Outlook

## Conduction of International Conference on “Current Trends in Drug Discovery Development & Delivery” (CTD4-2025) on 24th-26th April 2025 by KL College of Pharmacy - Communication - Reg.

**From** Registrar's Office <registraroffice@kluniversity.in>

**Date** Sat 4/19/2025 3:49 PM

**To** Dean Academics <dean.academics@kluniversity.in>; Dean P & D <deanpnd@kluniversity.in>; Dean Student Affairs <deansa@kluniversity.in>; Dean Quality <deanquality@kluniversity.in>; Dean Faculty & Staff Affairs <deanfsa@kluniversity.in>; Dean - Skill Development <deanskill@kluniversity.in>; Dean Skill Development <deansdnsp@kluniversity.in>; Dean- MHS <deanmhs@kluniversity.in>; Dean MHS & IR <kishore@kluniversity.in>; Dean Placements and Progression <deanplacement@kluniversity.in>; Dr.P.V.Chalapathi <pvc@kluniversity.in>; Addl.Dean-Academics <addl.deanacademics@kluniversity.in>; Dr. B.T.P. Madhav <btpmadhav@kluniversity.in>; PRINCIPAL - COE <principal.coe@kluniversity.in>; Principal-ASC <principal.asc@kluniversity.in>; Pricipal K L Pharmacy College <principal.pharmacy@kluniversity.in>; PRINCIPAL - SCIENCES <principal.cos@kluniversity.in>; PRINCIPAL LAW <principal.law@kluniversity.in>; Principal -FED <principal.fed@kluniversity.in>; Dr A Anka Rao <Ankarao@kluniversity.in>

1 attachment (12 MB)

CTD4-2025 Brochure.pdf;

Ref: KLEF/RO/Pharmacy/Intl.Conf./2024-25 Date: 18-04-2025

**Orders of the Hon’ble In-charge Vice-Chancellor dt. 18-04-2025**

**CIRCULAR**

Sub: Conduction of International Conference on “Current Trends in Drug Discovery Development & Delivery” (CTD4-2025) on 24th-26th April 2025 by KL College of Pharmacy - Communication - Reg.

Ref: Letter received from Dr. G. Chakravarthi, Principal, KL College of Pharmacy & Dr.N. Buchi Naidu, Director-Life Sciences

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This is to inform that KL College of Pharmacy is organizing an Anusandhan National Research Foundation (ANRF) and Department of Biotechnology (DBT), Government of India sponsored Pre-conference workshop and International Conference on Current Trends in Drug Discovery, Development and Delivery (CTD4-2025) during 24th-26th April 2025 on the following themes.

**Session 1**- Emerging Next-Generation Therapeutics in Drug Discovery and Development
**Session 2**- Translational Strategies in Pharmaceutical Product Development
**Session 3**- Transforming Healthcare: Synergy of Medical Devices, Ai, Biosensors, and Regenerative Medicine
**Session 4**- Advances In Disease Biology: Exploring Infectious and Non-Infectious Disorders

Each theme will have 2-3 talks. CTD4-2025 invites abstract for e-poster / oral presentations and full-length original research articles (to be published in **Royal Society of Chemistry conference proceedings**

**book with ISBN number, Scopus and Web of Science indexed)** from research scholars, faculty scientists and industry professionals from India and across the world.

**Venue for Pre-conference Workshop** on 24th April 2025- Jasmine Hall

**Venue for International Conference CTD4-2025** on 25th & 26th April 2025-Sir C V Raman Hall (New Seminar Hall)

Link for registration- https://forms.gle/t2n2iS8KbERFqojG7

For more details about conference, please visit conference website in the below link- https://www.kluniversity.in/pharmacy/ctd4-2025/default.aspx

For any further details on the conference, please drop an e-mail to ctd4.klcp@kluniversity.in

Conference brochure containing all details is enclosed herewith.

All the interested faculty members, research scholars and students can register and participate in the conference.

REGISTRAR

Encl: as above

Mail & Hard copy to: Hon'ble President, KLEF
Mail to: Hon'ble Vice-Presidents, KLEF
Mail & Hard copy to: Hon'ble Pro Chancellor
Mail & Hard copy to: Hon'ble Vice-Chancellor
Mail & Hard copy to: Pro Vice-Chancellors
Mail to: Chief Coordinating Officer-Dr.A. Jagadeesh
Mail to: Special Officer -Dr.A. Vani
Mail to: All Advisors / All Deans / All Principals / All Vice-Principals / All Sr.Directors / All Directors / All Additional Deans /
All Associate Deans / Deputy Deans / PR Head
Mail to: Controller of Examinations-Dr.A.S.C.S.Sastry
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Mail to: Principal-CoE..Dr.T.K. Rama Krishna Rao / Principal-FED
Mail to: All HoDs / All Alternate HoDs / All Deputy HoDs
Mail to: KL H - Principal Off Campus Centre, Aziz Nagar Campus / KL H - Principal Off Campus Centre, Bowrampet
Vice-Principal / Director / Deputy Director
Mail to: KL H HoDs.. AI&DS / CSE / ECE / BES / FED Coordinator / Business School
Mail to: KL H Associate Deans..P&D / R&D / Academics / IQAC / F&SA / Skill Development / Student Progression & Training
/ Student Affairs / Student Welfare / Examinations
Mail to: Librarian
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Mail to: Chief Technical Officer (CTO)-Mr.A.Satya Kalyan

Mr. Raja Sekhar, Emp. No. 2482, Jr. Network Administrator (E-mail: rajasekhar_syte@kluniversity.in)
Mail to: Professor In-charge, EduTech, Animation-Dr. M. Siva Kumar,Assoc. Professor,ECE
Mail to: Principal, KL College of Pharmacy
Director-Life Sciences
Dr. Manikanta Murahari, M.Pharm, Ph.D, Associate Professor, IQAC In-charge
All Faculty members
All Research Scholars
All Students

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**Thanks & Regards,**

**O/o REGISTRAR**
**C-006; Extn. No. 1200**
**K L University**

**Greenfields, Vaddeswaram-522 302,**

**Guntur District, A.P. India**

**Phone:+91-8645-350200**

**Web: www.kluniversity.in**

KL UNIVERSITY
(DEEMED TO BE UNIVERSITY)

NAAC ACCREDITED BY A++ GRADE | 1 CATEGORY UNIVERSITY BY MHRD, Govt. of India | 45 EDUCATIONAL EXCELLENCE years of
22 RANKED AMONG ALL UNIVERSITIES nirf 2024 | ALL INDIA SWATCHTA 1 CAMPUS RANKING BY MHRD | DIAMOND IGAUGE RANKING BY QS - IGAUGE

ANRF
Government of India

Department of BioTechnology, Government of India
सत्यमेव जयते

# ANRF & DBT SPONSORED INTERNATIONAL CONFERENCE ON CURRENT TRENDS IN DRUG DISCOVERY, DEVELOPMENT AND DELIVERY

## (CTD4-2025)

**24th – 26th APRIL 2025**

Weblink https://www.kluniversity.in/pharmacy/ctd4-2025/registration.aspx

(DEEMED TO BE UNIVERSITY)

## About KLEF

Koneru Lakshmaiah Education Foundation (KLEF) is a premier educational institution that was established as KL College of Engineering in 1980-81. Recognized as a Deemed to be University by the UGC in 2009, KLEF has consistently achieved top national and international rankings and accreditations. It is accredited by NAAC with an A++ grade and holds the prestigious Category I status as declared by the UGC. KLEF offers a diverse range of programs across various disciplines, fostering an environment of academic, research, and innovation excellence. With state-of-the-art infrastructure, distinguished faculty, and cutting-edge research, the institution is committed to creating the next generation of global leaders and professionals, with an emphasis on holistic development and global exposure. The institution's strong placement record, in collaboration with top companies worldwide, ensures that students are well-prepared to excel in their careers.

## About KLCP

K L College of Pharmacy (KLCP) is established in the year of 2016 and is currently offering B.Pharm (4 years), Pharm.D (6 years), M.Pharm Pharmaceutics (2 years) and Ph.D. program under the aegis of Koneru Lakshmaiah Education Foundation (KLEF). KLCP is well furnished with state of art facilities to conduct the program meeting the global standards. The college has infrastructural facilities in terms of well-equipped laboratories with modern instruments and well-furnished and spacious classrooms to appease the requirement of undergraduate & postgraduate students and Ph. D scholars in addition to the central facilities at K L University level.

## ABOUT CTD4-2025

College of Pharmacy, Koneru Lakshmaiah Education Foundation, Andhra Pradesh is organizing an International Conference on **"CURRENT TRENDS IN DRUG DISCOVERY, DEVELOPMENT AND DELIVERY (CTD4-2025)"** on **24th – 26th April 2025** in offline mode. The conference will offer networking opportunities for Students, PhD scholars and early-career researchers, facilitating knowledge exchange, enabling them to connect with peers and industry experts. Such scientific gatherings aim to discuss key emerging areas of drug discovery and development, focusing on cutting-edge research, innovative approaches and advanced technologies.

## ORGANIZING COMMITTEE

### CHIEF PATRONS:

**Er. K. Satyanarayana,**
President, KLEF

**Er. K. L. Havish,**
Vice-President, KLEF

**Er. K. Raja Harin,**
Vice-President, KLEF

### PATRONS:

**Dr. K. S. Jagannatha Rao,**
Pro-Chancellor

**Dr. G. P. S. Varma,**
Vice-Chancellor

**Dr. N. Venkatram,**
Pro Vice-Chancellor

**Dr. A.V.S. Prasad,**
Pro Vice-Chancellor

**Dr. K. Rajasekhara Rao,**
Pro Vice-Chancellor

**Dr. K. Subba Rao,**
Registrar

**Dr. Buchi N. Nalluri,**
Director, Life Sciences

### CONFERENCE CHAIRMAN:

**Dr. G. Chakravarthi,**
Principal, KL College of Pharmacy

**Dr. A. Anka Rao,**
Vice Principal, KL College of Pharmacy

### CONVENER:

**Dr. Manikanta Murahari,**
Asso. Professor, KL College of Pharmacy

### CO-CONVENER:

**Dr. Shailendra Singh,**
Asst. Professor, KL College of Pharmacy

*Invited talks will be given in the following areas of pharmaceutical research.*

**SESSION 1:**
**EMERGING NEXT-GENERATION THERAPEUTICS IN DRUG DISCOVERY AND DEVELOPMENT**

- Protein Degraders, Molecular Glues,Antibody Drug Conjugates
- Nucleotide Drugs, Peptides
- Advanced Computational Tools for fasten Drug Discovery

**SESSION 2**
**TRANSLATIONAL STRATEGIES IN PHARMACEUTICAL PRODUCT DEVELOPMENT**

- Biologics and Biosimilar
- Artificial Intelligence (AI) in Formulation Design
- Vaccine Discovery and Development

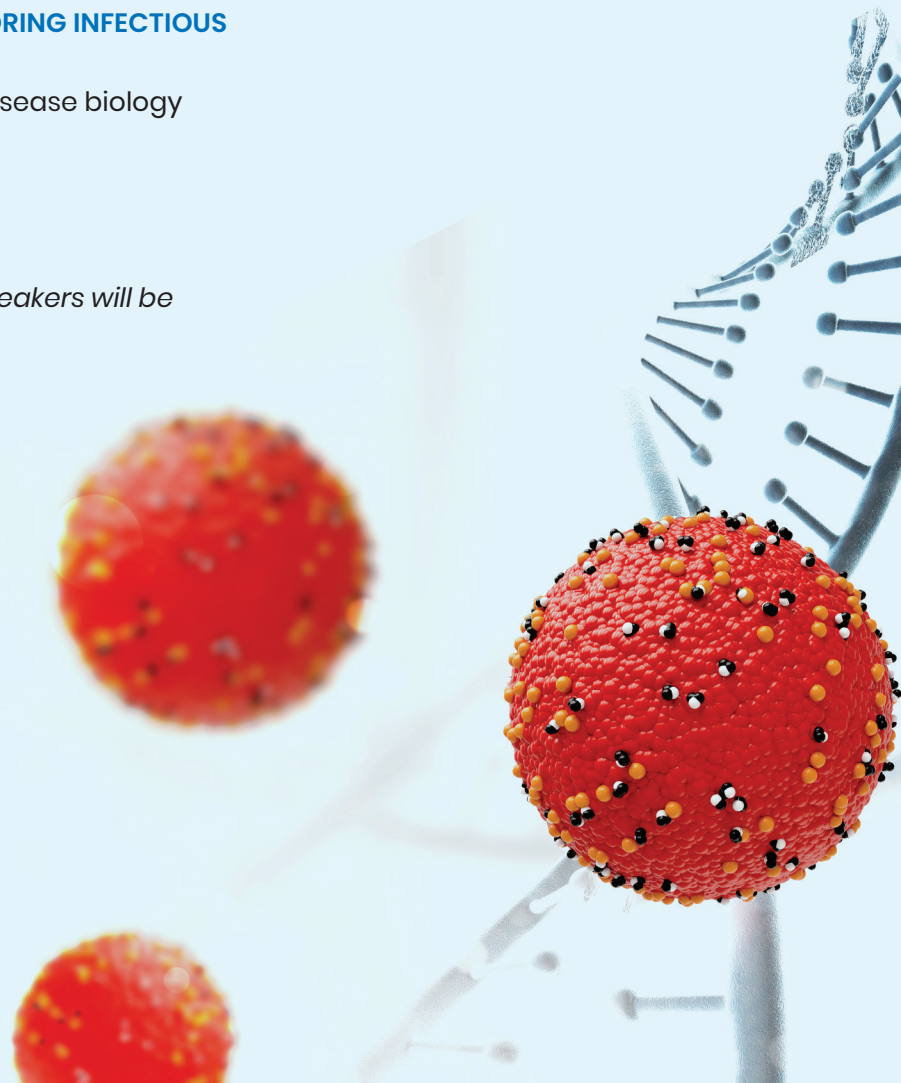
**SESSION 3**
**TRANSFORMING HEALTHCARE: SYNERGY OF MEDICAL DEVICES, AI, BIOSENSORS, AND REGENERATIVE MEDICINE**

- Biomarkers and Biosensor in Precision Medicine/Point-of-Care Diagnostic Devices
- AI and Machine Learning in disease dentification
- Software-based / 3D-Printed Medical Devices

**SESSION 4**
**ADVANCES IN DISEASE BIOLOGY: EXPLORING INFECTIOUS AND NON-INFECTIOUS DISORDERS**

- Advancement in screening disease biology
- CART-Cell Technology
- 3D Culture/Organoid

*Each session will have 2-3 talks and speakers will be from both academics and industry*



## THEMATICS

CTD4-2025 invites full-length original research articles from research scholars, faculty, scientists and industry professionals from India and across the world. Research articles not exceeding twelve pages in a single column format shall be submitted. The manuscripts should not have been published or under review in any of the journals or conference proceedings. Further, the manuscript should contain the name, e-mail id of the corresponding author and affiliation of co-authors. An exciting scientific program led by world class experts will develop around following scientific topics.

### THEME-1: MEDICINAL CHEMISTRY AND PHYTOCHEMISTRY

- Artificial Intelligence in Drug Discovery
- Drug Design and Synthesis
- Green Synthesis / Green Chemistry
- Analytical Chemistry/Impurity Profiling
- Isolation & Extraction of Phyto constituents
- Herbal Formulations

### THEME-2: FORMULATION DEVELOPMENT AND DRUG DELIVERY

- Physiologically Based Pharmacokinetic (PBPK) Modelling
- Novel Drug Delivery Systems
- Vaccine Development
- Biologics & Biosimilars

### THEME-3: MEDICAL DEVICES BIOSENSOR AND REGENERATIVE MEDICINE

- Point of Care Devices
- Biosensor
- Medical devices
- 3D printing of pharmaceuticals and Bioprinting

### THEME-4: PHARMACOLOGY AND PHARMACY PRACTICE RELATED

- Pharmacogenomics
- In vitro & In vivo evaluation of natural and synthetic compounds
- Toxicity evaluation
- Pharmacokinetics & Pharmacodynamics Study

## PUBLICATION

All the accepted full-length papers will be published in conference proceedings with International Standard Book Number (ISBN)

## ABSTRACT SUBMISSION

Perspective authors are encouraged to present their original, unpublished research work, and the selected abstracts will be called for Oral presentations. Abstract up to 300 words in Times New Roman with font size 12pts, 1.5 line spacing may be submitted in .doc/.docx file with the author's name (presenting author name to be underlined), affiliation and corresponding author email ID.

KL (DEEMED TO BE UNIVERSITY) | College of Pharmacy

ANRF Government of India | Department of BioTechnology, Government of India

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# ANRF & DBT SPONSORED INTERNATIONAL CONFERENCE ON CURRENT TRENDS IN DRUG DISCOVERY, DEVELOPMENT AND DELIVERY

## CTD4-2025

## 24th –26th APRIL 2025

### SESSION 1 : EMERGING NEXT-GENERATION THERAPEUTICS IN DRUG DISCOVERY AND DEVELOPMENT

**Prof. N.S. HARI NARAYANA MOORTHY**
REGISTRAR & PROFESSOR, DEPARTMENT OF PHARMACY,
INDIRA GANDHI NATIONAL TRIBAL UNIVERSITY,
AMARKANTAK

**Dr. NARENDER TADIGOPPULA,**
CHIEF SCIENTIST (SCIENTIST-G)
PROFESSOR (ACSIR), MEDICINAL CHEMISTRY DIVISION,
CSIR-CENTRAL DRUG RESEARCH INSTITUTE, LUCKNOW

**Dr. VINOD DEVARAJI**
SENIOR SCIENTIST II,
SCHRODINGER INC., BANGALORE

### SESSION 2 : TRANSLATIONAL STRATEGIES IN PHARMACEUTICAL PRODUCT DEVELOPMENT

**Dr. VIVEK GUPTA**
ASSOCIATE DEAN FOR GRADUATE EDUCATION & RESEARCH
ASSOCIATE PROFESSOR, PHARMACEUTICAL SCIENCES
AT ST. JOHN'S UNIVERSITY, NEW YORK CITY., USA.

**Dr. SAI BALAJI ANDUGULAPATI,**
SENIOR SCIENTIST
CSIR-INDIAN INSTITUTE OF CHEMICAL TECHNOLOGY,
HYDERABAD

### SESSION 3 : TRANSFORMING HEALTHCARE: SYNERGY OF MEDICAL DEVICES, AI, BIOSENSORS, AND REGENERATIVE MEDICINE

**Prof. Dr. MARTIN F. DESIMONE**
UNIVERSIDADE FEDERAL DO RIO GRANDE - FURG
INSTITUTO DE CIÊNCIAS BIOLÓGICAS (ICB)
RIO GRANDE, RS, BRASIL

**Dr. AMIT ASTHANA**
ASSOCIATE PROFESSOR & HEAD,
DEPARTMENT OF MEDICAL DEVICES,
NIPER HYDERABAD

### SESSION 4 : ADVANCES IN DISEASE BIOLOGY: EXPLORING INFECTIOUS AND NON-INFECTIOUS DISORDERS

**Prof. Dr. HEM CHANDRA JHA**
ASSOCIATE PROFESSOR
DEPT OF BIOSCIENCES AND
BIOMEDICAL ENGINEERING, IIT INDORE

**Dr. SUBHAJIT CHATTERJEE**
POST DOCTORAL RESEARCHER
STARRETT LAB, LABORATORY OF CELLULAR ONCOLOGY, CCR
NATIONAL CANCER INSTITUTE (NIH),
CENTER FOR CANCER RESEARCH, USA

ROYAL SOCIETY OF CHEMISTRY

Submit your abstract to : **ctd4.klcp@kluniversity.in**

**Awards:** **"BEST PAPER AWARD"** for both oral and poster presentation shall be awarded to the authors of selected papers based on recommendations of peer review.

**Full-length Articles:** All the accepted full-length papers will be published in Royal Society of Chemistry Conference Proceedings under the category of Special Publications with Scopus indexing and ISBN number.

## REGISTRATION DETAILS

| FEE STRUCTURE | PRE CONFERENCE WORKSHOP | DELEGATES WITH ORAL/POSTER PRESENTATION | DELEGATES WITH PRESENTATION AND PUBLICATION |
|---|---|---|---|
| Foreign delegates/Scholars/Students | **25 USD** | **50 USD** | **100 USD** |
| Indian Faculty | **400 INR** | **800 INR** | **3800 INR** |
| Indian Scholars | **300 INR** | **700 INR** | **3700 INR** |
| Indian Students | **300 INR** | **500 INR** | **3500 INR** |
| Industrial Participants | **500 INR** | **1500 INR** | **4500 INR** |

*Group registrations for both the workshop and conference are encouraged to avail discount.*

| ACCOUNT DETAILS | |
|---|---|
| Name of the account | **KL University** |
| Account number | **62434363674** |
| Name of the bank | **SBI** |
| Branch Name | **Vaddeswaram** |
| IFSC Code | **SBIN0021361** |

| IMPORTANT DATES | |
|---|---|
| **Registration Opening** | **10.01.2025** |
| **Closing Date for Registration** | **20.04.2025** |
| **Last Date for Abstract Submission** | **18.04.2025** |
| **Acceptance Intimation** | **21.04.2025** |
| **Submission of Full-length Papers** | **30.04.2025** |

For Details of CTD4-2022

Selected papers were published as full length manuscripts in RSC Conference Proceedings

Registration for CTD4-2025

Link : https://forms.gle/t2n2iS8KbERFqojG7


All correspondence should be addressed to: **ctd4.klcp@kluniversity.in**

**Dr. Manikanta Murahari,** Associate Professor, Convenor, CTD4-2025, Cell: +91 - **9619 00 8212**

**Dr. Shailendra Singh,** Assistant Professor, Co-Convenor, CTD4-2025, Cell +91 - **9981 419 935**



KONERU LAKSHMAIAH EDUCATION FOUNDATION

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VIJAYAWADA | HYDERABAD

(DEEMED TO BE UNIVERSITY)

22 RANK AMONG ALL UNIVERSITIES IN INDIA

35 RANK AMONG ALL ENGINEERING COLLEGES IN INDIA

40 RANK OVER ALL RANKING IN INDIA

79 RANK AMONG ALL MANAGEMENT INSTITUTES IN INDIA

# Pre-Conference Workshop

# Current Trends in Drug Discovery, Development, and Delivery (CTD4-2025)

## 24th April 2025

**About Workshop**: CTD4-2025 proudly introducing pre-conference workshops designed to enhance practical knowledge and skill development in both emerging and traditional pharmaceutical research. Each workshop offers hands-on training and interactive sessions under expert guidance, ensuring participants gain real-world insights. The workshops cover training on Microplate (ELISA) readers, various drug administration routes and blood collection, histopathological studies, hematology cell analysis, and the operation of a BUCHI spray dryer. These sessions integrate theory with practice, fostering hands-on learning and networking.

**Venue: Animal House Facility, KLCP**

Pre-conference workshop Insights on

1. Hands on Training on Microplate (ELISA)reader
2. Hands on various routes of drug administration and blood collection
3. Hands on Histopathological studies
4. Hands on Haematology Cell analyser

**No of Participants : 50** (first-come, first-serve)

**Organized By:**

KL (DEEMED TO BE UNIVERSITY) College of Pharmacy

**Registration Link :**
https://forms.gle/t2n2iS8KbERFqojG7

# KL COLLEGE OF PHARMACY

## ANRF & DBT JOINTLY SPONSORED INTERNATIONAL CONFERENCE ON "CURRENT TRENDS IN DRUG DISCOVERY, DEVELOPMENT AND DELIVERY (CTD4-2025)"

***24th-26th April 2025***

***In association with Royal Society of Chemistry, UK***

**A report on International Conference on CURRENT TRENDS IN DRUG DISCOVERY DEVELOPMENT AND DELIVERY (CTD4-2025).**

**Introduction:**

The three-day International Conference CURRENT TRENDS IN DRUG DISCOVERY, DEVELOPMENT AND DELIVERY (CTD4-2025) sponsored by jointly ANRF & DBT" held from **April 24 to 26, 2025**, in association with Royal Society of Chemistry (RSC), UK with an objective academic gathering aimed at fostering knowledge exchange, collaboration, and innovation in pharmaceutical and biomedical research. The event commenced with a **Pre-Conference Workshop** on **April 24**, titled *"Essential Lab Techniques in Preclinical Research."* This one-day workshop offered hands-on training and expert-led sessions focused on vital laboratory methodologies, equipping participants—particularly early-career researchers and postgraduate students—with the foundational skills crucial for effective preclinical experimentation.

The core **International Conference** unfolded over **two days**, from **April 25 to 26**, The scientific program was structured around four forward-looking and interdisciplinary themes:

1. **Emerging Next-Generation Therapeutics in Drug Discovery and Development**.
2. **Translational Strategies in Pharmaceutical Product Development**.
3. **Transforming Healthcare: Synergy of Medical Devices, AI, Biosensors, and Regenerative Medicine**.
4. **Advances in Disease Biology: Exploring Infectious and Non-Infectious Disorders**.

A total of 200 participants have attended the conference including 10 eminent speakers and from different organizations across the globe. Total 60 delegates have presented the results of their ongoing research works (as oral and e-posters) from the universities and colleges across the India.

The conference provided an excellent platform for presenting cutting-edge research, exchanging ideas, and initiating potential collaborations. Through keynote addresses, plenary talks, technical sessions, and poster presentations, participants engaged in insightful discussions addressing current challenges and innovations across the pharmaceutical and biomedical landscape.

**INTERNATIONAL CONFERENCE ON *"Current Trends in Drug Discovery, Development and Delivery* (CTD4-2025)"**
**Pre-conference Workshop "Essential Lab Techniques in Preclinical Research"**

**Programme schedule**

**24th APRIL 2025**

| **DATE & TIME** | **24th APRIL 2025 (Friday)** |
|---|---|
| **VENUE: Jasmine Seminar Hall, C-Block** | |
| **09:00-9:50 AM** | **REGISTRATIONS** |
| **9:50-10:10 AM** | **INAUGURATION** |
| **10:10-10:45 AM** | **Expert talk on "Importance of animal models in Preclinical studies"** |
| **10:45-11:00 AM** | **Tea Break** |
| **11:00-12:30 PM** | • Hands-on Animal handling (Batch A), Animal House<br>• Histopathology and Haematology (Batch B), L block-507<br>• Biochemical Analysis using ELISA reader (Batch C), R&D block-411 |
| **12:30-1:30 PM** | **Lunch (R&D block, 3rd floor, Department of Pharmacy)** |
| **1:30-3.00 PM** | • Histopathology and Haematology (Batch A), L block-507<br>• Biochemical Analysis using ELISA reader (Batch B), R&D block-411<br>• Hands-on Animal handling (Batch C), Animal House |
| **3:00-4.30 PM** | • Biochemical Analysis using ELISA reader (Batch A), R&D block-411<br>• Hands-on Animal handling (Batch B), Animal House<br>• Histopathology and Haematology (Batch C), L block-507 |
| **4:30-5:00 PM** | **Vote of Thanks and Certificate Distribution** |

**Workshop Team:**

1. **A presentation on "Animal care in preclinical experiments" by** Dr. Madhuri, Laila Nutraceuticals, Vijayawada, Andhra Pradesh.
2. **Animal Handling:** Dr. Madhuri, Dr. G. Prasad, Mr. Hari Krishna (9704892287), Mrs. Radha, & Mr. Rajesh S.
3. **Histopathology:** Dr. K. Ramakrishna, Dr. D. Naresh, & Mr. SSSM Sharma (8885412910)
4. **Hematology:** Dr. D. Naresh (9700087883) & Ms. Srilekha
5. **ELISA reader:** Dr. K. Ramakrishna & Mr. Y. Srikanth (9177483672)

## Session on Animal Care in Preclinical Experiments:

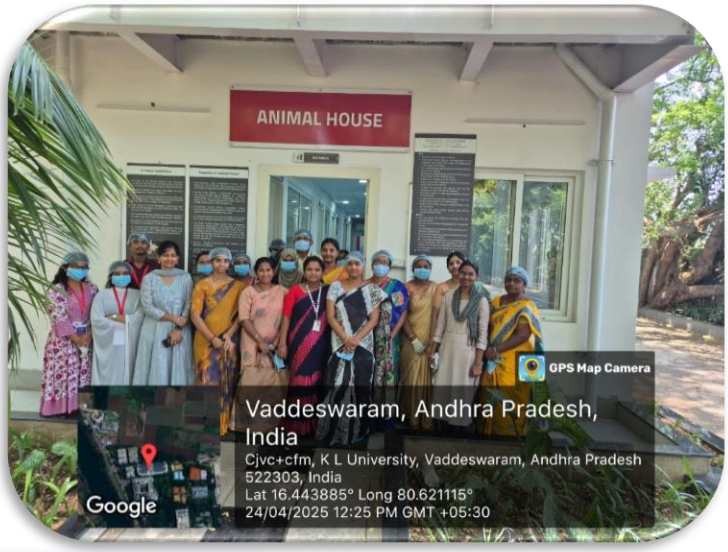
**Dr. Madhuri** delivered a talk on "Animal Care in Preclinical Experiments". Dr. Madhuri's presentation provided a clear and thorough overview of the fundamental principles of animal care in preclinical research. The emphasis on the 3Rs (Replacement, Reduction, and Refinement) was commendable and demonstrated a strong commitment to ethical research practices. The presentation was well-aligned with national (CPCSEA) and international (OECD, AAALAC, ICH) guidelines. Sharing practical examples from Laila Nutraceuticals' own preclinical facility added authenticity and real-world context to the discussion. Overall, the talk rightly emphasized the importance of proper training for animal handlers and meticulous documentation, and it reinforced the critical importance of humane and ethically sound practices in animal-based research, particularly within the framework of industrial R&D.



## A practical session on Hands-on Animal handling:

A practical session on "Hands-on Animal Handling" was conducted by Dr. Madhuri and Dr. G. Prasada Chowdary, where participants were thoroughly trained in handling laboratory animals such as rats and mice. The session covered essential techniques for feeding, drug administration through various routes, and the necessary precautions to be followed within the animal house environment. Participants also learned about animal care during experimentation, post-surgical management, and recovery procedures. In addition, the session included demonstrations of key

neurobehavioral tests used to assess memory, anxiety, and motor functions. Overall, the session significantly enhanced the participants' practical skills in animal experimentation.



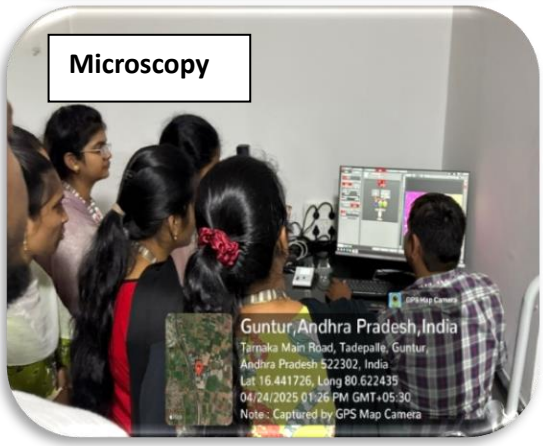


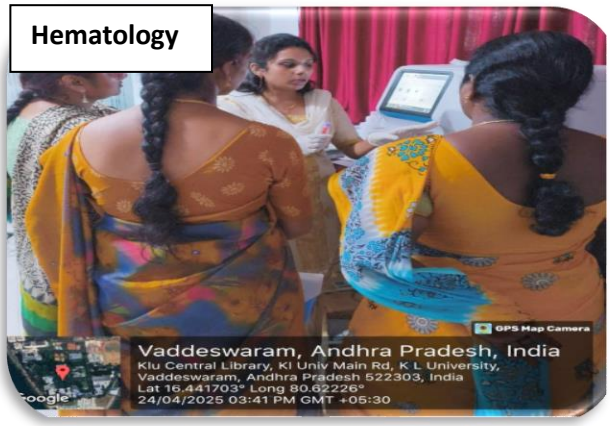
**A practical session on-Hands-on Histopathology and Haematology:**

The practical session on "Hands-on Histopathology and Haematology," delivered by Dr. D. Naresh and Dr. K. Ramakrishna, provided participants with in-depth training on essential laboratory techniques. The session included detailed demonstrations on blood collection methods, preparation of blood smears, and analysis of hematological parameters. Participants were also trained in tissue fixation, processing, sectioning, and staining techniques used in histopathological examination. Emphasis was placed on identifying cellular and tissue-level

changes relevant to preclinical studies. This session greatly enhanced the participants' understanding and practical skills in evaluating biological samples for toxicological and pathological assessments.






**Biochemical Analysis using ELISA reader:**

Dr. K. Ramakrishna conducted a hands-on session on the usage of the ELISA reader, focusing on its applications in ELISA-based assays, protein estimation, and both colorimetric and fluorescence-based biochemical analyses. Participants were trained in sample preparation, plate loading, and operation of the ELISA reader, including wavelength selection and result interpretation. The session emphasized the importance of accuracy, sensitivity, and standard curve generation for quantitative analysis. This practical exposure enabled participants to effectively utilize the ELISA reader in various experimental setups, enhancing their competency in biochemical and molecular diagnostics.

**Concluding Remarks:**

Overall, the hands-on sessions conducted during the workshop provided participants with valuable practical experience in key areas of preclinical research. From animal handling and

care, to histopathological and hematological techniques, and advanced biochemical analysis using ELISA readers, the sessions were comprehensive and skill oriented. The active participation and expert guidance by Dr. Madhuri, Dr. G. Prasada Chowdary, Dr. D. Naresh, and Dr. K. Ramakrishna ensured that attendees gained not only technical knowledge but also a deeper understanding of ethical and scientific standards in preclinical experimentation. These practical modules have significantly strengthened the participants' capabilities for conducting high-quality research. Acter completion of the workshop, participants are awarded with participation certificates.

**INTERNATIONAL CONFERENCE ON *"Current Trends in Drug Discovery, Development and Delivery* (CTD4-2025)"**

**Programme schedule**

# ANRF & DBT SPONSORED
# INTERNATIONAL CONFERENCE ON CURRENT TRENDS IN DRUG DISCOVERY, DEVELOPMENT AND DELIVERY
## CTD4–2025
## 24th –26th APRIL 2025

## Day-1 - 25th APRIL 2025

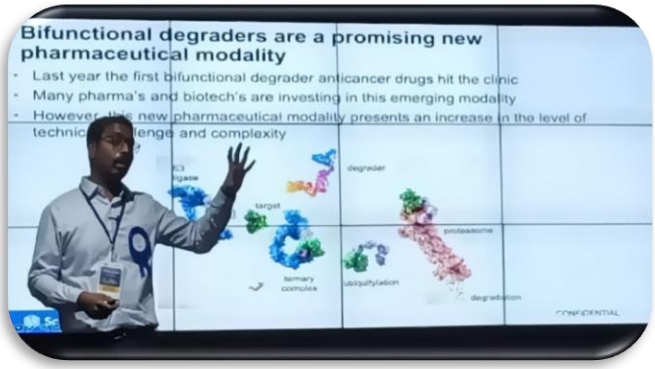
**Inauguration Session:** : (25th April 2025, 9:00AM - 6:00PM)

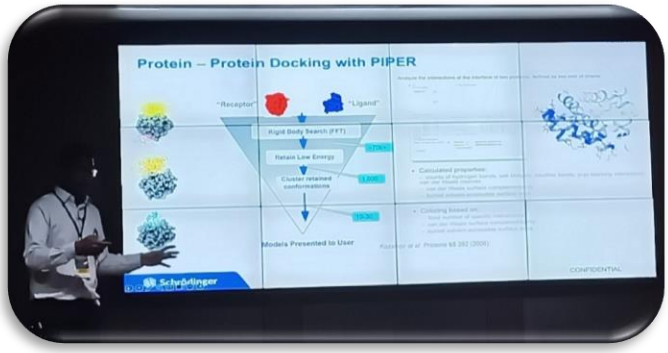
## Opening session:

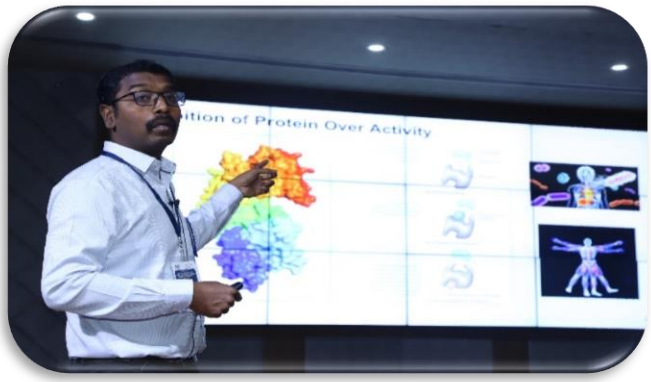
The inaugural session of ANRF & DBT sponsored International conference CTD4-2025 in association with Royal Society of Chemistry began with the traditional lighting of the lamp, symbolizing the pursuit of knowledge and enlightenment, accompanied by a prayer song performed by the Pharmacy students. This auspicious moment was led by Dr. K.S. Jagannatha Rao (Pro-Chancellor, KLEF). Following the ceremony, speeches were delivered by Dr. G. Chakravarthi (Principal, KL College of Pharmacy), Dr. Buchi N. Nalluri (Director, Life Sciences), and Dr. K. Subba Rao (Registrar, KLEF). Subsequently, the dignitaries formally inaugurated the ANRF & DBT-sponsored International Conference CTD4-2025, marking the beginning of a multi-day scholarly event focused on cutting-edge developments in Pharmaceutical & Biotechnology. During the inaugural ceremony, the RSC conference proceedings from the previous year were also officially released by the distinguished dignitaries on the dais. The inauguration concluded with an address by Dr. Buchi N. Nalluri (Director, Life Sciences) and Dr. Manikanta Murahari (Convener, CTD4-2025, KLCP, KLEF), acknowledging the support of ANRF, DBT, and the Royal Society of Chemistry.

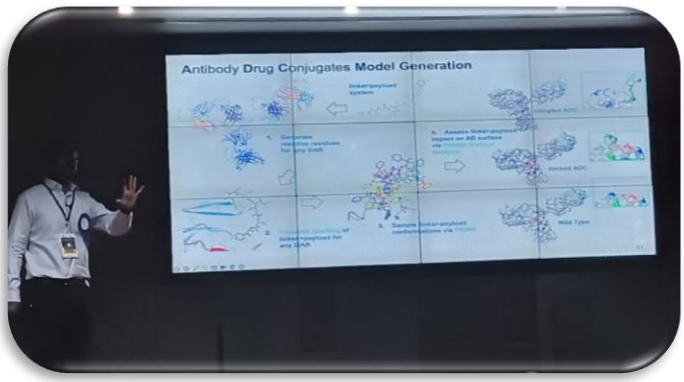
**Session 1:**

The keynote speaker for the first session was **Dr. Vinod Devaraji**, Senior Scientist at Schrodinger Inc, Bangalore. The Chair and Co-Chair are Dr. Manikanta Murahari, Associate Professor, KL College of Pharmacy and Dr. J Risy Namratha, KLCP, respectively. **Dr. Vinod** delivered an insightful lecture on "Next-Generation Therapeutics: Exploring Peptides, Macrocycles, PROTACs, and Antibody-Drug Conjugates in Drug Discovery." In his presentation, Dr. Vinod highlighted emerging technologies in drug discovery, with a focus on peptides and macrocycles as promising therapeutic modalities. A particularly innovative segment of his talk covered PROTACs (Proteolysis Targeting Chimeras)—bifunctional molecules designed to recruit target proteins to E3 ubiquitin ligases, facilitating their selective degradation. Concluding his lecture, Dr. Vinod also discussed antibody-drug conjugates (ADCs), a rapidly advancing field in oncology that leverages the precision of monoclonal antibodies combined with the potency of cytotoxic agents for targeted cancer therapy drugs. In his concluding remarks, Dr. Vinod emphasized the essential skill sets young researchers and students should develop to meet industry demands and secure opportunities in pharmaceutical industry.



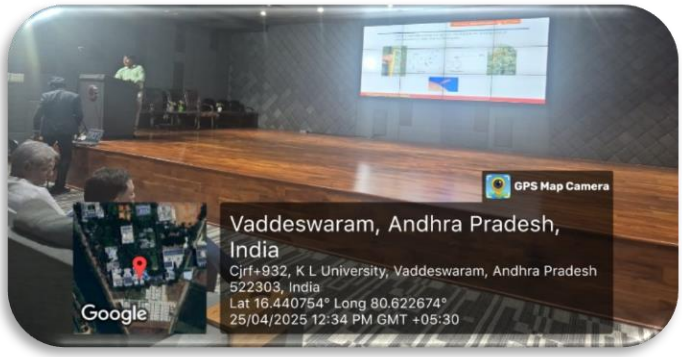



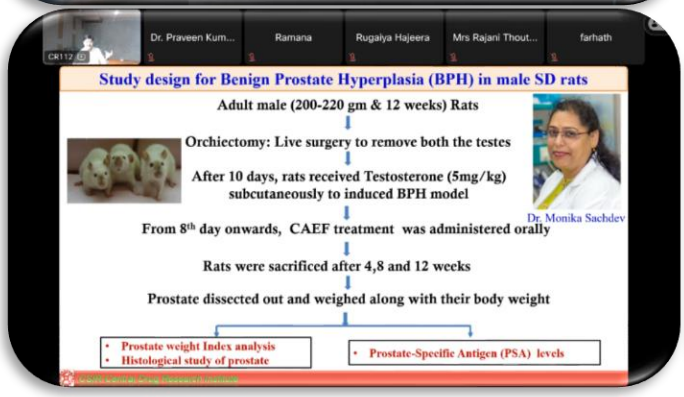



**Session 2:**

The keynote speaker of the Session was Dr. Narender Tadigoppula, Chief Scientist (Scientist-G), Professor (AcSIR) Medicinal Chemistry Division CSIR-Central Drug Research Institute Lucknow. The Chair and Co-Chair of the talk are Dr. K.N.V. Chenchu Lakshmi, Associate Professor, KLCP, KLEF and Dr. K. Ramakrishna, Asst Prof, KLCP, KLEF, respectively.

Dr. Narender Tadigoppula presented an insightful presentation on "Development of Phytopharmaceutical Drugs from Indian Medicinal Plants." His talk emphasized the integration of traditional Indian medicinal knowledge with modern scientific validation to develop effective phytopharmaceuticals. A key highlight was his detailed case study on chebulinic acid, a bioactive compound isolated from Terminalia chebula, and its progression toward clinical trials. Dr. Tadigoppula also underscored the role of traditional medicine in contemporary healthcare, particularly its potential applications in managing diseases like COVID-19, demonstrating the enduring relevance of ancient wisdom in addressing modern medical challenges. Moving forward, he discussed how one can discover a New Chemical Entity (NCE) from natural products and highlighted recent analytical techniques useful in the analysis of phytoconstituents. In his concluding remarks, he emphasized the role of wet lab work, especially synthesis, for early-career researchers.

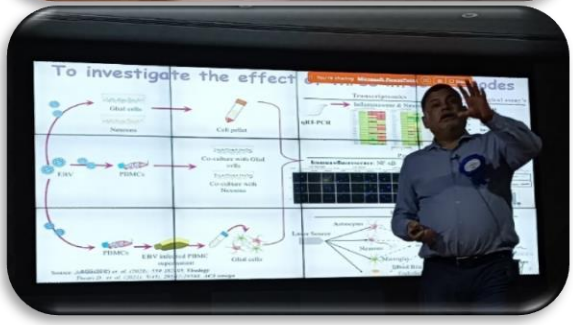



**Session 3:**

The resource speaker was Dr. Hem Chandra Jha, Associate Professor, Dept of Biosciences and Biomedical Engineering, Indian Institute of Technology (IIT), Indore. The Chair and Co-Chair for the talk are Dr. B. Srinivas, Associate Prof, Dept of Biotechnology, KLEF and Dr. Prasada Chowdari Gurram, KLCP, KLEF, respectively

Dr. Jha delivered his talk on "Demethoxycurcumin and Rosmarinic Acid as Potential Anti-Epstein-Barr Virus Drugs in Neurological Disorders." He highlighted his research group's findings on how these phytoconstituents—demethoxy-substituted curcumin and rosmarinic acid—exhibited potent activity against the Epstein-Barr virus (EBV) in neurological disorders. Dr. Jha emphasized the role of EBV in promoting neurological diseases and discussed its underlying pathophysiology in detail. During his talk, he also explored the broader role of viruses in various diseases, including their modes of entry into the human body (e.g., through the nose and mouth). Additionally, he addressed future challenges in combating viral diseases, such as drug resistance and the need for targeted therapies. A key point of his presentation was the gap in reliable in vivo models for studying viral-associated diseases, which limits translational research. To conclude, Dr. Jha encouraged budding graduates to explore this emerging field of viral disease research, particularly the integration of phytochemicals in antiviral drug development. He also stressed the importance of interdisciplinary approaches combining virology, neurology, and natural product chemistry to advance therapeutic solutions.

**Session 4:**

The resource speaker was Dr. Amit Asthana, Associate Professor & HOD, Department of Medical Devices, National Institute of Pharmaceutical Education and Research, Hyderabad. The Chair and Co-Chair for the talk are Dr. T. Anusha, Asst Prof, Dept of Chemistry, KLEF and Dr. Bhima Sridevi, KLCP, KLEF, respectively

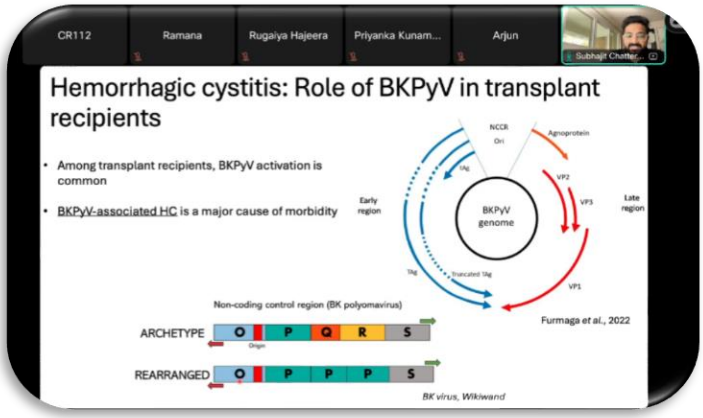
Dr. Amit delivered an insightful talk on "Facile Methods of Fabricating Microdevices and Their Applications." He emphasized the importance of medical device development and its translational applications in human medicine, pharmaceuticals, and veterinary sciences. Dr. Amit briefly introduced microdevices, illustrating their significance with a case study on a blood group detection kit developed by his research group at NIPER. He further expanded on veterinary applications, highlighting a specific challenge: the difficulty in detecting pregnancy in buffaloes. He explained how advanced biomarker identification could simplify this complex problem, ultimately benefiting farmers and animal husbandry professionals. Traditionally, pregnancy detection in animals is a tedious and costly process, but Dr. Amit demonstrated how microdevice technology could provide a cost-effective and efficient solution for society. Addressing the audience, he also discussed career prospects in medical device research, including opportunities in start-ups, industry, and academia. He encouraged budding researchers to explore this field to solve pressing societal problems through innovation.

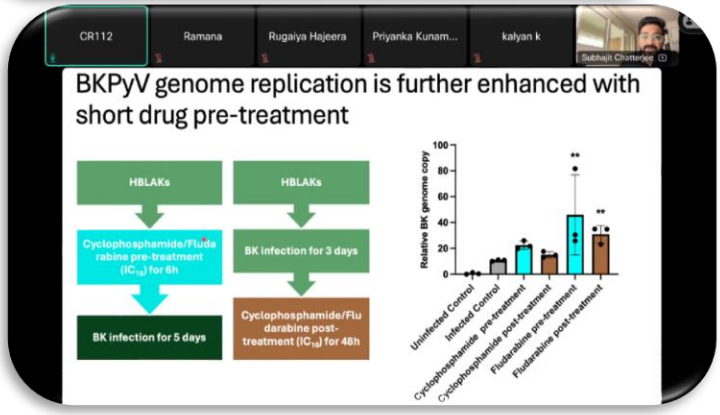


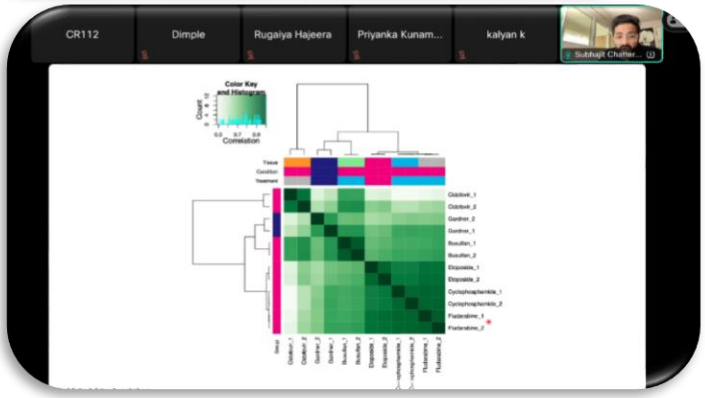
**Session 5:**

The resource speaker was Dr. Subhajit Chatterjee Postdoctoral Researcher, Starrett Lab, Laboratory of Cellular Oncology, CCR National Cancer Institute (NIH), Center for Cancer Research, USA. The Chair and Co-Chair for the talk are Dr. P. Ranakishor, Asst Prof, KLCP, KLEF and Dr. B. Jeevan Kumar, KLCP, KLEF, respectively

Dr. Subhajit delivered the lecture on "Sublethal doses of genotoxic therapeutics promote polyomavirus infection and replication in bladder cells" highlighted the emerging concern that certain cancer treatments, particularly those involving DNA-damaging agents, may inadvertently create a favourable environment for viral reactivation. Dr. Subhajit explained how sublethal doses of genotoxic drugs can induce cellular stress responses and DNA repair mechanisms that, instead of completely eliminating tumor cells, may compromise the cell's antiviral defenses. This creates an opportunity for dormant polyomaviruses, such as BK virus, to reactivate and replicate within bladder epithelial cells, potentially contributing to secondary infections or complications in cancer patients. The lecture by Dr. Subhajit emphasized the need for careful monitoring of viral activity during chemotherapy and suggested that understanding this interaction could inform better treatment strategies to minimize unintended viral propagation.

## ***Oral & Poster Presentation Session Day-1, 25th April 2025***

On Day 1, ***25th April 2025*** of the conference, an engaging parallel session was held from 2:00 PM to 5:00 PM, where over 30 participants representing various universities, colleges, and research laboratories presented their work in the form of oral and poster presentations The session provided a valuable platform for researchers to share their innovative work and exchange ideas in both offline and online modes. Participants shared their work on different topics like drug discovery, Natural products formulation, Design of experiments, Neurological disorders, point of care devices etc, which led to useful discussions and exchange of ideas among everyone present. This session showed the wide range of research being done and also helped young researchers and experts connect and work together in the future.



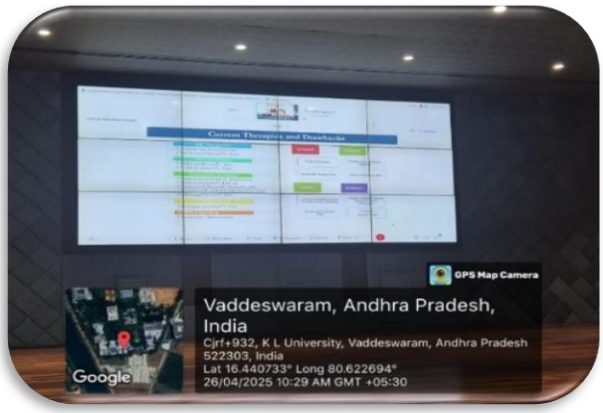

**INTERNATIONAL CONFERENCE ON *"Current Trends in Drug Discovery, Development and Delivery* (CTD4-2025)"**
**Programme schedule**

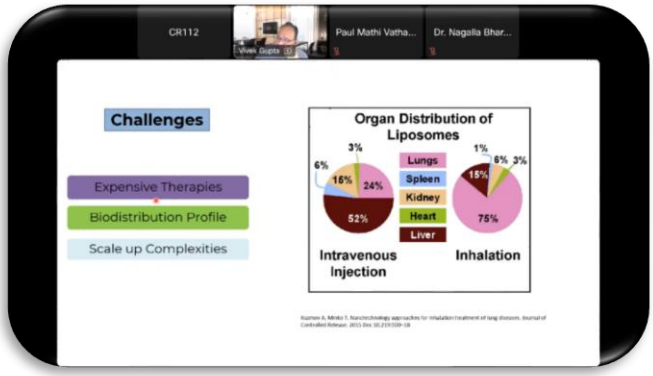
**Day-2 - 26th APRIL 2025**

**Session 6:**

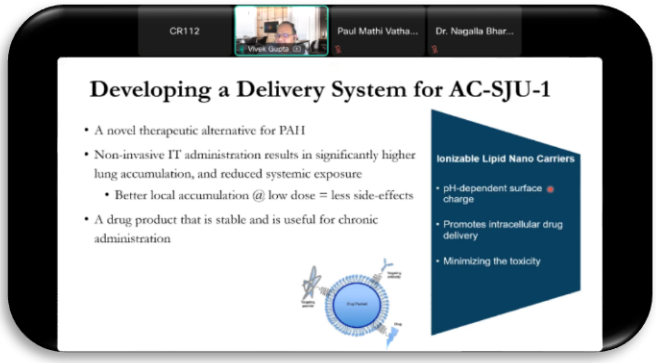
The resource speaker was Dr. Vivek Gupta, Associate Dean for Graduate Education & Research, Associate Professor, Pharmaceutical Sciences St. John's University, New York City, USA. The Chair and Co-Chair for the talk are Dr. Kasi Viswanadh Matte, Asso Prof, KLCP, KLEF and Dr. N. Srilakshmi, KLCP, KLEF, respectively

Dr. Vivek lecture on "Product Development Landscape of a Repurposed Therapy for Rare Diseases" provided an in-depth overview of the opportunities and challenges involved in developing repurposed therapies to address the unmet medical needs of patients with rare diseases. Dr. Vivek highlighted the growing importance of drug repurposing as a viable and cost-effective strategy to accelerate the availability of treatments for conditions that often lack dedicated research and investment. The session covered key stages of the product development cycle, including identification of repurposing candidates, preclinical validation, regulatory pathways, clinical trial design, and commercialization aspects specific to rare disease indications. Case studies were presented to illustrate successful examples and lessons learned from past initiatives. Dr. Vivek lecture also emphasized the critical role of collaboration among academia, industry, patient advocacy groups, and regulatory bodies to navigate scientific, financial, and policy hurdles. Overall, the session provided valuable insights into how strategic repurposing efforts can help expand therapeutic options for patients living with rare and neglected diseases.



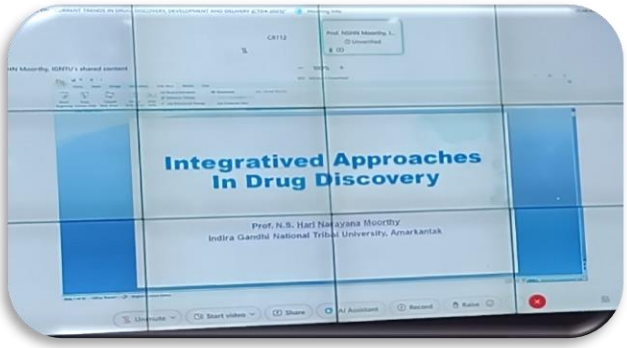


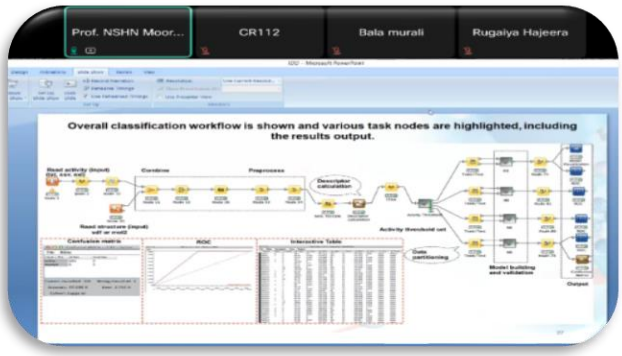


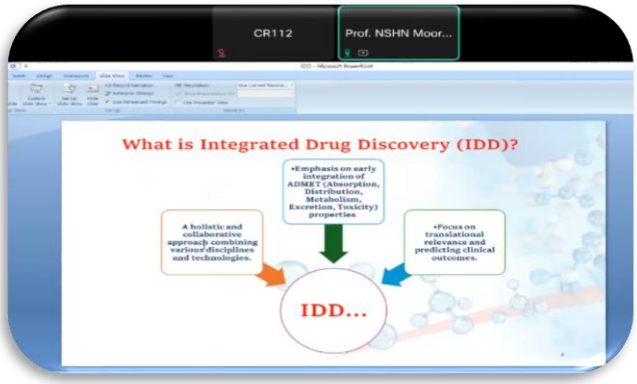
**Session 7:**

The resource speaker was Prof. N.S. Hari Narayana Moorthy, Registrar & Professor, Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak (M.P.), India. The Chair and Co-Chair for the talk are Dr. P. Rajeshwari, Asso Prof, KLCP, KLEF and Mr. A. Narayana Rao, KLCP, KLEF, respectively

Prof. Moorthy lecture on "Integrative Approaches in Drug Discovery" highlighted the growing importance of combining multiple advanced technologies to accelerate and enhance the drug discovery process. Prof. Moorthy provided an insightful overview of how machine learning and artificial intelligence (AI) are revolutionizing the identification and optimization of novel drug candidates. Emphasis was placed on the role of AI algorithms in analyzing vast chemical and biological data, predicting molecular properties, and designing new compounds with improved efficacy and safety profiles. The session also covered molecular docking techniques, illustrating how computational docking helps in understanding ligand–receptor interactions and aids in virtual screening of large compound libraries. In addition to these, Prof. Moorthy discussed various modern computational tools and software that are essential for researchers working in the field, including platforms for molecular modeling, structure-based drug design, and integrated data analysis. Overall, Prof. Moorthy stressed the need for a collaborative, technology-driven approach to address current challenges in drug discovery and to accelerate the development of innovative therapeutics.



**Session 8:**

The resource speaker was Dr. S. Gananadhamu, Assistant Professor, Department of Pharmaceutical Analysis, National Institute of Pharmaceutical Education & Research (NIPER), Hyderabad, Telangana, India. The Chair and Co-Chair for the talk are Dr. M. Narender, Asst Prof, KLCP, KLEF and Dr. Reehana Shaik, KLCP, KLEF, respectively.

Dr. Gananadhamu Lecture on "Extractables and Leachables in Pharmaceutical Products". focused on the critical aspects of ensuring pharmaceutical product safety and regulatory compliance in relation to packaging materials. Dr. Gananadhamu emphasized how extractables and leachables (E&L) studies are an essential part of regulatory submissions and compliance, especially under USFDA CFR (Code of Federal Regulations) requirements and Common Technical Document (CTD) guidelines. Dr. Gananadhamu discussion highlighted that packaging materials, if not properly selected and evaluated, can interact with the pharmaceutical product and lead to the migration of unwanted chemical substances into the drug product during storage. This can result in leakage, contamination, and compromise of the product's stability and efficacy. Furthermore, Dr. Gananadhamu addressed the emerging challenges posed by nanoparticles formulations, which can originate from packaging components or be unintentionally released during manufacturing and storage, creating additional risks for formulations, particularly complex injectables and biologics. By correlating real-world regulatory expectations with practical industry concerns, Dr. Gananadhamu lecture underlined the importance of rigorous E&L testing protocols, appropriate packaging design, and thorough risk assessments to meet global regulatory standards and protect patient safety




**Session 9:**

The resource speaker was Dr. Sai Balaji Andugulapati, Senior Scientist, CSIR-Indian institute of Chemical Technology, Hyderabad, India. The Chair and Co-Chair for the talk are Dr. A. Anka Rao, Asso Prof, KLCP, KLEF and Dr. A. V. Surendra, KLCP, KLEF, respectively.

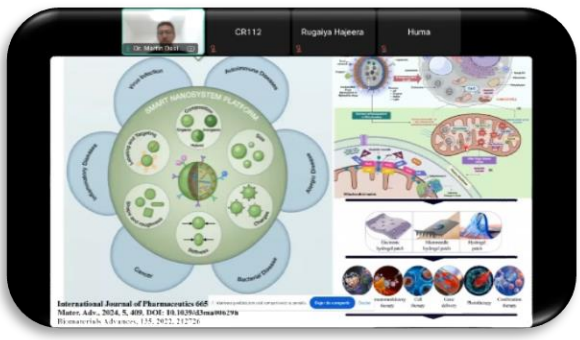
Dr. Sai Balaji lecture on "Nanoparticle and Liposome Mediated Targeted Delivery for Cancer Therapy: Insights into In Vitro and In Vivo Models" provided an in-depth understanding of the recent advances in nanotechnology-based drug delivery approaches for cancer treatment, with a special focus on breast cancer and, in particular, triple-negative breast cancer (TNBC). Dr. Sai Balaji emphasized the unique challenges associated with TNBC, including its aggressive nature, lack of hormonal receptors, and limited therapeutic options, which necessitate the development of innovative treatment strategies. Dr. Sai Balaji showed results of his research work in which nanoparticle and liposome-mediated targeted delivery systems have emerged as promising tools to enhance the therapeutic efficacy and reduce the systemic toxicity of anticancer drugs. By utilizing various surface modifications and ligand conjugations, these nanoscale carriers can be engineered to specifically target tumor cells, improving drug accumulation at the tumor site while minimizing off-target effects. Dr. Sai Balaji also discussed recent in vitro and in vivo model studies demonstrating how these delivery systems can effectively bypass biological barriers, achieve sustained drug release, and significantly influence disease progression, leading to better patient outcomes and relief. Overall, the session provided valuable insights into the translational potential of nanomedicine for tackling complex cancers like TNBC, and encouraged further research and collaboration in this rapidly evolving field

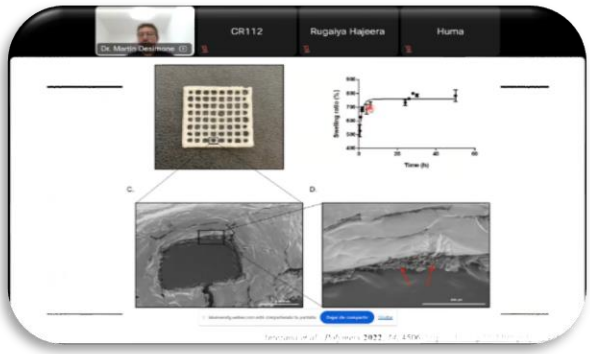


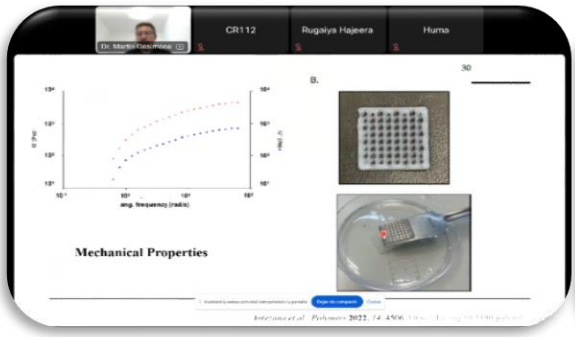
**Session 10:**

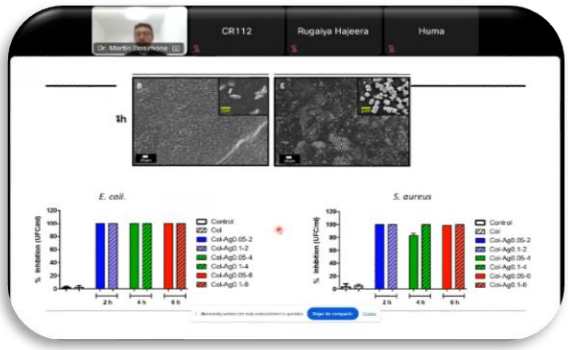
The resource speaker was Prof. Martin F. Desimone, Universidade Federal do Rio Grande – FURG Instituto de Ciências Biológicas (ICB) Rio Grande, RS, BRASIL. The Chair and Co-Chair for the talk are Dr. Sivadasu Praveen, Asst Prof, KLCP, KLEF and Ms. Md. Jaha Sultana, KLCP, KLEF, respectively.

Prof. Martin lecture on "Emerging Trends in Nanoparticles, Biomaterials, and 3D Printing for Biomedical Applications" highlighted the transformative role of advanced biomaterials and 3D printing technologies in the development of innovative point-of-care devices that can offer rapid, personalized, and cost-effective healthcare solutions. Prof. Martin discussed how the integration of these technologies enables the fabrication of customized medical implants, diagnostic tools, and drug delivery systems tailored to patient-specific needs. Furthermore, Prof. Martin emphasized the significant potential of nanoparticles, biomaterials, and 3D printing in addressing the pressing global challenge of antimicrobial drug resistance. By incorporating nanoparticles with antimicrobial properties and designing smart biomaterial-based delivery platforms, researchers can enhance the effectiveness of existing therapies, reduce the misuse of antibiotics, and develop novel treatment strategies. The session provided valuable insights into how the convergence of these emerging technologies is paving the way for next-generation biomedical innovations to improve patient outcomes and tackle complex health care problems.



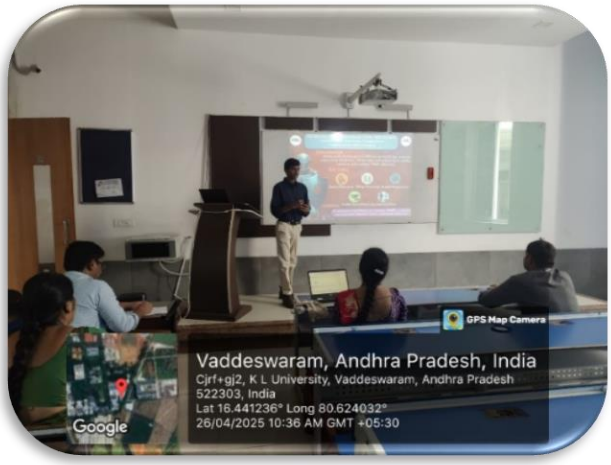



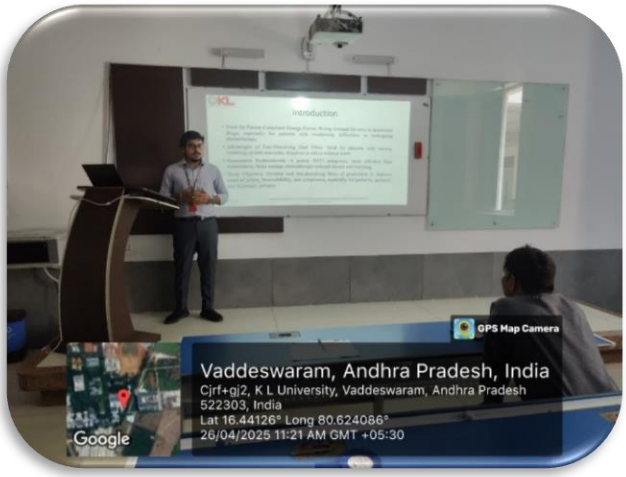



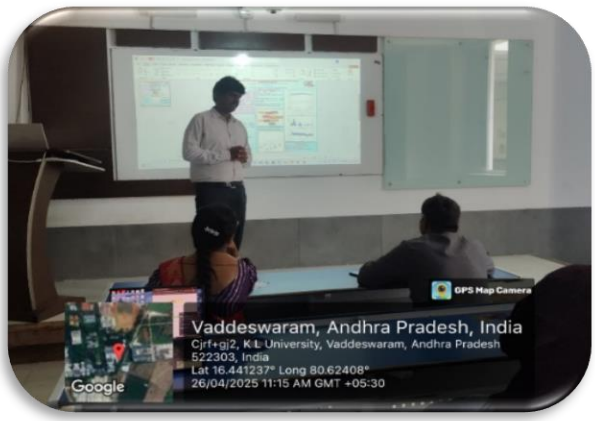



## ***Oral & Poster Presentation Session Day-2, 26th April 2025***

On Day 2 of the conference, held on 26th April 2025, a lively parallel session took place from 2:00 PM to 5:00 PM, where more than 30 participants from different universities, colleges, and research institutes presented their research through oral and poster sessions. This session offered an excellent platform for researchers to showcase their innovative ideas and interact in both offline and online formats. The presentations covered various topics such as drug discovery, natural product formulations, design of experiments, neurological disorders, and point-of-care devices, sparking meaningful discussions and idea sharing among all attendees. Overall, the session highlighted the diversity of research work and provided an opportunity for young researchers and experts to build connections and explore future collaborations.




## Valedictory:

The two day ANRF & DBT sponsored international conference, CTD4-2025 was concluded with the valedictory session which was scheduled after the technical sessions and oral/e-presentations. Dr. Manikanta Murahari, Convenor of the CTD4-2025, hosted the valedictory session. All the guest on the stage were felicitated with the memento. Later, certificates were given to the winners in the first, second, third place for oral and poster presentation categories. There were also appreciation certificates given to the participants' who presented well despite of the competition. The convener addressed the gathering by appreciating each one of the committee members and highlighted the knowledge gained from the sessions.

KL (DEEMED TO BE UNIVERSITY) College of PHARMACY | 45 years of EDUCATIONAL EXCELLENCE | ALL INDIA SWATCHTA 1 CAMPUS RANKING BY MHRD | DIAMOND QS I-GAUGE DIAMOND RANKING BY QS- IGAUGE | 22 RANKED AMONG ALL UNIVERSITIES nirf 2024

ANRF Govt. of INDIA | Department of BioTechnology, Government of India | In Association ROYAL SOCIETY OF CHEMISTRY

# Certificate of Appreciation

This Certificate is presented to

**Prof. Dr Martin F. DESIMONE**

in Grateful Recognition and Appreciation for being the Resource Person
in the **International Conference** on
**"CURRENT TRENDS IN DRUG DISCOVERY,DEVELOPMENT AND DELIVERY"- (CTD4-2025)**
held during **25th - 26th APRIL 2025** at **K L COLLEGE OF PHARMACY,**
**KONERU LAKSHMAIAH EDUCATION FOUNDATION (KLEF),**
Green Fields, Vaddeswaram, Andhra Pradesh, India.

Co-convenor
**Dr. Shailendra Singh**
Asst. Professor
KL College of Pharmacy

Convenor
**Dr. Manikanta Murahari**
Assoc. Professor
KL College of Pharmacy

Organizing Chairman
**Dr. G. Chakravarthi**
Principal
KL College of Pharmacy

Director, R&D and Life Sciences
**Prof. Buchi N. Nalluri**
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# Certificate of Appreciation

This Certificate is presented to

**Dr. Subhajit Chatterjee**

in Grateful Recognition and Appreciation for being the Resource Person
in the **International Conference** on
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Co-convenor
**Dr. Shailendra Singh**
Asst. Professor
KL College of Pharmacy

Convenor
**Dr. Manikanta Murahari**
Assoc. Professor
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Organizing Chairman
**Dr. G. Chakravarthi**
Principal
KL College of Pharmacy

Director, R&D and Life Sciences
**Prof. Buchi N. Nalluri**
KLEF