



## Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

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**Campus:** Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.

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## Department of Mechanical Engineering

**A.Y 2024-2025, Even Semester**

### Alumni Guest Lecture Report

In view of alumni activities, Department of Mechanical Engineering conducted an Alumni Guest Lecture with **Mr. P. Ratna Prasad (Y1IP258), Process Development Engineer, AGCO Corp., Batavia, IL State, U.S.A. of Y1-Batch on 28-02-2025**. He gave continuous lecture from 2:00 P.M to 03:00 P.M on the topic **“Optimization and Digital Transformation in Warehousing and Supply Chains”**. In on-line mode, he given presentation in Webex platform in which **99 participants (87 students and 12 faculty)** of ME department was participated in blended mode in room M122 and M215.

#### Webex Link:

<https://kluniversity.webex.com/kluniversity/j.php?MTID=m89340152ae8bff996601938ac4ea7fae>

#### During his interactive lecture, he discussed on:

- What is Supply Chain?
- Supply Chain Structure – participants – Suppliers supplier, Customer’s customer, service providers
- Supply chain is same as that of Logistics – Concept
- Warehousing and Storage systems
- Why have a Warehouse, Consolidation and Break-Bulk Services with example
- Cross Docking concept and Value-Added services (VAS) concepts
- Order Fulfilment & E-Commerce Logistics
- Warehousing Supply Chain
- Types of Warehouses and warehouse process
- Digital Transformation and its advantages and challenges in implementation



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## Some of the Screen shots / Geo tagged pictures of event attached here

Participants (16)

- CR083 Host, me
- Ratna Prasad Paladugu Presenter + Unverified
- 2200070018 Unverified
- 2520 ME Dr.K.V.Durga Rajesh kluuniversity.in
- A V S Ram Prasad Unverified
- DIWAKAR Unverified
- Dr K V Narasimha Rao Unverified
- Dr PNV BALASUBRAMANYAM Unverified
- Dr S S Rao Unverified

Optimization and Digital Transformation in Warehousing and Supply Chains

Ratna Prasad Paladugu  
PDE, AGCO Corp.

Participants

- CR083
- 2520 ME Dr.K.V.Durga Rajesh kluuniversity.in
- A V S Ram Prasad Unverified
- Ratna Prasad Paladugu Unverified
- PVC Unverified
- sanjay krishna Unverified

What is a Supply Chain?

- In simplest type of Supply Chains, items and services are sourced from suppliers and converted into products and delivered to the customer or end-user.
- Both products and information move forward through the chain.
- In the same way, products and related information move back up the chain.
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- Both products and information move forward through the chain.
- In the same way, products and related information move back up the chain.

Supplier → Manufacturer → Distributor → Retailer → Shopper



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Vaddeswaram, Andhra Pradesh, India

Cjrf+932, K L University, Vaddeswaram, Andhra Pradesh 522303, India

Lat 16.440743° Long 80.62275°

28/02/2025 02:08 PM GMT +05:30

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- Bharath Bharath gmail.com
- DIWAKAR Unverified
- Dr K V Narasimha Rao Unverified
- Dr PNV BALASUBRAMANYAM Unverified

Why have a Warehouse?

**Storage & Inventory Management**

- Warehouses serve as **storage hubs** for raw materials, work-in-progress (WIP) items, and finished goods.
- They help maintain **buffer stock** to manage demand fluctuations.
- Advanced **Warehouse Management Systems (WMS)** track inventory levels, locations, and movement.
- Example: Amazon uses **AI-driven inventory tracking** to optimize warehouse space and minimize overstocking.



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The screenshot shows a video conference interface with a presentation slide titled 'Warehouse Process'. The slide details the flow of goods through a warehouse, from 'Receive' to 'Put Away', 'Store', 'Pick', and finally 'Pack, Ship'. The process is divided into 'Inbound' (Receive, Put Away, Store) and 'Outbound' (Pick, Pack, Ship) phases. The 'Inbound' phase accounts for 10% of the process, while 'Outbound' accounts for 20%. The slide also lists characteristics of warehouse operations, such as being labor-intensive and having smaller units of measure.

Alumni Guest Lecture on 28-02-2025 Meeting Info

CR083 Ratna Prasad Paladugu PVC sanjay krishna DIWAKAR S.Ramesh kumar

Viewing Ratna Prasad Paladugu's applications 100%

Warehouse Process

10% 15% 55% 20%

Receive Put Away Store Pick Pack, Ship

Inbound Outbound

- Warehouse controls the operation
- Unit of measure is larger
- Pace is slower
- Customer drives the operation
- Most labor-intensive
- Unit of measure is smaller (usually)
- Pace is decided by customer and truck departures
- Urgency to get order to customer ASAP
- Customer satisfaction depends on delivery time

Unmute Start video

Unmute Start video

14:33 28-02-2025





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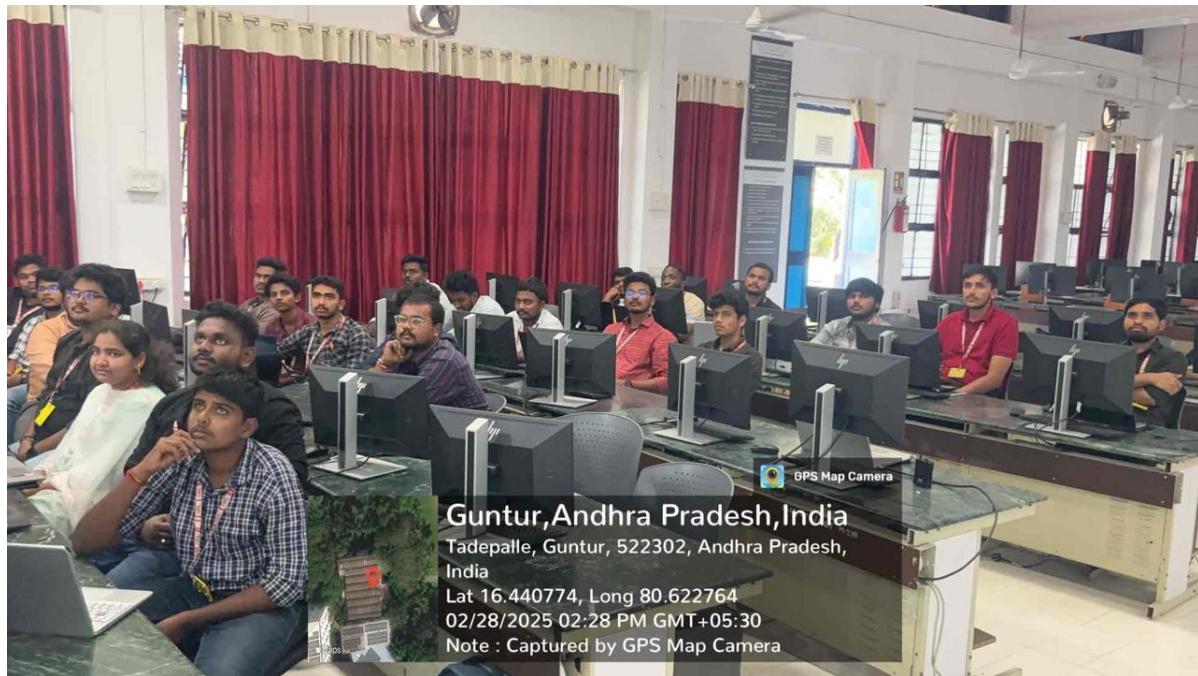
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CR083 Ratna Prasad Paladugu PVC sanjay krishna

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- Dr. G.Yedukondalu Unverified

Unmute Start video Mute all Unmute all 14:43 28-02-2025 ENG IN

Successful Case Studies

The Orion System From UPS

One of the most prominent package delivery firms in the world, UPS, used the Orion system for on-road integrated optimization and navigation. Orion optimizes UPS drivers' delivery routes using AI and machine learning. UPS has significantly cut fuel consumption and greenhouse gas emissions by lowering idle time; unwanted left turns, and distance. Additionally, the method improves customer service by offering more precise delivery windows.

TradeLens From Maersk

Global container shipping business Maersk and IBM worked together to develop TradeLens, a blockchain-based platform for international commerce. TradeLens offers complete supply chain visibility, which decreases paperwork, boosts transparency, and guards against fraud. The platform has been used by several shipping lines and logistical firms, improving the effectiveness of global commerce.



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Participants (16)

- Unverified
- Dr K V Narasimha Rao
- Unverified
- Dr. G.Yedukondalu
- Unverified
- hareeswar
- Unverified
- Karimulla Syed
- Unverified
- pratap
- Unverified
- PVC
- Unverified
- Ratna Prasad Paladugu
- Unverified
- S.Ramesh kumar
- Unverified
- sanjay krishna
- Unverified

Mute all Unmute all

Alumni Guest Lecture on 28-02-2025 Meeting Info

CR083 S.Ramesh kumar sanjay krishna Dr K V Narasimha Rao 2200070018 DIWAKAR

Open participants panel

Few students asked questions and interacted with speaker and then Dr. K. V. Durga Rajesh delivered Vote of Thanks to the speaker.

**Prepared by**

**(Dr. A.V.S Ram Prasad)**

**Approved by**

**(Dr. T. Vijaya Kumar)**