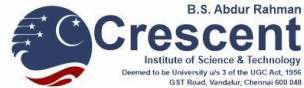


AICTE SPONSORED ATAL FDP
on
3D Printing in Industry 4.0

Organized by
School of Mechanical Sciences
B.S. Abdur Rahman Crescent
Institute of Science and Technology

Blended Mode

05th to 16th December, 2022



Name of the programme	FDP on 3D Printing in Industry 4.0
Date	05.12.2022 to 16.12.2022 (Two weeks, Blended Mode)
No. of Participants	50
Nature of participants	Faculty members from various institutions in and around Chennai.

Coordinators:

Dr. P.D. Jeyakumar, Asso. Prof. & Head, Department of Automobile Engg.

Dr. A. Arockia Julias, Assist.Prof. (Sr.), Department of Mechanical Engg.

Conveners:

Dr. A. S. Selvakumar, Professor & Dean i/c, School of Mechanical Sciences

Dr. H. Siddhi Jailani, Professor & Head, Department of Mechanical Engineering

FDP on 3D Printing in Industry 4.0

Permeable:

The FDP on **3D Printing in Industry 4.0** was sponsored by AICTE through the ATAL scheme. An amount of **Rs 3 Lakhs was sanctioned** for this program. The workshop was organized by the school of **Mechanical sciences**. The FDP was conducted in blended Mode. Online sessions were conducted in the evening from 7 to 9.30 PM during the first week using Zoom platform. Physical session were conducted in the campus during the second week.

The resource persons identified are experts in the field from eminent institutions like IIT, IIITDM, CSIR-CLRI, VIT, SRM, Crescent and Industries like TVS Sensing Solutions, Einel Technologies and Monotech systems.

The participants registered for the FDP in the ATAL portal. 50 participants from more than 100 enrolled were shortlisted and approved to attend the FDP. The FDP was successfully completed by 29 participants who attended minimum 80 % of the sessions and score more than 70 % marks in the continuous comprehensive assessment conducted as per AICTE guideline. E-certificates were issued for these participants through AICTE ATAL portal.

The major learnings of the participants are various types of 3D printing, printing materials, and machines, metal additive manufacturing, Industrial approach for 3D printing, impact of 3D printing in the industry and startup ecosystem, development of new materials for 3D printing, fabricating their own FDM machines. They also learned the basics of Industry 4.0, IOT, AI, ML and the integration of Industry 4.0 and 3D Printing. Application of 3D printing in various fields including human implants. They got hands on training in developing CAD models, configuration of models in slicing software Ultimaker cura, setting up the FDM 3D printing machine and printing of components.

It was a great Initiative by ATAL Academy. I am thankful to AICTE for giving me this opportunity and funds to conduct the blended (online, offline) FDP for faculty members of technical institute. We received good response for registration as well as appreciations from participants for conducting this program successfully.

Brochure:

ABOUT THE COURSE

We are standing on the threshold of another industrial revolution known as Industry 4.0. 3D printers are expected to play a significant role in this digital transition as their speed, reliability, safety, and quality of 3D printed parts improve, and their cost decreases. As the performance and communication of 3D printers improves new opportunities will arise that will take 3D printing even closer to mass production. The range of things that can be made will expand as 3D printing advances. The adoption of 3D printers in Industry 4.0 will be boosted by the rapid development of specialised printing materials, the integration of digital security, and regulatory agency certification of 3D products.

This faculty development program will equip with knowledge and hands-on training on this current trend by interacting with experts in the field and working on 3D printers.

ABOUT ATAL

The Government of India in association with All India Council for Technical Education (AICTE) launched the AICTE Training and Learning (ATAL) academy with a vision to empower faculty to achieve goals of Higher education such as access and quality. ATAL Academy has started unique faculty development programs in various thrust areas of modern technology. More than 1,500 such programs have already been conducted in various AICTE approved institutions benefiting around 1,15,000 faculties, research scholars & PG students.

EXPECTED PARTICIPANTS

- Faculties, Research Scholars, PG Scholars from AICTE approved institutions, participants from Government organisations and Industry are eligible.
- No registration fee for participants.
- TA / DA will be not paid to any participant.
- Number of participants is limited to 50 from the same city.
- Participants will be selected on first - come first - serve basis.
- Selected candidates will be intimated by e-mail
- Confirmation of participation by email is compulsory.
- Participants attending the programme should get authorization certificate signed by Head of the institution.

PATRON
Dr. A. Peer Mohamed, Vice-Chancellor

CO-PATRON
Dr. N. Raja Hussain, Registrar


CONVENER
Dr. A.S. Selvakumar, Dean(i/c) SMS
Dr. H. Siddhi Jailani, HOD Mechanical

COORDINATOR
Dr. P.D. Jeyakumar, Asso. Prof., HOD Automobile
Dr. A. Arockia Julius, Asst. Prof, Mechanical

RESOURCE PERSONS


Experts in this field from academia & industry such as IIT, IIITDM, CIPET, Anna University, VIT, Crescent and Mono Tech. systems.

PREVIOUS WORKSHOPS CONDUCTED
Online AICTE ATAL FDP on 3D Printing & Design



Components Manufactured using 3D Printer

How to build your own 3D Printer




Two Weeks
BASIC AICTE ATAL FDP
on
3D Printing in Industry 4.0
05th to 16th December, 2022
Blended Mode



Organized by
School of Mechanical Sciences
B.S. Abdur Rahman
Crescent
Institute of Science & Technology
Dedicated to be University on 3 of the UGC Act, 1956
O-27 Block, Vandalur, Chennai - 600 048

Sponsored by
AICTE Training & Learning (ATAL) Academy



ABOUT THE INSTITUTION



B.S. Abdur Rahman Crescent Institute of Science & Technology (Est. u/s 3 of the UGC Act, 1956, India), formerly Crescent Engineering College is acclaimed throughout India for its quality in teaching and research. The institution is committed to focus on three dimensions of higher education Viz., quality teaching, innovative research and appropriate applications of knowledge through extension, outreach and consultancy activities. The institution is located on the Chennai - Trichy National Highway, 7km from Tambaram and 2km from Vandalur Railway Station and 17km from the Chennai International Airport.

ABOUT SCHOOL OF MECHANICAL SCIENCES



The school of Mechanical Sciences comprises of Departments of Mechanical Engineering, Aerospace Engineering, Automobile Engineering, and Polymer Engineering.

The Department of **Mechanical Engineering** was established in 1984 and offers B.Tech., M.Tech. CAD/CAM and Ph.D - Full Time/ Part Time programs.

The Department of **Aerospace Engineering** offers B. Tech., M. Tech (Avionics) and Ph.D - Full Time/Part Time programs.

The Department of **Automobile Engineering** offers B. Tech. and Ph.D - Full Time/Part Time programs.

All the undergraduate Programs offered by the School are accredited by the National Board of Accreditation.

COURSE CONTENT

- The Role of 3D Printing in Industry 4.0
- Industry 4.0 Concepts and Principles
- Additive Manufacturing and Industry 4.0 integration
- Industry 4.0 Processes, Materials, and Applications
- 3D Printers for Digital Manufacturing
- Data Driven 3D Printing
- 3D Printing of Nano Composites
- Create a design for 3D printing
- Industry 4.0-enabled 3D printing demonstration
- Practical experience with a 3D printer

VENUE

Conference Hall,
Department of Mechanical Engineering,
B.S. Abdur Rahman Crescent Institute of Science & Technology, Vandalur, Chennai - 600 048.

DATES TO REMEMBER

Last date for Registration : 28.11.2022
Intimation of Selection : 30.11.2022
Confirmation by Participants : 02.12.2022

Week 1: Online sessions using Google Meet.
Week 2: Regular Mode in the Campus

REGISTRATION

Registration has to be done only through ATAL academy.
Please visit:
<https://atalacademy.aicte-india.org/login>.

CERTIFICATE

E-certificate will be provided by ATAL Academy through their website after successful completion of FDP. Minimum 80% attendance and overall 70% marks in continuous comprehension assessment is required to earn certificate.



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REGISTRATION FORM
Two Weeks
BASIC AICTE ATAL FDP
on
3D Printing in Industry 4.0
05th to 16th December, 2022

Full Name :
Designation :
Organization :
Address :
Mobile :
E-mail :

Food Preference Veg. Non-Veg.

Declaration
I agree to abide by the rules and regulations governing the conduct of two weeks workshop under AICTE Training & Learning (ATAL) Academy.
Date :
Place : Signature of the Applicant

Authorization Certificate
This is to certify that is regular employee/Research Scholar of our institution and is hereby permitted to attend the two weeks ATAL FDP at Dept. of Mechanical Engg., B.S. Abdur Rahman Crescent Institute of Science & Technology, Chennai.
Date :
Place : Signature of the HOD/Principal
With seal

CONTACT DETAILS
Dr. P.D. Jeyakumar, Asso. Prof., HOD Automobile
Dr. A. Arockia Julius, Asst. Prof., Mechanical
School of Mechanical Sciences,
B.S. Abdur Rahman Crescent Institute of Science & Technology,
Vandalur, Chennai - 600 048.
Mobile: 94441 83049. E-mail: ajuilius@crescent.education

The two weeks AICTE sponsored faculty development program was conducted from 5th to 10th December 2022 in online mode and 12th to 16th December 2022 in offline mode. 50 participants from nearby institutions registered for the program and attended. Eminent speakers from IIT, IIITDM, CSIR and other institutions delivered lecture during the two weeks program:

Expert	Designation	Specialization
<p>Dr. J. Ramkumar</p> 	<p>Professor Department of Mechanical Engineering and Design IIT Kanpur</p>	<p>Product Development, Micro and Nano machining Tribology, composite, Manufacturing Process modeling</p>
<p>Dr. M. Sugunalakshmi</p> 	<p>Sr. Principal Scientist CSIR – CLRI Chennai</p>	<p>3D Printing technologies for polymers, Additive Manufacturing Technologies for Footwear</p>
<p>Dr. V. Balaji</p> 	<p>President, TVS Sensing Solutions Pvt. Ltd., Madurai.</p>	<p>Industry 4.0, Internet of Things, Strategy planning, Industrial Engineering, New product development</p>
<p>Dr. S. J. Thiruvengadam</p> 	<p>Professor, Thiagarajar College of Engineering, Madurai.</p>	<p>NEP 2020 Signal Processing</p>
<p>Dr. K. Senthil Kumaran</p> 	<p>Assistant Professor, Dept. of Mechanical Engineering, IIITDM Kancheepuram.</p>	<p>Additive Manufacturing, Sustainable Manufacturing, Smart Manufacturing</p>

<p>Dr. G. Dan Sathiyaraj</p> 	<p>Assistant Professor, Dept. of Mechanical Engineering, IIT, Indore</p>	<p>Laser Material Processing, Laser Rapid Manufacturing, Bio Materials fabrication</p>
<p>Dr. S. Shiva</p> 	<p>Assistant Professor, Department of Mechanical Engineering, IIT Jammu.</p>	<p>Additive manufacturing, Laser Surface Processing, Smart Materials</p>
<p>Dr. J. Al Muzzamil Fareen</p> 	<p>Asst. Professor, Department of English IIITDM Jabalpur</p>	<p>Language, Literature & Communication Studies</p>
<p>Dr. T. Vijayakumar</p> 	<p>Meditation Trainer & Head, Centre for Value Based Education, Delhi Technological University</p>	<p>Meditation Trainer Heartfulness center</p>
<p>Dr. R. Rajendran</p> 	<p>Professor, Dept. of Automobile Engineering. SRM IST, Kattankulathur, Chennai.</p>	<p>Research Methodology Materials and Metallurgy Surface Engineering</p>
<p>Dr. J. M. Jafferson</p> 	<p>Associate Professor School of Mechanical sciences VIT Chennai</p>	<p>Additive Manufacturing, Light weight applications, New product development</p>

 Mr. G. Albert Einstein	CEO, Einel Technologies, Chennai	AI & Machine learning Product development Computer Aided Engineering
 Mr. P. J. Srikanth	Manager 3D Application, Monotech Systems Ltd, Chennai	Product development using various 3D Printing, Additive manufacturing
 Dr. M. Thirumurugan	Associate Professor, Department of Mechanical Engg., B S A R Crescent IST Chennai	3D Printing Materials & Metallurgy Composite Materials

Schedule of the program followed is as given below.



BASIC ACTE ATAL FDP on **3D Printing in Industry 4.0** from 5th to 16th December 2022
 Department of Mechanical Engineering, B S Abdur Rahman Crescent Institute of Science & Technology
 Programme Schedule

Week 1 – Online (7.00 pm – 9.30 pm)

Online Session Link: <https://us06web.zoom.us/join/register/tZMvdOmtqisqEtO7-6TREiexVJk3TExrwdwN>

Date / Session	Slot I (7.00 – 7.50)	Slot II (8.00 – 8.50)	Slot III (9.00 – 9.30)
05.12.22	1. Role of 3D Printing in Industry 4.0 Dr. J. Ramkumar IIT Kanpur	1. Role of 3D Printing in Industry 4.0 Dr. J. Ramkumar IIT Kanpur	Interaction with the Expert
06.12.22	2. Meditation: A Tool for Stress Management Dr. T. Vijayakumar Delhi Technological University	2. Meditation: A Tool for Stress Management Dr. T. Vijayakumar Delhi Technological University	Interaction with the Expert
07.12.22	3. Industry 4.0 Concepts and Principles Dr. V. Balaji, TVS Sensing Solutions Pvt. Ltd, Madurai	3. Industry 4.0 Concepts and Principles Dr. V. Balaji, TVS Sensing Solutions Pvt. Ltd, Madurai	Interaction with the Expert
08.12.22	4. National Educational Policy 2020 Dr. S. J. Thiruvengadam, Thiagarajar College of Engineering	4. National Educational Policy 2020 Dr. S. J. Thiruvengadam, Thiagarajar College of Engineering	Interaction with the Expert
09.12.22	5. 3D Printing of Metals Dr. S. Shiva, IIT Jammu.	5. 3D Printing of Metals Dr. S. Shiva, IIT Jammu.	Interaction with the Expert
10.12.22	6. Indian values & ethos, Teaching learning psychology Dr. J. Al Muzzamil Fareen IIITDM Jabalpur	6. Indian values & ethos, Teaching learning psychology Dr. J. Al Muzzamil Fareen IIITDM Jabalpur	Week 1 MCQ



BASIC AICTE ATAL FDP on 3D Printing in Industry 4.0 from 5th to 16th December 2022
Department of Mechanical Engineering, B S Abdur Rahman Crescent Institute of Science & Technology
Programme Schedule

Week 2 – offline (9.30 am – 5.15 pm)

Venue: Department of Mechanical Engineering, BSA Crescent IST, Vandalur, Chennai 600048

Date / Session	Slot I (9.30 – 12.00)	Slot II (12.00 – 1.00)	Slot III (2.00 – 4.00)	Slot IV (4.00 – 5.15)
12.12.22	Inauguration (9.30 – 10.00) 7. Additive Manufacturing Enablers for Industry 4.0 Dr. K. Senthil Kumaran IIITDM Kancheepuram	Demonstration of 3D printing Machine Mr. M. Balasrinivasan BSAR Crescent IST	8. 3D Printing Techniques and its applications, Dr. M. Sugunalakshmi, CSIR - CLRI	Teaching Practice Session 1 CAD Model for 3D printing Mr. M. Balasrinivasan BSAR Crescent IST
13.12.22	Industrial Visit to Monotech Systems Ltd	Travel Back from Industry	9. Build your own 3D Printing Machine Dr. M. Thirumurugan, BSAR Crescent IST	Visit Report
14.12.22	10. Integration of 3D Printing & Industry 4.0 Mr. Srikanth P J Monotech Systems Ltd	Teaching Practice Session 2 Slicing for 3D printing Mr. M. Balasrinivasan BSAR Crescent IST	11. Large format 3D Printing Dr. J. M. Jafferson VIT Chennai	Article 1 Discussion
15.12.22	12. Research Methodology Dr. R Rajendran SRMIST	Teaching Practice Session 3 3D Printing of Component Mr. M. Balasrinivasan BSAR Crescent IST	13. AI & ML in Industry 4.0 Mr. G. Albert Einstein, Einel Technologies	Article 2 Discussion
16.12.22	14. 3D Printing of Novel Metal Alloys Dr. Dan Sathiyaraj IIT, Indore	Visit to Crescent Innovation and Incubation Centre for Start-up exposure	Reflection Journal, MCQ & Reports	Feedback & Valediction

Chief Patrons:

Mr. BSA Arif Buhary Rahman, Chancellor
Mr. Abdul Qadir Abdul Rahman Buhari, Pro-Chancellor

Patrons:

Dr. T. Murugesan, Pro Vice-Chancellor
Dr. N. Raja Hussain, Registrar

Conveners:

Dr. A. S. Selvakumar, Professor & Dean i/c, School of Mechanical Sciences
Dr. H. Siddhi Jailani, Professor & Head, Department of Mechanical Engineering

Coordinators:

Dr. P.D. Jeyakumar, Associate Professor & Head, Department of Automobile Engineering
Dr. A. Arockia Julias, Assistant Professor (Sr.), Department of Mechanical Engineering

Resource Persons:

1. Dr. J. Ramkumar, Professor, Department of Mechanical Engineering, IIT Kanpur.
2. Dr. M. Sugunalakshmi, Sr. Principal Scientist, CSIR – CLRI, Chennai.
3. Dr. S. J. Thiruvengadam, Professor, Thiagarajar College of Engineering, Madurai.
4. Dr. K. Senthil Kumaran, Assistant Professor, Department of Mechanical Engineering, IIITDM Kancheepuram.
5. Dr. Dan Sathiyaraj, Assistant Professor, Department of Mechanical Engineering, IIT, Indore.
6. Dr. S. Shiva, Assistant Professor & Head, Department of Mechanical Engineering, IIT Jammu.
7. Dr. T. Vijayakumar, Professor, Meditation Trainer & Head, Centre for Value Based Education, Delhi Technological University.
8. Dr. J. Al Muzzamil Fareen, Assistant Professor, Department of English Language & Literature, IIITDM Jabalpur.
9. Dr. J. M. Jafferson, Associate Professor, School of Mechanical Sciences, VIT Chennai.
10. Dr. R. Rajendran, Professor & Head, Department of Automobile Engineering, SRMIST, Kattankulathur, Chennai.
11. Dr. V. Balaji, President, TVS Sensing Solutions Pvt. Ltd., Madurai.
12. Mr. G. Albert Einstein, CEO, Einel Technologies, Chennai.
13. Mr. P J Srikanth, General Manager, 3D Application, Monotech Systems Ltd, Chennai.
14. Dr. M. Thirumurugan, Associate Professor, Department of Mechanical Engineering, BSAR Crescent Institute of Science and Tech., Chennai.
15. Mr. M. Balasrinivasan, Assistant Professor, Department of Mechanical Engineering, BSAR Crescent Institute of Science and Tech., Chennai.



B.S. Abdur Rahman
Crescent
Institute of Science & Technology
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G.T Road, Vandalur, Chennai 600 948

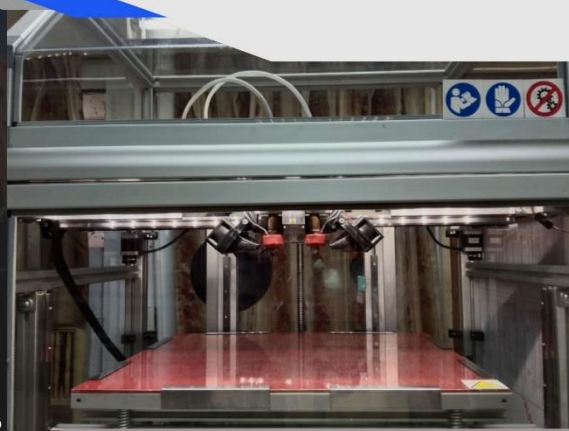


AICTE SPONSORED ATAL FDP
on
3D Printing in Industry 4.0

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School of Mechanical Sciences
B.S. Abdur Rahman Crescent
Institute of Science and Technology

Blended Mode

05th to 16th December, 2022



Resource Persons



Dr. J. Ramkumar
IIT Kanpur
Role of 3D Printing in
Industry 4.0



Dr. M. Sugunalakshmi
CSIR - CLRI
3D Printing Techniques and
its applications



Dr. S. J. Thiruvengadam
TCE Madurai
National Educational
Policy 2020



Dr. V. Balaji
TVS Sensing Solutions
Industry 4.0 Concepts
and Principles



Dr. K. Senthil Kumaran
IIITDM Kancheepuram
Additive Manufacturing
Enablers for Industry 4.0



Dr. T. Vijayakumar
Delhi Technological Univ.
Meditation a Tool for
Stress Management



Dr. S. Shiva
IIT Jammu
3D Printing of Metals



Dr. Dan Sathiyaraj
IIT Indore
3D Printing of
Novel Metal Alloys



Mr. G. Albert Einstein
Einell Technologies
AI & ML in Industry 4.0



Dr. J. M. Jafferson
VIT Chennai
Large Format 3D Printing



Mr. Arul Regan
MonoTech
Integration of
3D Printing & Industry 4.0



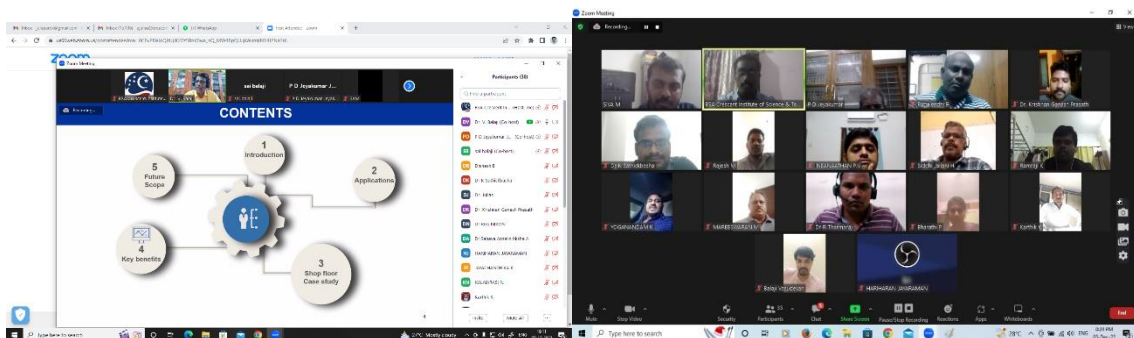
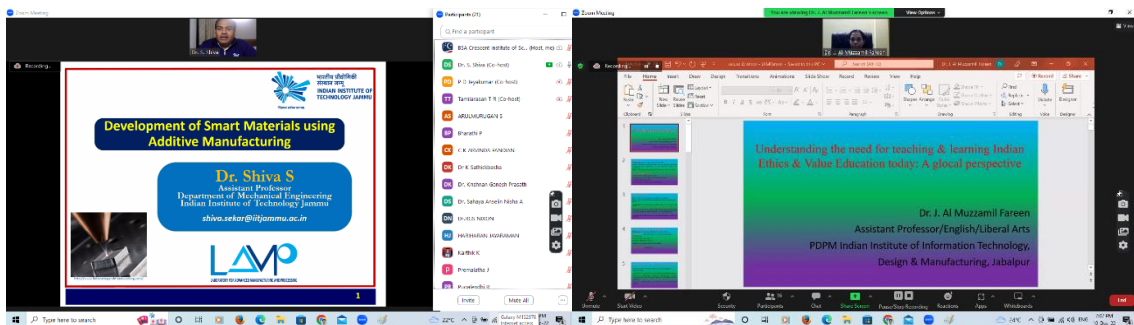
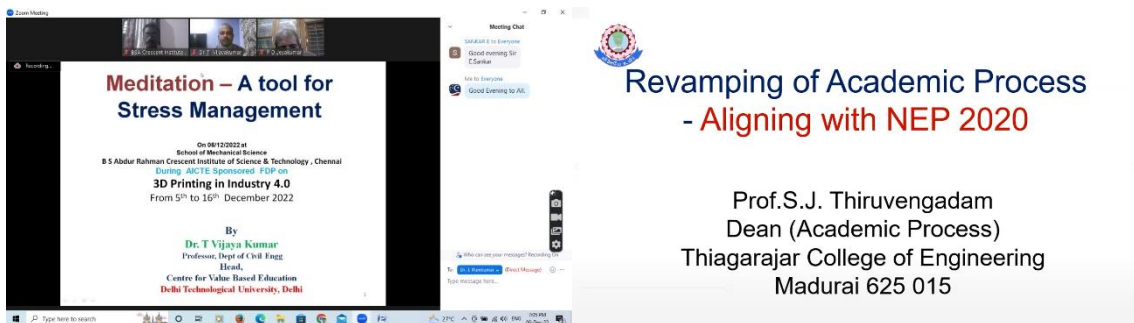
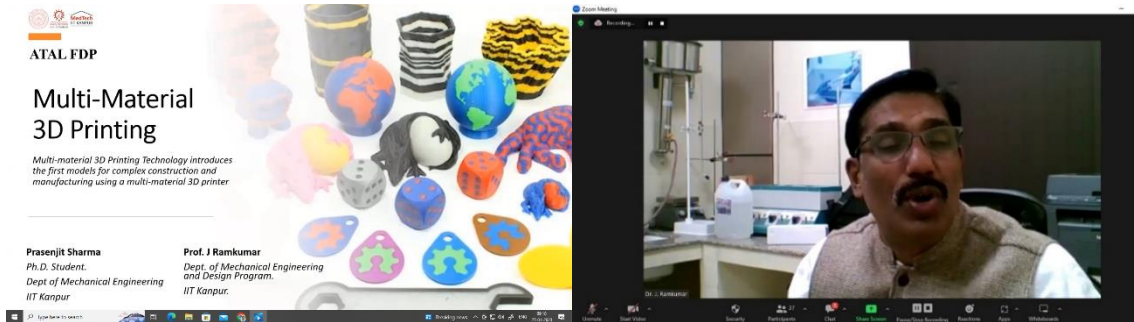
Dr. J. Al Muzzamil Fareen
IIITDM Jabalpur
Indian values & ethos,
Teaching learning psychology

CONTACT DETAILS

Dr. P.D. Jeyakumar, Asso. Prof., HOD Automobile
Dr. A. Arockia Julias, Asst. Prof., Mechanical
School of Mechanical Sciences,
B.S. Abdur Rahman Crescent Institute of Science & Technology, Vandalur, Chennai - 600 048.
Mobile: 94441 83049, E-mail: ajulias@crescent.education

The online session was inaugurated on 05.12.2022 through Zoom Video conferencing. Dr. A. S. Selvakumar, Dean i/c, School of Mechanical Sciences delivered the welcome address. Coordinator Dr. P D Jeyakumar, Associate Professor, welcomed and introduced the Chief Guest Dr. J Ramkumar, Professor, IIT Kanpur. The chief guest inaugurated the FDP and delivered the first technical lecture.

Screenshots of the online sessions:

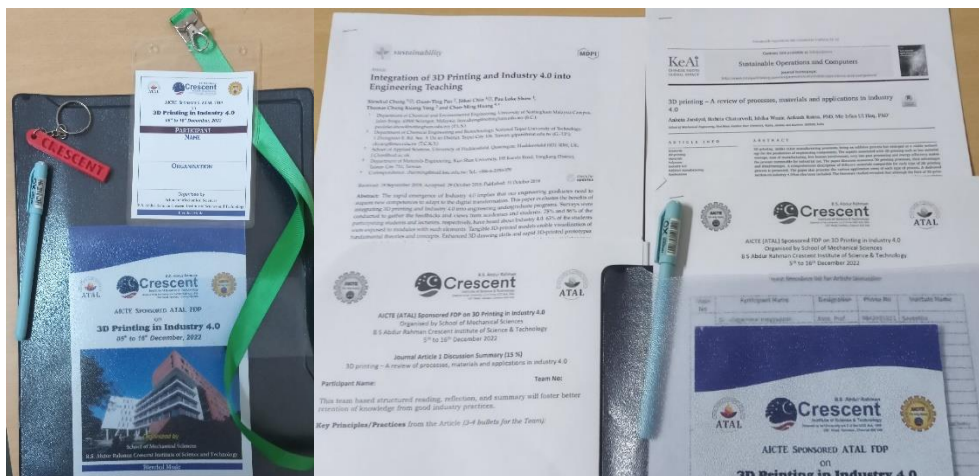


The offline session was inaugurated on 12.12.2022. Dr. M. S. Haji Sheik Mohammed, Dean Academic, BSA Crescent IST welcomed the participants and chief guest. Dr. H. Raja Hussain, Registrar, BSA Crescent IST delivered the presidential address. Dr. K. Senthil Kumaran, Assistant Professor, IIITDM Kancheepuram inaugurated the FDP and delivered the inaugural address. Dr. A. Arockia Julias Co-coordinator of the program introduced the chief guest. Dr. P D Jeyakumar, Coordinator of the program proposed the vote of thanks. Dr. A. S. Selvakumar, Dean i/c, School of Mechanical Sciences, and Dr. H. Siddhi Jailani, HOD Mechanical preside. The program was conducted in the Seminar hall I of the convention center, B S Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai.

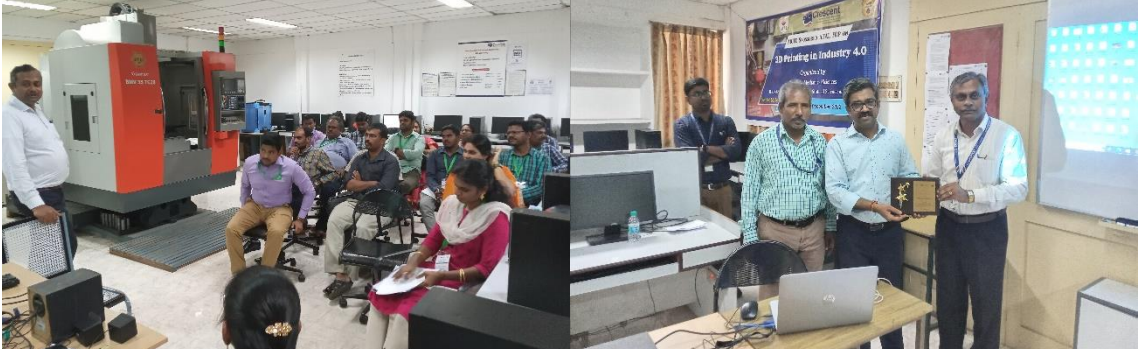
Sample screenshots of the inaugural function:



Registration Kit:



Session Screenshot:

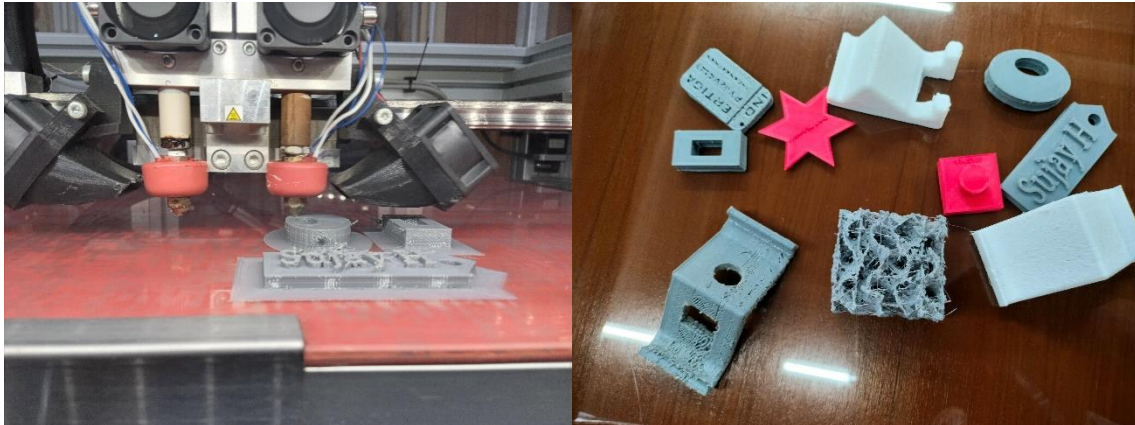


Peerakankaranai, Tamil Nadu, India
 Unnamed Road, Peerakankaranai, Tamil Nadu
 603210, India
 Lat 12.875193°
 Long 80.084299°
 14/12/22 11:00 AM GMT +05:30

Peerakankaranai, Tamil Nadu, India
 Unnamed Road, Peerakankaranai, Tamil Nadu
 603210, India
 Lat 12.875308°
 Long 80.084397°
 16/12/22 10:38 AM GMT +05:30



3D Printing Practice session in the Lab



3D Printing of components designed by the participants



Industrial Visit to MonoTech Systems, Chennai



Visit to Crescent Innovation and Incubation council

The valedictory function was conducted on 16.12.2022. Dr. H. Siddhi Jailani, HOD Mechanical welcomed the participants and chief guest. Dr. A. S. Selvakumar, Dean i/c, School of Mechanical Sciences, felicitated. Dr. G. Dan Sathiaraj, Assistant Professor, IIT Indore delivered the chief guest addressed. Dr. P D Jeyakumar, Coordinator introduced the chief guest. Dr. A. Arockia Julias Co-coordinator proposed the vote of thanks.

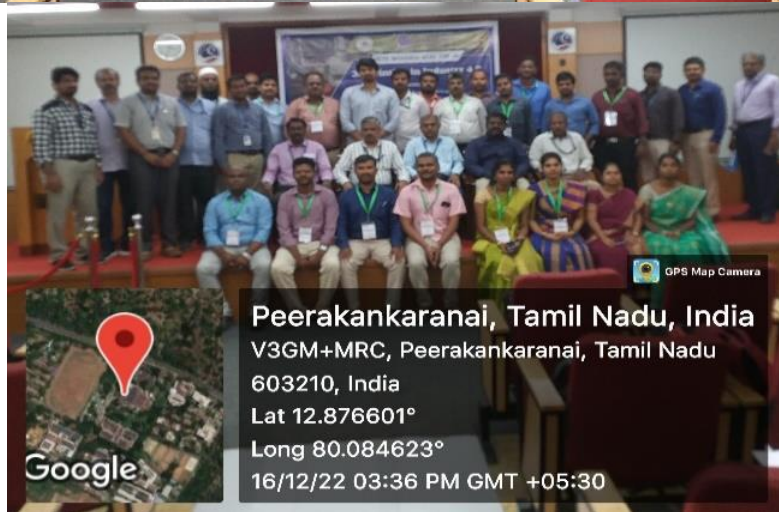


Issue of books to selected participants




Feedback by participants

Participants Group Photo:



Participants Feedback:



AICTE (ATAL) Sponsored FDP on 3D Printing in Industry 4.0
 Organised by School of Mechanical Sciences
 B S Abdur Rahman Crescent Institute of Science & Technology
 5th to 16th December 2022
Participant Feedback Form

(✓ in appropriate box)

a. What is your overall Assessment of this FDP?

Excellent Very Good Good Satisfactory Poor

b. How do you feel about the quality of the content delivered in this FDP?

Excellent Very Good Good Satisfactory Poor

c. Are you satisfied with the topics covered in this FDP?

Excellent Very Good Good Satisfactory Poor

d. How do you rate the communication before and during the FDP?

Excellent Very Good Good Satisfactory Poor

e. Rate the following towards this FDP in 1 to 5 Scale. (1 being least and 5 Being Maximum)

Resource persons	: 1	2	3	4	<input checked="" type="radio"/> 5
Industrial Visit	: 1	2	3	4	<input checked="" type="radio"/> 5
Practical Sessions	: 1	2	3	4	<input checked="" type="radio"/> 5
Food Arrangement	: 1	2	3	4	<input checked="" type="radio"/> 5
Time Management	: 1	2	3	4	<input checked="" type="radio"/> 5
Hospitality	: 1	2	3	4	<input checked="" type="radio"/> 5

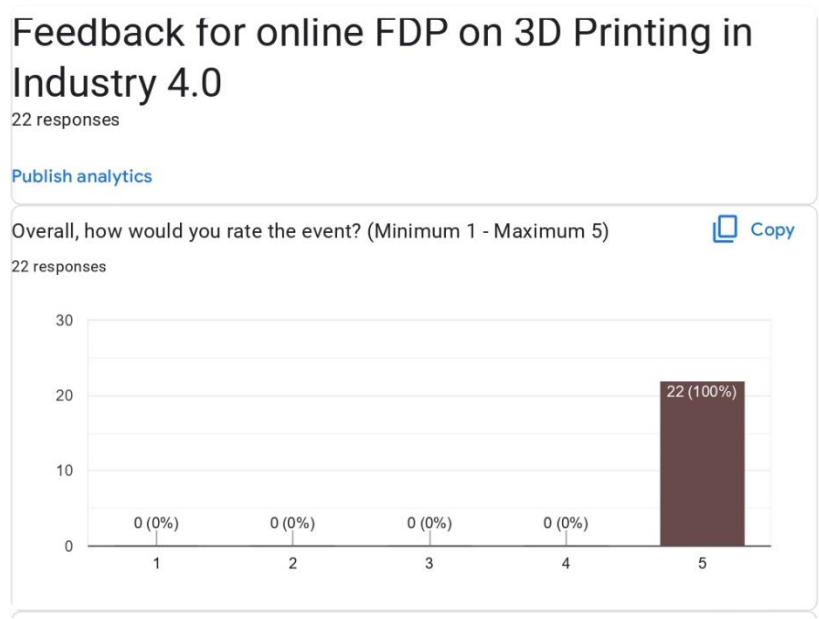
f. Whether this FDP fulfilled your expectations? Mention Few Highlights of this FDP

This FDP satisfied my expectation and it is very helpful to develop my knowledge of 3D printing operation.

g. Please write any comments /Suggestions/ Scope for improvement regarding to this FDP.

Most of the resource persons are arranged from reputed Institutions and Industries. The Practical Sessions are improved my 3D printing knowledge.

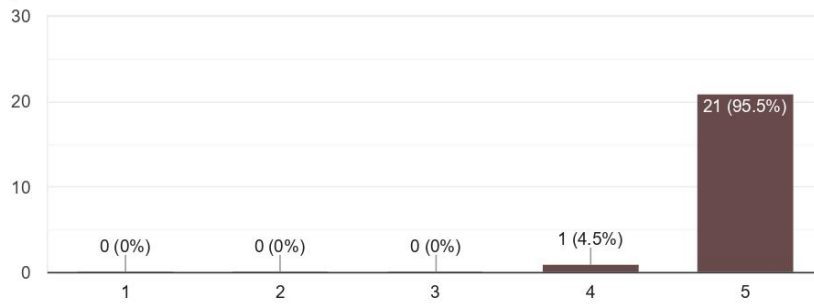
Participant signature with name and designation (Optional) : *F. Suleman*
16/12/22
 F-SANKAR, AP/Mech, SRMIST, Vandavalem Camps



Rate the overall coordination of the FDP. (Minimum 1 - Maximum 5)

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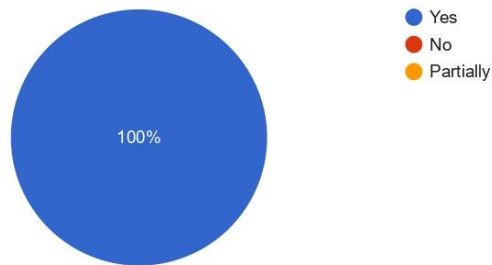
22 responses



Whether the content of the sessions relevant to this FDP?

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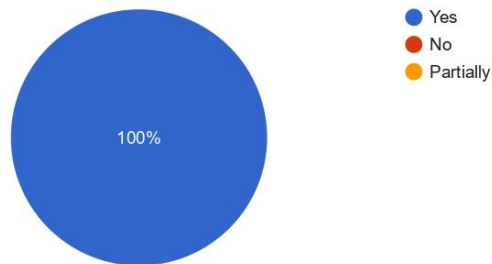
22 responses



Whether the mandatory sessions on Research Methodology, NEP 2020, Life skills and Indian Values & Ethos useful?

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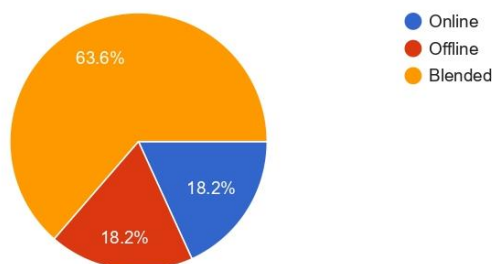
22 responses



Which mode of FDP do you prefer?

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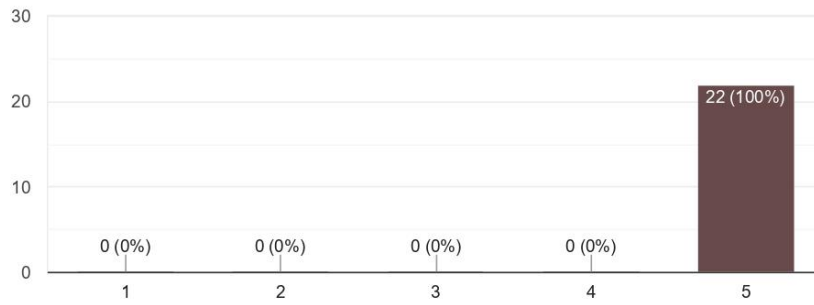
22 responses



Rate the practical session. (Minimum 1 - Maximum 5)



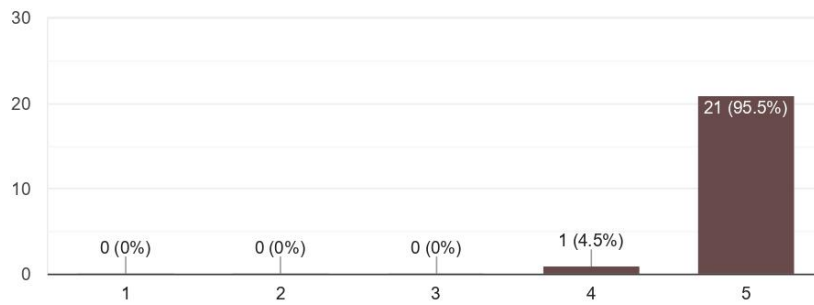
22 responses



Rate the Industrial visits (Minimum 1 - Maximum 5)



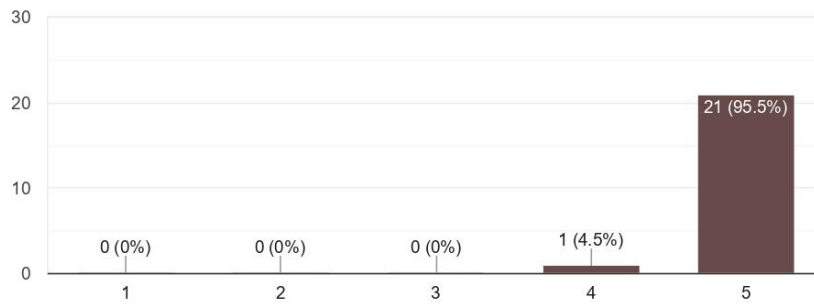
22 responses



Rate the online platform (Zoom) used for this FDP (Minimum 1 - Maximum 5)



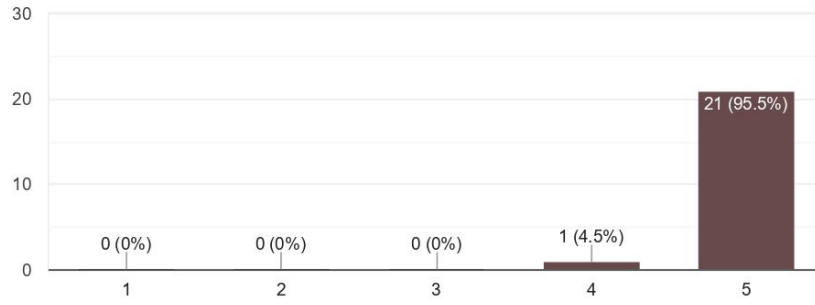
22 responses



Rate the topics covered in this FDP. (Minimum 1 - Maximum 5)



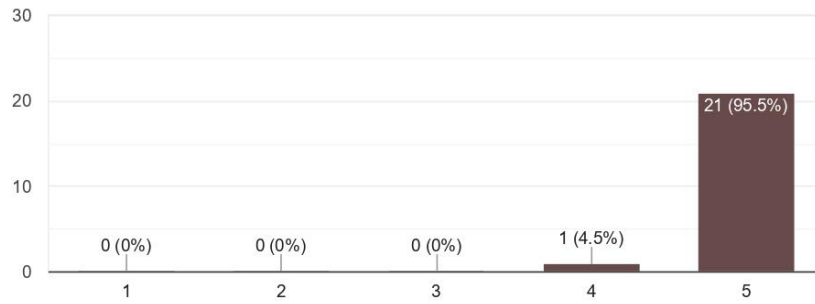
22 responses



Rate the expertise of the speaker (Minimum 1 - Maximum 5)



22 responses



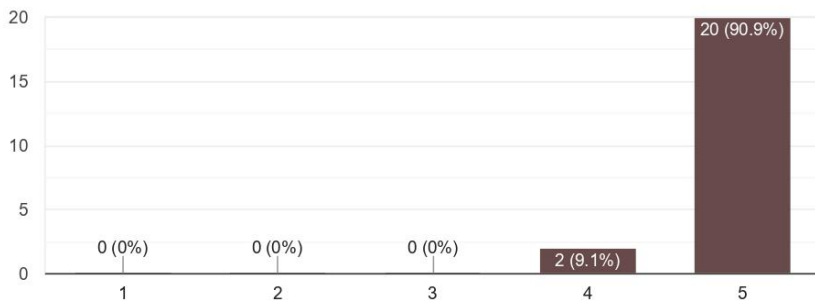
23, 1:14 PM

Feedback for online FDP on 3D Printing in Industry 4.0

Rate the Time Management. (Minimum 1 - Maximum 5)



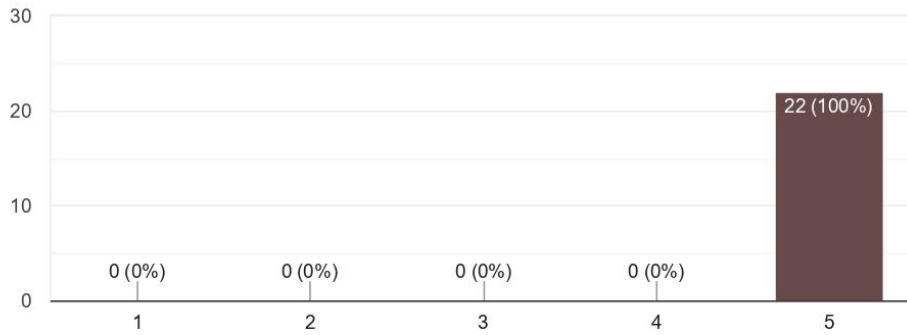
22 responses



Rate the infrastructure facilities provided for this FDP. (Minimum 1 - Maximum 5)



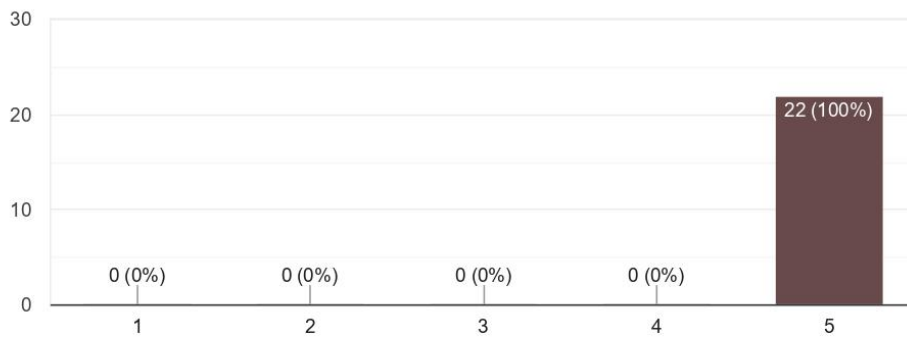
22 responses



Rate the Refreshment and Lunch arrangement for this FDP. (Minimum 1 - Maximum 5)



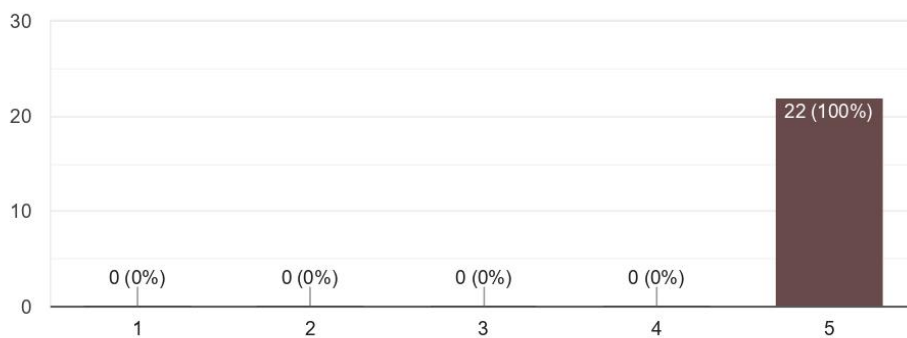
22 responses



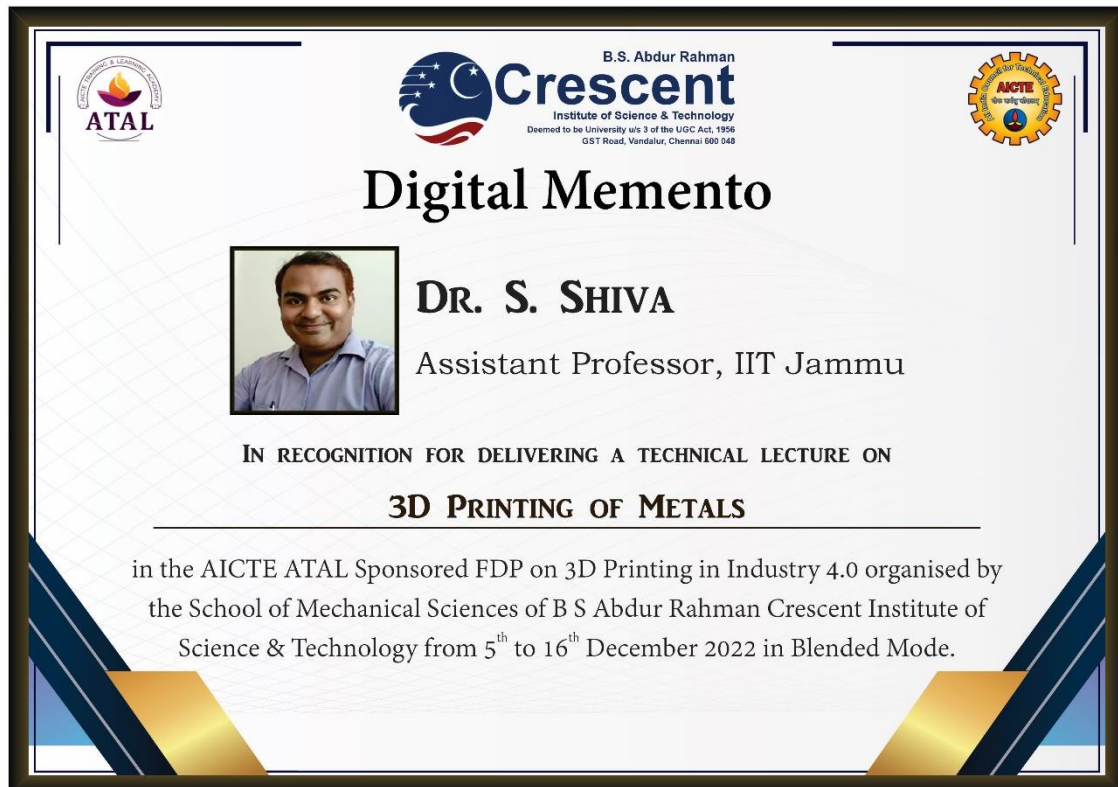
Rate the Hospitality. (Minimum 1 - Maximum 5)



22 responses



Sample Certificate:



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