



## LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING(Autonomous)

L.B.Reddy Nagar, Mylavaram – 521 230, Andhra Pradesh, INDIA.

Affiliated to JNTUK, Kakinada & Approved by AICTE, New Delhi.

Accredited by NAAC 'A' Grade, NBA Tier-1 for ASE, CE, CSE, IT, ECE, EEE & ME and "CPE" status by UGC.

**Recognised as Scientific and Industrial Research Organisation**

**Research & Development Cell**

03-09-2025

### FACULTY DEVELOPMENT PROGRAM REPORT

<b>Title of the programme</b>	<b>:</b> Five-Day Faculty Development Program on Opportunities for Research in Emerging Technologies
<b>Date of the event</b>	<b>:</b> 28 <sup>th</sup> Aug. to 2 <sup>nd</sup> Sept. 2025
<b>Resource persons</b>	<b>:</b> <b>Dr. T. Ram Prabhu</b> Scientist 'E' and Joint Director, Defense Research and Development Organization (DRDO), Bengaluru
	<b>:</b> <b>Mr. Avinash Kumar</b> Territory Manager, Turnitin Pvt Ltd Bengaluru, Karnataka
	<b>:</b> <b>Dr. P. LOVARAJU</b> Professor of ASE & HoD, Lakireddy Bali Reddy College of Engineering Mylavaram
	<b>:</b> <b>Dr. V.Ramakrishna</b> Professor of Civil Engineering Lakireddy Bali Reddy College of Engineering Mylavaram
	<b>:</b> <b>Dr. P.Bhagath.</b> Professor of AI&DS & HoD, Lakireddy Bali Reddy College of Engineering. Mylavaram
<b>No. of participants</b>	<b>:</b> 175
<b>Organized by</b>	<b>:</b> <b>Research &amp; Development Cell and IQAC</b> Lakireddy Bali Reddy College of Engineering, Mylavaram-521230
<b>Convenor</b>	<b>:</b> <b>Dr. Seelam Pichi Reddy</b> Dean, Research & Development Lakireddy Bali Reddy College of Engineering.
<b>Coordinator</b>	<b>:</b> <b>Dr.K.R.L.Prasad</b> Coordinator, IQAC Lakireddy Bali Reddy College of Engineering
<b>Co-Coordinator</b>	<b>:</b> <b>Dr. T. Satyanarayana</b> , M.Sc., M.Phil., Ph.D. Professor & HoD, FED, R&D Central Coordinator Lakireddy Bali Reddy College of Engineering

## About the Event:

The five-day faculty development program is conducted for the internal faculty members to motivate, encourage and bring awareness regarding various funding agencies available and the essence of writing the proposal. Usage of Turnitin software to check the plagiarism content is discussed at length and hands on session is carried to get familiarize with its usage. Manuscript writing with the LaTeX software, Research Opportunities in Waste Management & Research to Writing: Crafting Scholarly Work with Impact are also covered in the FDP.

## Session-Wise Details of Workshop

**Day-1:** 28<sup>th</sup> Aug. 2025

**Session:** Inaugural Function

**Time:** 10:00 AM to 10:30 AM

The inauguration of the five-day faculty development program was held at 10:00 AM in the S.R.K seminar hall, Admin Block of Lakireddy Bali Reddy College of Engineering (Autonomous), Mylavaram. The event began with the arrival of esteemed dignitaries who graced the occasion and addressed the participants.

**Dr. Seelam Pichi Reddy**, the FDP Convener, extended a warm welcome to all participants and outlined the core objectives of the FDP.

**Dr. B. Ramesh Reddy**, Vice Principal of LBRCE, praised the Research & Development Cell for conducting a faculty development program and stressed the importance of research in higher education.

**Dr. T. Ram Prabhu**, Scientist 'E' and Joint Director, Defense Research and Development Organization (DRDO), Bengaluru, gave key note address about the research in the defense sector and other allied areas.

**Dr.T.Satyanarayana**, the FDP Coordinator of the program proposed vote of thanks and concluded the Inaugural Function.

**Day-1:** 28<sup>th</sup> Aug. 2025

**Technical Session-1**

**Time:** 10:45 AM to 01:30 PM

**Name of the resource person:** **Dr. T. Ram Prabhu**, Scientist 'E' and Joint Director, Defense Research and Development Organization (DRDO), Bengaluru

**Title of the Talk:** Funding schemes, Proposal writing and Institute Research Eco system Development

As a part of the FDP, the resource person delivered a talk on Funding schemes, Proposal writing and Institute research ecosystem. Explained about the funding bodies in India and provided detailed classification of schemes. Explained about ANR Research schemes

like ECRG, EV Mobility, SSY and ITS. Covered the details of SERB Matrix, Inclusivity Research Grant, DST Young Scientist, SERB – POWER, DST WISE KIRAN, DSIR-TDUPW. Provided the details of schemes available for women faculty under various funding agencies. Explained about the contents to be placed in the proposal for its likely approval. Emphasised the importance of establishment of research environment, centre of excellence and provided the details of thrust areas of national importance. Also provided the details of post-doctoral fellowships, internships for UG students etc.

**Day-1:** 28<sup>th</sup> Aug. 2025

**Technical Session-2**

**Time:** 02.30 PM to 03:30 PM

The resource person provided detailed discussion on thrust areas of national priority, thrust areas of national mission, thrust areas in Defence, space, energy and agriculture. Thrust areas with societal impact and also provided details corresponding to interdisciplinary and faculty research. Urged the faculty to carry industry driven Ph.D and entrepreneurship. Explained the skills required for cracking funds and also focused on thrust areas with respect to various departments.



Photo-1: Day-1: Inauguration Session: Address by Dean R&D Dr.S.Pichi Reddy



Photo-2: Day-1: Inauguration Session: Address by Vice-Principal, Dr.B.Ramesh Reddy



Photo-3: Day-1: Address by Resource Person, Dr. T. Ram Prabhu, **Scientist 'E' and Joint Director** at DRDO, Bengaluru.



Photo-4: Day-1: Address by Resource Person, Dr. T. Ram Prabhu, **Scientist 'E' and Joint Director** at DRDO, Bengaluru



Photo-5: Day-1: Resource person introduction by Dr.T.Satyanarayana, Professor & HoD FED and central R&D Coordinator.

**Day-2: 29<sup>th</sup> Aug. 2025**

**Technical Session-01**

**Time:** 10.30 AM to 12:30 PM

**Name of the resource person:** **Mr. Avinash Kumar**, Territory Manager, Turnitin Pvt Ltd, Bengaluru, Karnataka

**Title of the Talk:** Turnitin for Efficient Research.

The session is conducted in the online mode and the resource person explained in details about the use of turnitin for plagiarism check. The working process and the options to be checked are explained in detail. Step by step process is explained.

**Day-2: 29<sup>th</sup> Aug. 2025**

**Technical Session-02**

**Time:** 01.30 PM to 03:30 PM

Hands on session on the usage of turnitin software by the department coordinators in their respective department for their faculty.

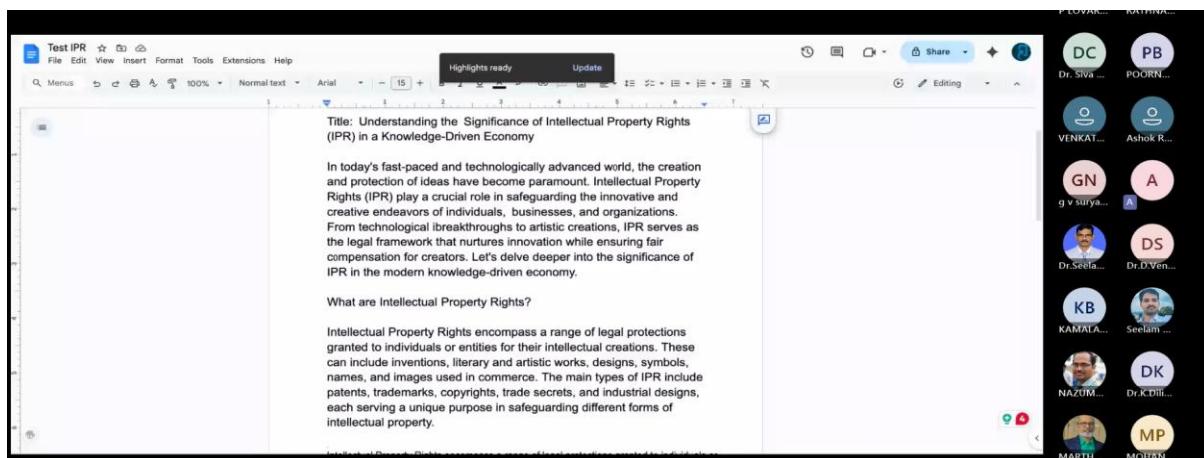


Photo-6: Day-2: Screenshots of online presentation.

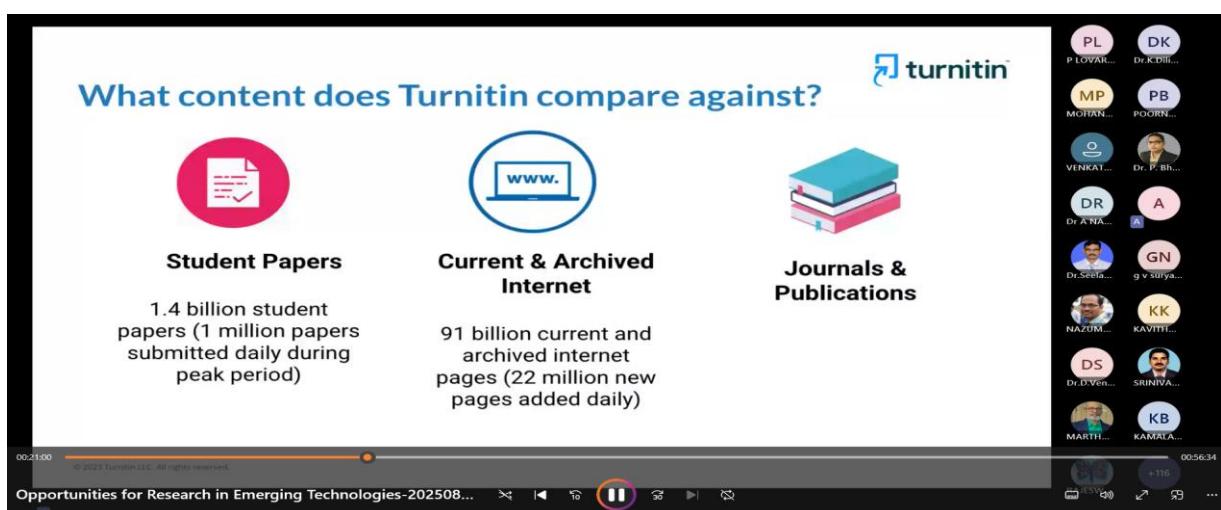


Photo-7: Day-2: Screenshots of online presentation

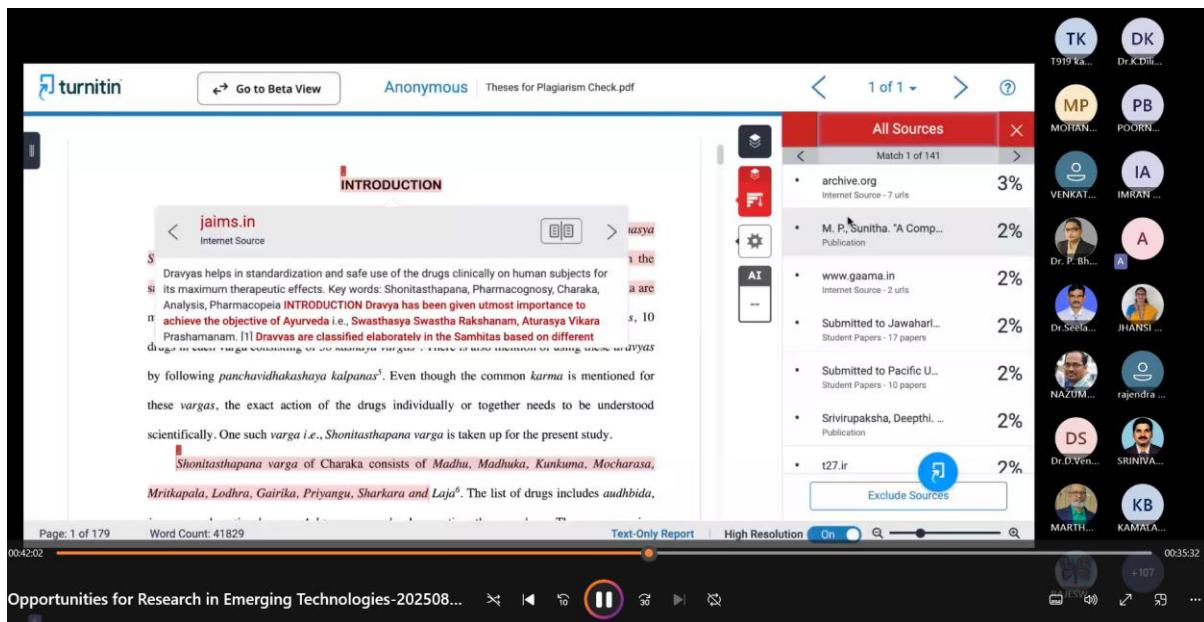


Photo-8: Day-2: Screenshots of online presentation



Photo-9: Day-2: Screenshots of online presentation

**Day-3: 30<sup>th</sup> Aug. 2025**

**Technical Session-01**

**Time:** 10.30 AM to 12:30 PM

**Name of the resource person:** **Dr. P. LOVARAJU, Professor of ASE & HoD, Lakireddy Bali Reddy College of Engineering, Mylavaram**

**Title of the Talk: LyX – The Document Processor (TeX/LaTeX)**

Preparation of manuscript using LaTex software is explained in detail and its practical usage is shown to all the participants.

**Day-3: 30<sup>th</sup> Aug. 2025**

**Technical Session-01**

**Time: 01.30 PM to 03:30 PM**

**Name of the resource person: Dr. P. LOVARAJU**, Professor of ASE & HoD, Lakireddy Bali Reddy College of Engineering, Mylavaram

**Title of the Talk:** Hands-on Session - LyX – The Document Processor (TeX/LaTeX)

Hands-on session carried by the resource person and the department coordinators.

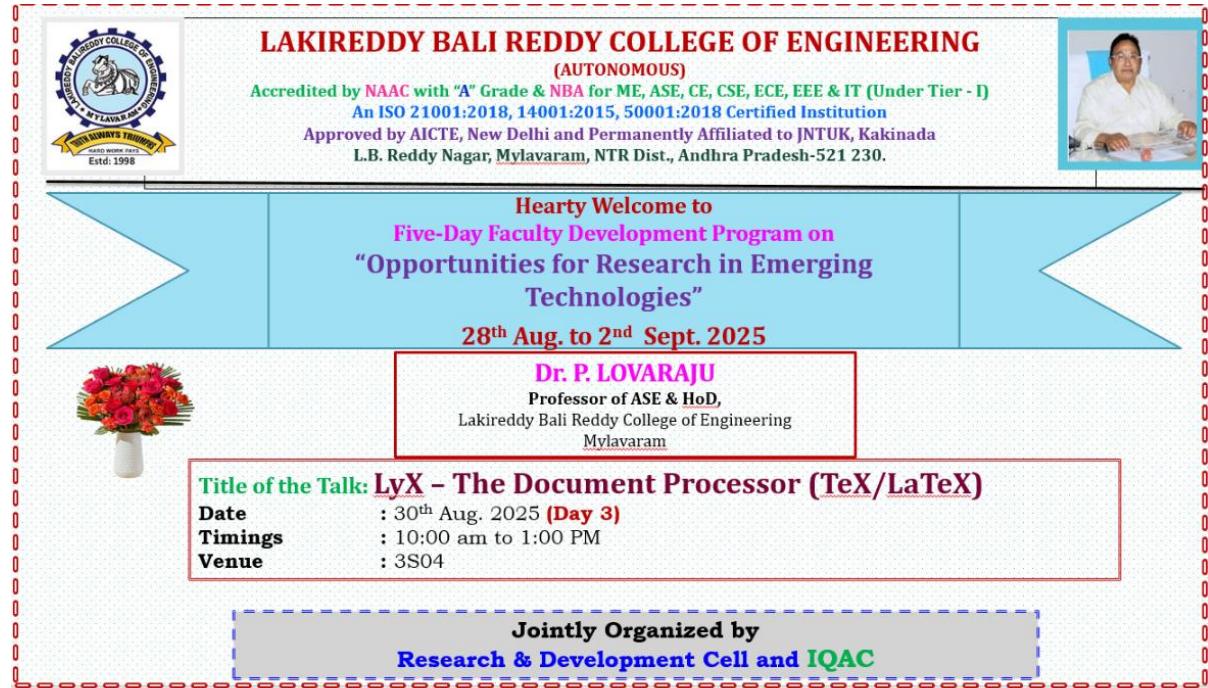


Photo-10: Day-3: Talk by Dr.P.Lovaraju, Professor & HoD-ASE.



Photo-11: Day-3: Talk by Dr.P.Lovaraju, Professor & HoD-ASE.



Photo-12: Day-3: Talk by Dr.P.Lovaraju, Professor & HoD-ASE.



Photo-12: Day-3: Talk by Dr.P.Lovaraju, Professor & HoD-ASE.

**Day-4: 1<sup>st</sup> September, 2025**

**Technical Session-01**

**Time:** 10.30 AM to 12:30 PM

**Name of the resource person:** **Dr. V.Ramakrishna, Professor of CE, Lakireddy Bali Reddy College of Engineering, Mylavaram**

**Title of the Talk:** Research Opportunities in Waste Management and Environmental Engineering Domain.

The presentation focussed on how to develop research ideas from small observations happening around us and convert into effective outcomes at larger scale. Presented three case studies

(i) Estimation of optimum bagasse and waste oil mix in place of coal for firing a boiler in a sugar industry: The economic savings replacing coal as a fuel are discussed. Idea: How to use Bagasse and waste oil in the industry and reduce wastage. The outcomes generated - two journal papers publication and one consultancy project

(ii) Ground water quality study around Mylavaram: Spatial variation of Water Quality Index and hazards due to Magnesium, Chloride, TDS and Hardness on ground water quality are discussed. Results show that majority of the 38 samples analysed in this study are not suitable for irrigation and drinking purpose. Idea: Reason for higher values of Ca, Mg, TH and TDS in the region stretched around 120 sq. km. Reason: Dolomite and Limestone in the geological stratum in the region. Outcome generated - One international conference paper presented at ESCI, Hyderabad.

(iii) Waste management opportunities: The options for Research potential discussed are - Smart bin design, Smart biogas and compost generation, making building tiles from waste plastic using Fly ash and sand. Idea: How to reduce manual interference in waste collection, its processing, its recovery and effectively utilise the smart operations. Outcomes generated - Patent applied for smart bin, one funding project applied for Rs 65 lakhs to DST, one paper under review, two ongoing projects on smart generation of biogas and composting. Further exploration in future of Waste management technologies for developing social applications.

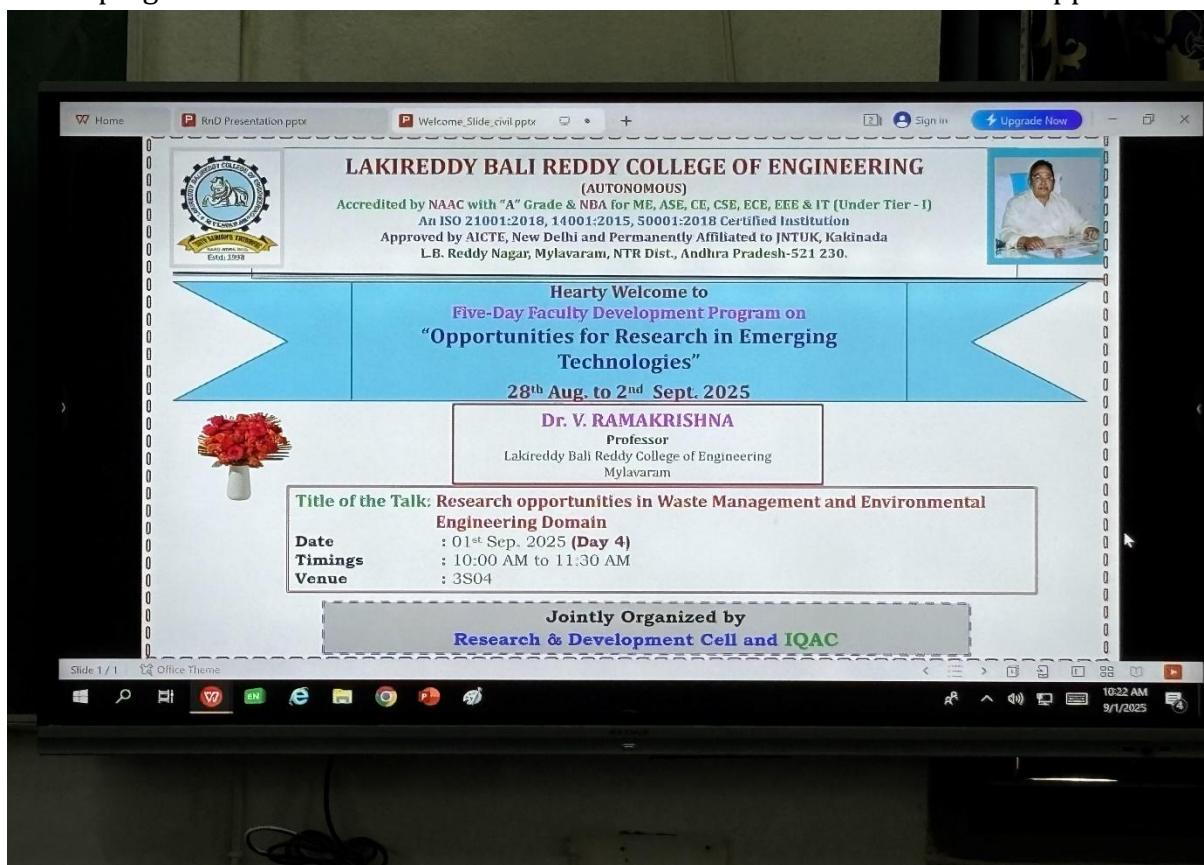


Photo-13: Day-4: Talk by Dr.V.Ramakrishna, Professor of CE

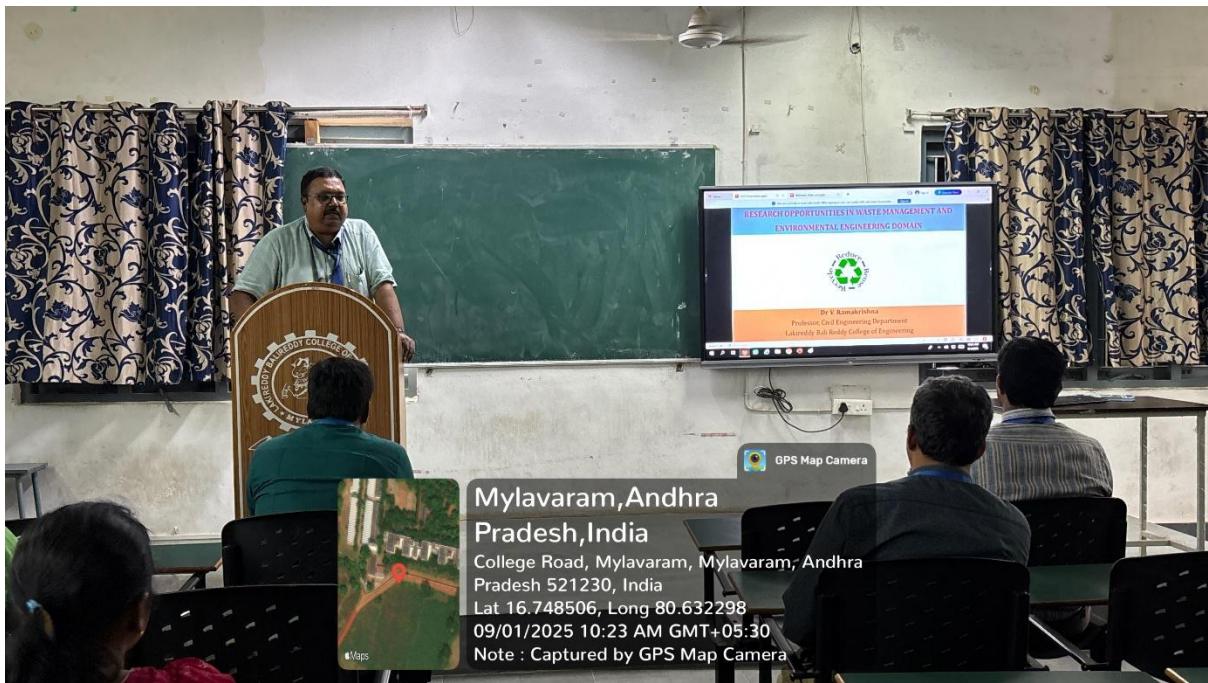


Photo-14: Day-4: Talk by Dr.V.Ramakrishna, Professor of CE



Photo-15: Day-4: Talk by Dr.V.Ramakrishna, Professor of CE

**Day-5: 2<sup>nd</sup> September. 2025**

**Technical Session-01**

**Time:** 10.30 AM to 12:30 PM

**Name of the resource person:** Dr.P.Bhagath , Professor of AI&DS and HoD, Lakireddy Bali Reddy College of Engineering, Mylavaram-521230

**Title of the Talk:** From RESEARCH to WRITING: Crafting Scholarly Work with Impact

**Venue :** IBM Lab, 2nd floor, CSE block

The session focused on "Research Writing"- contents of a good research article, arrangement of various sections, methodology and experimentation, results, discussions and conclusions. The use of AI tools in research are also discussed at length. Arrangement of references with various tools like mendeley- reference management software is also discussed at length.



Photo-16: Day-5: Talk by Dr.P.Bhagath, Professor & HoD- AI&DS



Photo-17: Day-5: Talk by Dr.P.Bhagath, Professor & HoD- AI&DS

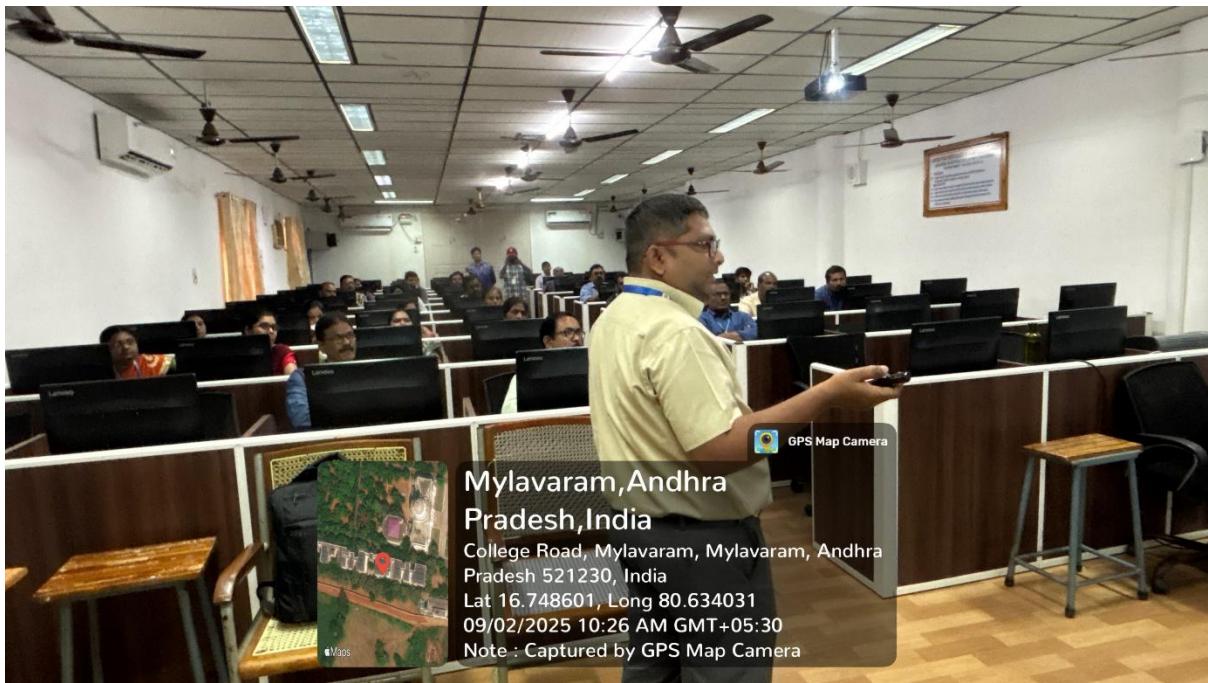


Photo-18: Day-5: Talk by Dr.P.Bhagath, Professor & HoD- AI&DS

Dean, Research and Development