ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

ENVISION LAB

WEBINAR ON "LOW COST AUTOMATION"

FROM:

IGUS INDIA PVT. LTD

ON

28/07/2023

@

2 PM

WELCOME TO WEBINAR

LCA & LIVE APPLICATIONS

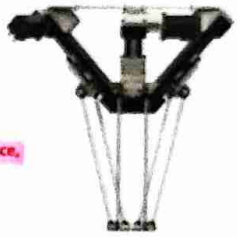
Join us for an exciting Webinar on LCA & Applications organized by AIET, Moodbidre a renowned institution dedicated to excellence in Engineering and research on 28/8/2023 at 2 PM With its state of art infrastructure and a strong focus on nurturing talented individuals, AIET is committed to shaping the future of Engineering

Rebel Robots:
Payload -2kg
Reach - 664mm
Application: R&D, Service robots.

RoboLink:
Payload -3 kg
Reach – 730mm
Application: Pick & place.

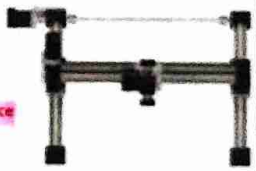
In Association with igus India Pvt Ltd, with its expertise in motion plastics and innovative solutions, this event promises to bring together the best minds in the industry and academia. Igus India Pvt Ltd, a global leader

The event aims to explore the latest advancements in Life Cycle Assessment and its practical applications, providing a platform for participants to gain deep insights into sustainable engineering practices. With a diverse range of sessions, and discussions, attendees will have the opportunity to connect with experts, exchange ideas, and expand their knowledge in this rapidly evolving field.



Delta robot:
Payload -5kg
Reach – 660mm
Application: Pick & place, Sorting

Scara robot:
Payload -5kg
Reach – 660mm
Application: Pick & place



Gantry robot:
Payload -10kg
Reach – 3*3*1m
Application: Pick & place

Don't miss out on this incredible learning and networking opportunity. Mark your calendars and be a part of LCA & APPLICATIONS at AIET, Moodbidre, known for its academic excellence and commitment to innovation, in association with igus India Pvt. Ltd., known for its innovative solutions.*

igus

1

Gmail

Vignyana Taranga <shwethag0329@gmail.com>

igus REBEL with Automated guided vehicle

2 messages

Ragesh Kumar <rkumar@igus.net>
To: Vignyana Taranga <shwethag0329@gmail.com>
Cc: Rajashekar Gowda <rgowda@igus.net>

9 August 2023 at 09:33

Dear Madam,

Hope you are doing well.

I would like to inform you that we have got feedback from Germany about REBEL (6 axis COBOT) with AGV. We have offered only the Robot and the integrator from Germany has used their controller for integrating with AGV.

Please see the image for your reference. We are looking forward to hear from you.

Thanking You !

Mit freundlichen Grüßen / Best Regards,

G.Ragesh Kumar

Product Manager – Low Cost Automation

Chat using MS Teams

igus®(India) Private Limited
36/1, Sy. No. 17/3, NCPR Layout, Euro School Road,
Dodda Nekkundi Industrial Area - 2nd Stage
Mahadevapura Post
Bangalore – 560048
Karnataka, India

CIN: U29130KA2000PTC036289

GSTIN: 29AAACI7545P1ZV

Hi Madam,

Please find attached the Profile & agenda of the webinar as mentioned below.

Please let us know if this is okay.

Agenda:

- About igus India Pvt Ltd – 3 minutes - Ragesh / Rajashekhar Gowda
- Introduction of Low-Cost Automation – 5 min – Ragesh Kumar
- Introduction of REBEL – Sascha Mias– 10 min.
- Importance of LCA – 5 min – Ragesh
- Live Demonstration CTA LIVE FROM BANGALORE– Robolink, Delta – 10 min
- Igus Education kit – 8 different configuration by Ragesh – 5 min
- Industrial Application – By Nirmal – 10 min
- iRC programming – by Balaji – 5 min
- Q&A – 7 min
- Thank you Note

Thanking You !

Mit freundlichen Grüßen / Best Regards,

G.Ragesh Kumar

Product Manager – Low Cost Automation

Chat using MS Teams

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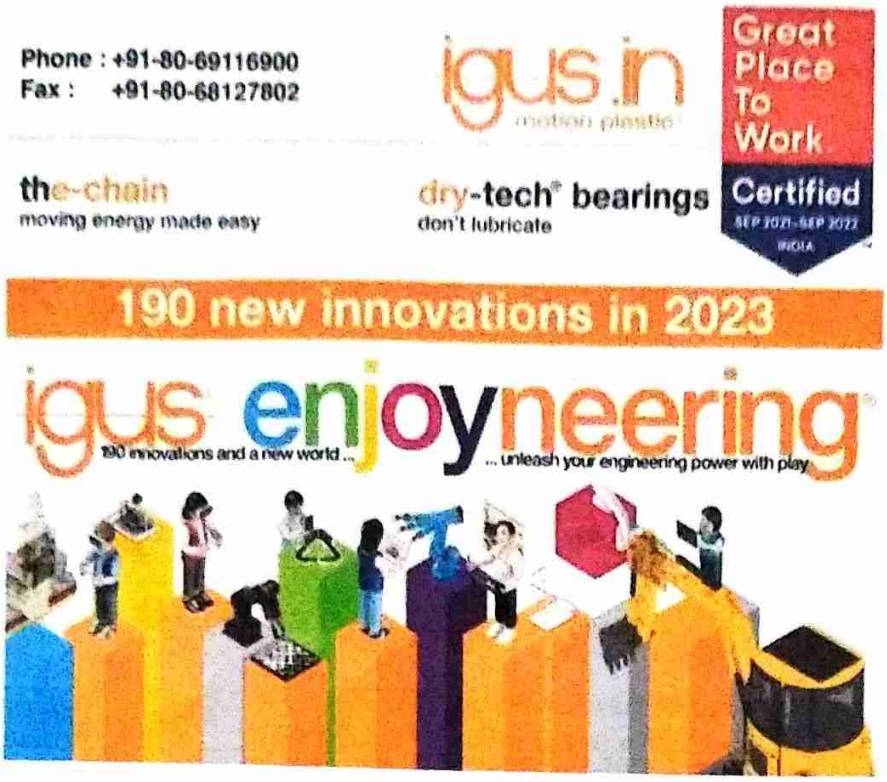
For more details visit us @ https://www.igus.in/

For a guided tour to our virtual booth click here

For a virtual tour of the igus factory click here

Phone : +91-80-69116900
Fax : +91-80-68127802



From: Vignyana Taranga <shwethag0329@gmail.com>
Sent: Tuesday, July 25, 2023 9:19 PM
To: Ragesh Kumar <rkumar@igus.net>
Subject: [EXT] Re: igus Low Cost Automation Webinar for Alva's Institute of Engineering & Technology (AIET)

Dear Sir,

We are feasible with this timmings. Please share the short profile of resource person and coordinators.

And also please share me the agenda.

Regards

Mrs. Shwetha Guruprasad

On Tue, 25 Jul 2023 at 15:59, Ragesh Kumar <rkumar@igus.net> wrote:

> Dear Madam,
>
> Thank you for your call & confirming Online Webinar for Low Cost Automation.
>
> I had a call with my German colleague Mr.Sascha Mais who is international sales manager for LCA, he is also available live from Germany on Friday. We would like to do a webinar for Low Cost Automation on 28/7/2023 from 2 to 3 PM.

Agenda

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Education Foundation®

+

- About igus India Pvt Ltd – 3 minutes - Ragesh / Rajashekhar Gowda
- Introduction of Low-Cost Automation – 5 min – Ragesh
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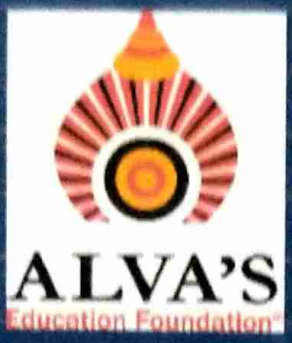
- igus Education kit – 8 different configuration by Ragesh – 5 min
- Industrial Application – By Balaji – 10 min
- iRC programming – by Balaji – 5 min
- Q&A – 7 min
- Thank you Note

Introduction

- Founded 1964
- 4150 employees
- 35 subsidiaries worldwide
- 10000 motion plastics products....

- Founded 1998
- 160 employees
- 25 locations across India with 60+ engineers
- 150000 + Customers across India



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ENVISION LAB – TECHNICAL TALK REPORT

MAY-2023

ENVISION LAB REPORT

Alvas Institute of Enginnering and Technology

ENVISION LAB

TECHNICAL TALK ON "ADDITIVE MANUFACTURING AND ITS APPLICATIONS

By

Dr. Roopa S

Associate Professor

JSSSTU, Mysore

On

27th May 2023

@

11 a. m

Venue:

Civil Department Seminar hall

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Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., KarnatakaPh: 08258-262725;
Mob:722262724,7026262725,mail:principalaiet08@gmail.com

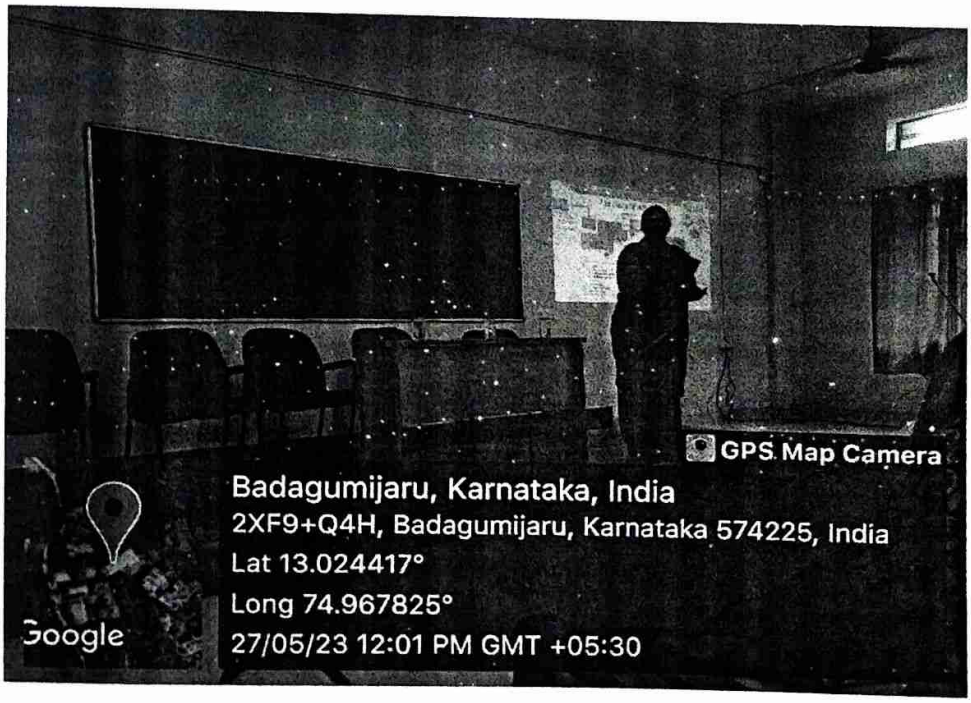
ENVISION LAB

Report On Technical Talk On "Additive Manufacturing And Its Applications" by Dr. Roopa S

Date of event: 27/05/2023
Venue: Alva's Civil Department Seminar Hall
Time: 11 am to 12.30 pm
Participants: Around 100 engineering students and faculty members

Introduction: The purpose of this report is to summarize a technical talk on "Additive Manufacturing and Its Applications" delivered to engineering students. The talk aimed to provide an overview of additive manufacturing, commonly known as 3D printing, and highlight its diverse applications in various engineering fields

Overview of Additive Manufacturing: The talk commenced with an introduction to additive manufacturing. It explained that additive manufacturing is a process of creating three-dimensional objects by layering materials based on a digital model. Unlike traditional subtractive manufacturing techniques, such as cutting or machining, additive manufacturing builds objects layer by layer, offering greater design flexibility and customization.



Key Principles of Additive Manufacturing: The speaker discussed the key principles underlying additive manufacturing.

a. Digital Design: The process begins with a digital model of the object, created using computer-aided design (CAD) software or obtained from a 3D scan.

b. Layer-by-Layer Construction: The object is divided into cross-sectional layers, and the printer adds material layer by layer, fusing or curing it to create the final product.

c. Material Selection: Additive manufacturing employs a wide range of materials, including plastics, metals, ceramics, and composites, depending on the application requirements.

d. Post-Processing: After printing, the object may require post-processing steps, such as curing, polishing, or painting, to achieve the desired final properties and appearance.

- Applications of Additive Manufacturing: The talk explored the extensive applications of additive manufacturing in various engineering domains:

a. Prototyping: Additive manufacturing enables rapid prototyping, allowing engineers to quickly produce and test designs before committing to large-scale production.
b. Aerospace: The aerospace industry utilizes additive manufacturing for lightweight and complex component production, reducing material waste and improving fuel efficiency.
c. Biomedical Engineering: Additive manufacturing plays a crucial role in creating patient-specific medical devices, prosthetics, implants, and even human tissue scaffolds.
d. Automotive: Additive manufacturing finds applications in automotive manufacturing for producing lightweight parts, custom components, and specialized tools.

e. Architecture and Construction: Large-scale 3D printers can create complex architectural models, building components, and even entire structures using various materials.
f. Consumer Products: Additive manufacturing allows for personalized and customizable consumer products, including jewelry, fashion accessories, and home decor.
g. Electronics: Additive manufacturing techniques are used to fabricate electronic components, circuit boards, and even functional prototypes of devices.

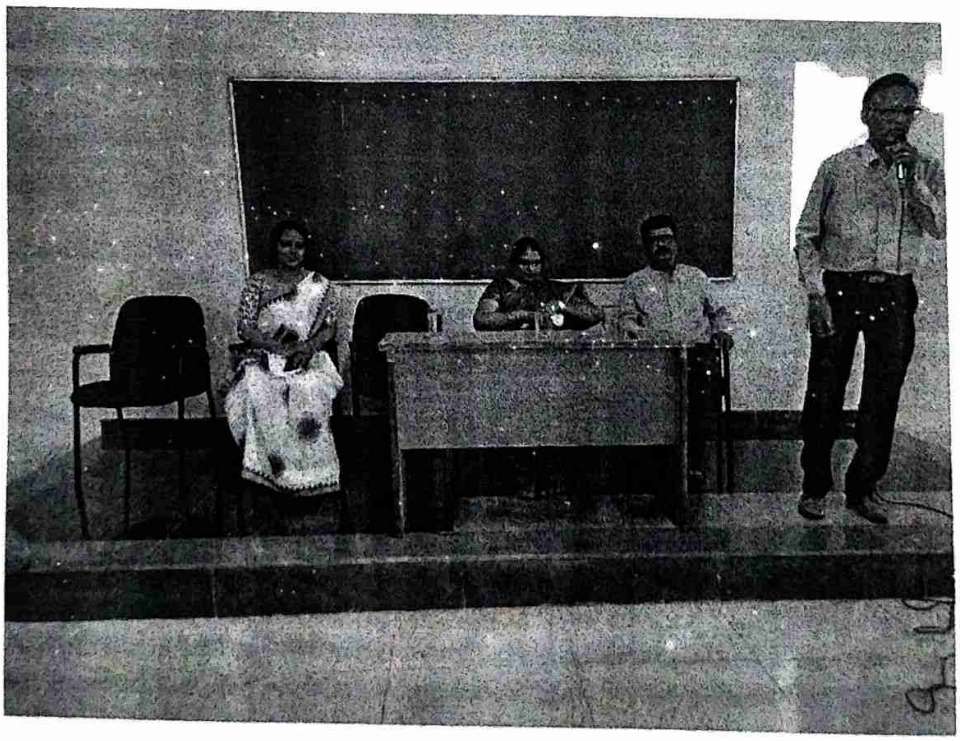
- Advantages and Limitations: The talk discussed the advantages and limitations of additive manufacturing:

a. Advantages:

- Design Flexibility: Complex geometries and intricate designs can be easily fabricated.
- Rapid Prototyping: Accelerated product development and reduced time-to-market.
- Customization: Tailoring products to specific user needs or preferences.
- Material Efficiency: Reduced material waste compared to traditional manufacturing.
- On-Demand Manufacturing: Cost-effective production of low-volume or niche products.

b. Limitations:

- Limited Material Selection: Certain materials may not be suitable for additive manufacturing.
- Size Constraints: Large-scale objects may pose challenges due to printer size limitations.
- Surface Finish: Achieving high-quality surface finish may require additional post-processing.
- Cost: Initial setup costs and material expenses can be relatively high.



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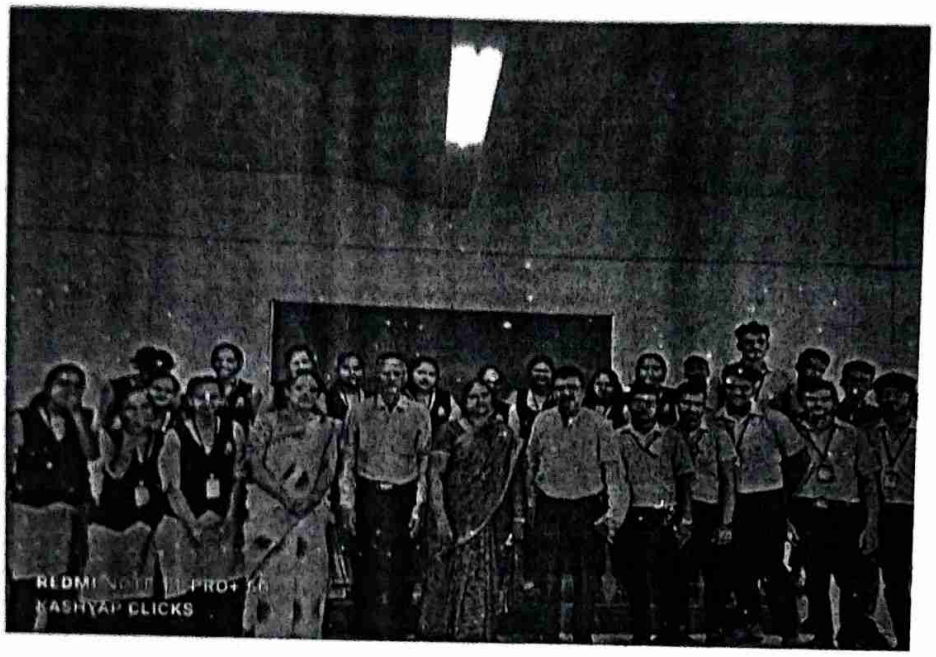
Mob:722262724,7026262725,mail:principalaiet08@gmail.com



Outcome: The technical talk on additive manufacturing provided engineering students with a comprehensive understanding of the principles, applications, advantages, and limitations of this transformative technology. By exploring various industries benefiting from additive manufacturing, the talk aimed to inspire students to leverage its potential in their future engineering careers.

Mrs. Shwetha M.S
Faculty Coordinator
Envision Lab of AIET

PRINCIPAL
PRINCIPAL
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

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Mob:722262724,7026262725,mail:principalaiet08@gmail.com

25/05/2023

To,
Mr. Vivek Alva
Managing Trustee
Alvas Education Foundation
Moodbidri

Through
The Principal
AIET, Moodbidri

Respected Sir,

SUB: approval of budget for the technical talk by Dr. Roopa on 27th May 2023 from ENVISION LAB of AIET reg.

As a part of **ENVISION LAB**, planned to conduct technical talk on 27th May-2023 on "Additive Manufacturing and its applications" by the external resource person **Dr. Roopa,** Associate Professor from JSS University (formerly SJCE), Mysore. In this regard the budget is set for resource person's travel plan, commercials and miscellaneous expenditure for the event. We request you to kindly approve for the same.

Sl no	Particulars	Description	Amount
1.	Bus ticket for resource person	Mysore to Moodbidri 27th May 2023	1000/
2.	Cottage	One day stay for resource person	As per norms of AEF
3.	Bus ticket for resource person	Moodbidri to Mysore 28th May 2023	1000/
4.	Remuneration	Remuneration for resource person	2500/
5.	Momentum	One momentum for resource person	---

ENVISION LAB Coordinator

Mrs.Shwetha M.S
Dept of ECE
AIET

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DEPARTMENT OF MECHANICAL ENGINEERING

Title of the talk : ADDITIVE MANFACTURING & ITS IMPORTANCE

Date : 27/05/2023 time : 10:00 AM-11:00 AM mode : OFFLINE

Semester : 6th semester

Sl no.	Name	USN	Sign
1	ADHWITH	4AL20ME001	
2	AKSHAR N	4AL20ME002	
3	BABUGOUDA SHANKARAGOUDA	4AL20ME003	
4	CHANDAN BHOSALE	4AL20ME004	
5	CH'RANTH H S	4AL20ME006	
6	DILEEP P R	4AL20ME007	
7	FRISON NIKHIL MARTIS	4AL20ME008	
8	GIRISH B BANNIKOPPA	4AL20ME009	
9	JENNY FERNANDES	4AL20ME011	
10	MANOJ KUMAR KARNAM	4AL20ME012	
11	MANU K N	4AL20ME013	
12	MOHAMMED SWAHID	4AL20ME014	
13	MOHAMMED FAHAD H	4AL20ME015	
14	NAVYASHREE H B	4AL20ME016	
15	PALLAVI P	4AL20ME017	
16	PAVANKUMAR H R	4AL20ME018	
17	RAKSHITH S	4AL20ME019	
18	VARUN S BHANDARY	4AL20ME021	
19	VIGNESH	4AL20ME022	
20	DODDAMALLAIAH	4AL21ME400	
21	RAHUL KUMBAR	4AL21ME401	
22	RAKESH KELAGADE	4AL21ME402	
23	SACHIN RATHOD	4AL21ME403	
24	SANDEEP JARALE	4AL21ME404	

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DEPARTMENT OF MECHANICAL ENGINEERING

Semester : 4th semester

Sl no.	Name	USN	Sign
1	AJITH R	4AL21ME001	
2	AKHIL SHARMA K	4AL21ME002	
3	AKSHAY KRISHNA M	4AL21ME003	
4	CHARAN KUMAR	4AL21ME004	
5	DHARSHITH A	4AL21ME005	
6	MELVIN VINAY SERA	4AL21ME006	
7	MOHAMMAD SWALIH	4AL21ME007	
8	NARAYAN V	4AL21ME008	
9	NAVANEETH H SHETTY	4AL21ME009	
10	NITHIN M	4AL21ME010	
11	PAIGAMBAR S NADAF	4AL21ME011	
12	SHASHWATH R GOWDA	4AL21ME013	
13	SUDESH D SHETTY	4AL21ME015	
14	KARTHIK VISWANATH DHANNUR	4AL22ME401	
15	PRAVEEN VEERAPPA CHAVADI	4AL22ME402	
17	KRISHNA KYADGIHALLI	4AL22ME403	
18	KARTHIK GOWDA B C	4AL22ME400	

Forum Coordinator

HOD
H. O. D.
Dept. Of Mechanical Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

TECHNICAL TALK ON "ADDITIVE MANUFACTURING & ITS IMPORTANCE"

Dept. of Mechanical Engineering

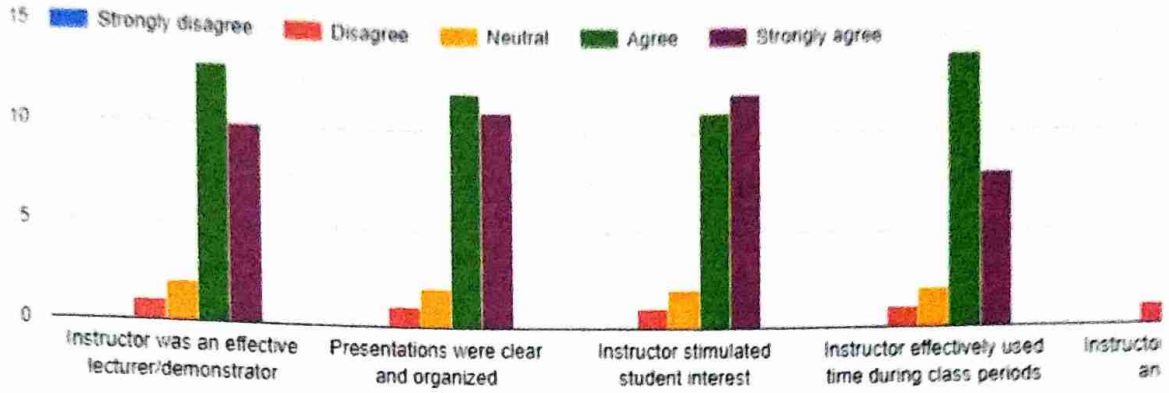
Please submit feedback regarding the course you have just completed, including feedback on course structure, content, and instructor.

Contribution to learning

Copy

Skill and responsiveness of the instructor

Copy



Course content

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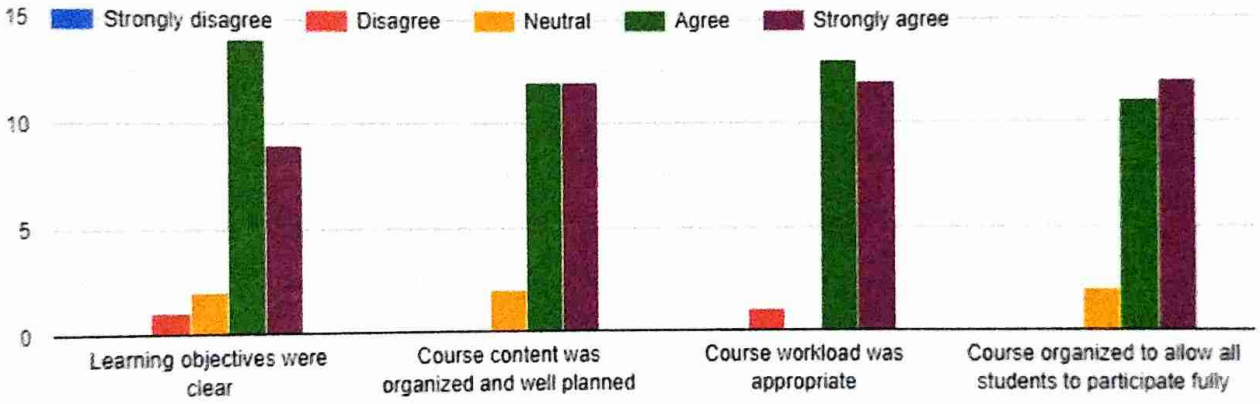

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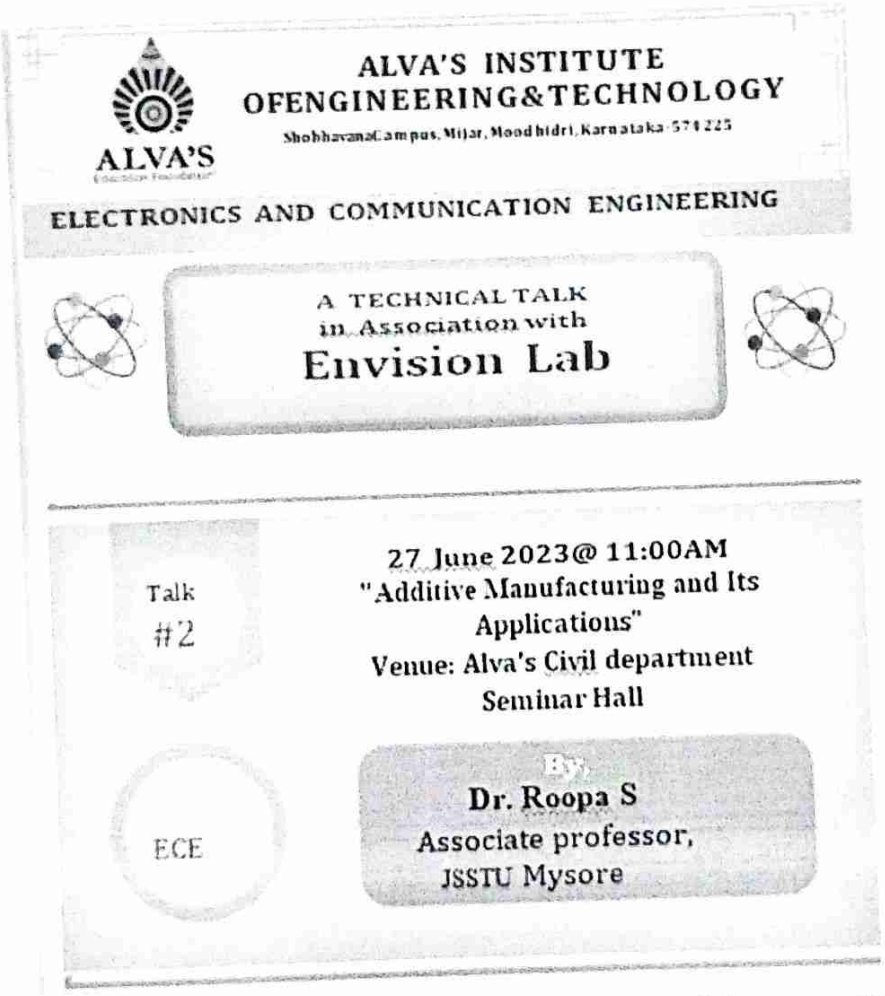
Ph: 08258-262725; Mob:7022262724,7026262725,mail.principalaiet08@gmail.com
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report of Technical Talk-II

Topic: "Additive Manufacturing and its Applications"

Resource Person: Dr. Roopa S
Associate professor, Department of Polymer Science and Technology, JSSTU Mysore

Date: 27-05-2023 **Time: 11:00AM to 12:30 PM.**



Department of ECE in Association with Envision Lab conducted the second technical talk of the even semester 2022-23 on **"Additive Manufacturing and Its Applications"** by **Dr. Roopa S,** Dept. of ECE JSSSTU Mysore on 27/5/2023 .

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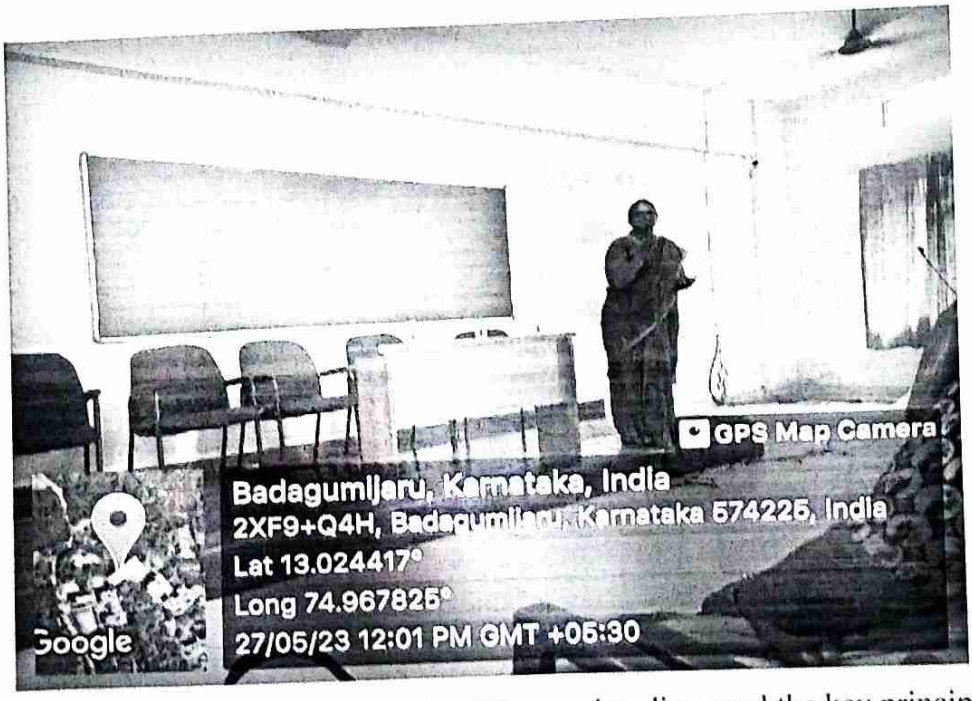
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Resource person for the talk was **Dr. Roopa S,** Associate professor, Department of Polymer Science and Technology, JSSSTU Mysore. She has teaching experience more than 25 years. She guided UG and PG projects. She is - Life Member of Indian Society for Technical Education (ISTE), New Delhi, Associate Member of Indian Rubber Institute, Life Member - Indian plastic Institute. She published papers in 12 international journals and contributed papers in 18 conferences.

The talk aimed to provide an overview of additive manufacturing, commonly known as 3D printing, and highlight its diverse applications in various engineering fields. The talk commenced with an introduction to additive manufacturing. It explained that additive manufacturing is a process of creating three-dimensional objects by layering materials based on a digital model. Unlike traditional subtractive manufacturing techniques, such as cutting or machining, additive manufacturing builds objects layer by layer, offering greater design flexibility and customization.



Key Principles of Additive Manufacturing: The speaker discussed the key principles underlying additive manufacturing

a. Digital Design: The process begins with a digital model of the object, created using computer-aided design (CAD) software or obtained from a 3D scan.

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Applications of Additive Manufacturing:

The talk explored the extensive applications of additive manufacturing in various engineering domains:

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c. Biomedical Engineering: Additive manufacturing plays a crucial role in creating patient-specific medical devices, prosthetics, implants, and even human tissue scaffolds.

d. Automotive: Additive manufacturing finds applications in automotive manufacturing for producing lightweight parts, custom components, and specialized tools.

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- Material Efficiency: Reduced material waste compared to traditional manufacturing.
- On-Demand Manufacturing: Cost-effective production of low-volume or niche products.

Limitations:

- Limited Material Selection: Certain materials may not be suitable for additive manufacturing.
- Size Constraints: Large-scale objects may pose challenges due to printer size limitations.
- Surface Finish: Achieving high-quality surface finish may require additional post-processing.
- Cost: Initial setup costs and material expenses can be relatively high.

Finally Dr. Siddesh HOD, dept. of ECE expressed gratitude for giving such an informative talk to the students.

The technical talk on additive manufacturing provided engineering students with a comprehensive understanding of the principles, applications, advantages, and limitations of this transformative technology. By exploring various industries benefiting from additive manufacturing, the talk aimed to inspire students to leverage its potential in their future engineering careers.