore College of Pharmacy, Chennai.
- **Overview:** Dr. Ilango discussed the role of AI in revolutionizing drug discovery. His talk covered the challenges and opportunities associated with integrating AI into the pharmaceutical industry, including how AI can reduce the time and cost associated with drug development while improving accuracy in identifying potential drug candidates.

3. Next-Gen Drug Discovery: Harnessing AI and ML for 4D Breakthroughs

- **Speaker:** Dr. Prakash Muthudoss, Director, A2Z4.0 Research and Analytics Private Limited, Chennai.
- **Overview:** Dr. Muthudoss focused on how artificial intelligence (AI) and machine learning (ML) are being used to drive the next generation of drug discovery. He discussed the concept of 4D breakthroughs, where AI is not only accelerating the drug discovery process but also providing predictive models for drug efficacy and safety.

4. **Emerging Platforms to Combat Bacterial Infections - Antibody-Antibiotic Conjugates**

- **Speaker:** Dr. U.P. Senthil Kumar, Head (R&D), 3xper Innoventure Limited, Chennai.
- **Overview:** Dr. Kumar introduced antibody-antibiotic conjugates (AACs) as a novel platform to tackle bacterial infections, particularly those caused by antibiotic-resistant strains. His presentation highlighted the potential of AACs to deliver targeted and effective treatments, minimizing the risk of resistance development.

Valedictory Programme The valedictory program marked the end of the conference, with closing remarks summarizing the key learnings, acknowledgments of speakers and participants, and an emphasis on the future directions for research collaborations in drug design, discovery, and development.

Valedictory Programme of the TWO Days International Conference on "Drug Design, Discovery & Development" (ICDDD 2024)

Date: 30 August 2024

Time: 4:30 PM

Venue: Tagore College of Pharmacy, Chennai

The Valedictory Programme for the TWO Days International Conference on "Drug Design, Discovery & Development" (ICDDD 2024) was held on August 30, 2024, at 04:30 PM at the Tagore College of Pharmacy, Chennai. This event marked the conclusion of the conference and provided an opportunity to reflect on the successes of the past two days, acknowledge the contributions of the participants, and formally close the conference.

Programme Outline

- **Welcome Address**

The Valedictory Programme began with a warm welcome address by Dr. K.Priyachitra. She expressed gratitude to all the participants, speakers, and organizers for their contributions to the conference's success. She highlighted the collaborative spirit that defined the event and the importance of continued efforts in drug discovery and development.

- **Valedictory Address**

The Valedictory Address was delivered by Prof. Dr. M. Mala, Chairperson and Managing Trustee of Tagore Educational Trust. In her address, Prof. Mala reflected on the objectives of the conference and how they were met through the diverse and insightful sessions. She encouraged participants to take the knowledge gained back to their institutions and continue the work of advancing drug design and development. Prof. Mala also acknowledged the hard work of the organizing committee and volunteers who ensured the smooth running of the conference.

- **Chief Guest Address**

The Chief Guest, Dr. Umesh Banakar, President of Banakar Consulting Services, Westfield, USA, then addressed the gathering. Dr. Banakar shared his insights on the current trends in pharmaceutical sciences and the future direction of drug discovery. He praised the conference for its high-quality presentations and discussions, which he noted were crucial for fostering innovation in the field. Dr. Banakar also emphasized the importance of international collaboration in overcoming global health challenges.

- **Felicitation**

The felicitation session followed, where key contributors to the conference were honored. This included special mentions of Dr. U.P. Senthil Kumar, Dr. Ashok Gnanasekaran, and Dr. EM. Shankar for their significant inputs and active participation throughout the event.

- **Feedback Session**

A feedback session was conducted by Dr. K. Priyachitra from Tagore College of Pharmacy. Participants were invited to share their experiences and provide suggestions for future conferences. The feedback highlighted the success of the conference in terms of content delivery, organization, and networking opportunities.

- **Certificate Distribution**

Certificates of participation were distributed to all attendees. The certificates served as a formal acknowledgment of the knowledge and insights gained during the event.

- **Prize Distribution**

The conference also recognized outstanding contributions through a prize distribution ceremony. Awards were given to the best presentations and posters, acknowledging the hard work and innovation demonstrated by the participants.

- **Vote of Thanks**

The Vote of Thanks was delivered by Dr. D. Saravanan, who expressed appreciation to everyone who made the conference a success. He specifically thanked the speakers, delegates, organizing committee, volunteers, and sponsors for their support and dedication.

- **National Anthem**

The Valedictory Programme concluded with the singing of the National Anthem, bringing the event to a formal close. This was a moment of unity and reflection, symbolizing the collective effort towards the betterment of pharmaceutical sciences and global health.