From:

hod mechssmiet <hodmechssmiet@gmail.com>

Sent:

09 August 2022 11:58 KANDAVEL V

To: Subject:

Fwd: Permission for Industrial Visit -Reg.

09.08.2022

To.

Dr. G. Sankaranarayanan, Professor and Head. **Department of Mechanical Engineering** SSM Institute of Engineering and Technology Dindiaul.

Sub: Permission for Hands-on Training -Reg.

Dear Sir,

With reference to your email request and telephonic discussion today regarding Hands-on Training for your students, we are pleased to inform you that permission is hereby granted for the Hands-on Training on 16.08.2022 for your students & faculties. During Hands-on Training, CIPET will provide working lunch and Tea for your students, Faculties on the same which is chargeable @ Rs.118/- (including GST) per candidate. Kindly pay in advance in the below mentioned account and send us the confirmation mail along with payment prooffor the same.

The Account details are as follows:

Name of Account : CIPET-CSTS, MADURAI

Name of Bank

: Indian Overseas Bank

Account Number : 166302000001419

IFSC Code

: IOBA0001005

MICR No

: 625020029

Branch Name

: Thiruvathavur (1005)

Herewith we have enclosed the Excel sheet format to be filled for further information. This is for your kind information & needful please.

For further information regarding industrial visit you can contact Mr. B. Nijamudeen CAD/CAM Dept. CIPET Madurai.

With best Regards,

Yours sincerely,

P.Radhakrishnan Senior Technical Officer CIPET: CSTS, Madurai

Mob: 9941404804

E-mail: cadcamcae-madurai@cipet.gov.in

\* DINDIGU

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., INUS) Principal SSM Institute of Engineering and Technology Kuttathupatti Village, Sindalagundu (Po), Palani Road, Dindigul - 624 002.



#### SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

Dindigul- Palani Highway, Dindigul - 624 002.

#### Department of Mechanical Engineering

Year: III Year

Date: 16.08.2022

Name of the Event: One-Day Hands Training on Injection Molding and Plastics Processing

| S.No | Reg.No       | Name of the Student    | S.No | Reg.No       | Name of the Student |
|------|--------------|------------------------|------|--------------|---------------------|
| 1    | 922120114001 | ABDUL HARSHATH A       | 25   | 922120114028 | SARAVANA PANDI P    |
| 2    | 922120114002 | ARISHRAJAN I           | 26   | 922120114029 | SIVARAMAN S         |
| 3    | 922120114004 | BALAMURUGAN S          | 27   | 922120114030 | SUGAN B             |
| 4    | 922120114005 | DANUSHMANI S           | 28   | 922120114031 | TAMIL SELVAN S      |
| 5    | 922120114006 | DINESH S               | 29   | 922120114032 | VASANTH R           |
| 6    | 922120114007 | EDISON S               | 30   | 922120114033 | VIDYASARAN P        |
| 7    | 922120114008 | JAIKUMAR PANDIAN J     | 31   | 922120114302 | ABISHEK N           |
| 8    | 922120114009 | JOHNSON M              | 32   | 922120114303 | ARUN KANNAN K       |
| 9    | 922120114010 | KARTHICK D             | 33   | 922120114304 | ASWIN RAJ V         |
| 10   | 922120114011 | KARTHICK RAJA R        | 34   | 922120114305 | BOMMURAJ K          |
| 11   | 922120114012 | KARTHIKEYAN N          | 35   | 922120114306 | DEVAPRAKASH N       |
| 12   | 922120114013 | LAKSHMI N              | 36   | 922120114308 | DHIWAKAR C          |
| 13   | 922120114014 | MANIKANDAN G           | 37   | 922120114314 | LOKESH VARMA D      |
| 14   | 922120114015 | MOHAMED RIAZ S         | 38   | 922120114316 | MAUREESH K V R      |
| 15   | 922120114016 | MUTHU<br>PRAKALATHAN V | 39   | 922120114317 | NAVIN JOE J         |
| 16   | 922120114017 | MUTHU SANTHOSH M.S     | 40   | 922120114318 | PRASANNAKUMAR S     |
| 17   | 922120114018 | NAWFUL GHIYAS M        | 41   | 922120114319 | RAJKUMAR P          |
| 18   | 922120114019 | NITHESH S              | 42   | 922120114320 | RAMKUMAR P R        |
| 19   | 922120114020 | NITHIS KUMAR J         | 43   | 922120114321 | SABARINATHAN S      |
| 20   | 922120114022 | RAJARAJESHWARAN S      | 44   | 922120114322 | SACHITHANANTHAM M   |
| 21   | 922120114023 | RAJASEKARAN V          |      |              |                     |
| 22   | 922120114025 | SANJAY KUMAR S         |      |              |                     |
| 23   | 922120114026 | SANMUGAPANDI M         |      | 0            |                     |
| 24   | 922120114027 | SANTHOSH KUMAR M       |      |              | 14                  |

Faculty In-charge

Dr.D.S. SSM In

Dr.D.SENTHIL KUMARAN, M.E., Hod (Mech Principal

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# SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

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# Department of Mechanical Engineering

Year: III Year

Date: 16.08.2022

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| 23   | 922120114026 | SANMUGAPANDI M      | 3 A RMCC CLA PANDI |
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| 35   | 922120114306 | DEVAPRAKASH N       | Deveralyz          |
| 36   | 922120114308 | DHIWAKAR C          | DHWalso T          |
| 37   | 922120114314 | LOKESH VARMA D      | Josh Shyring       |
| 38   | 922120114316 | MAUREESH K V R      | VR. March          |
| 39   | 922120114317 | NAVIN JOE J         | Navia Jold         |
| 40   | 922120114318 | PRASANNAKUMAR S     | O From             |
| 41   | 922120114319 | RAJKUMAR P          | Rojkunour P.       |
| 42   | 922120114320 | RAMKUMAR P R        | Remoderated 1      |
| 43   | 922120114321 | SABARINATHAN S      | In A. S.           |
| 44   | 922120114322 | SACHITHANANTHAM M   | Solo               |

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Dindigul- Palani Highway, Dindigul – 624 002.

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| 7    | 922120114008 | JAIKUMAR PANDIAN J     | Faikume Rendino |
| 8    | 922120114009 | JOHNSON M              | M. Johnson      |
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| 11   | 922120114012 | KARTHIKEYAN N          | Rathieran       |
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| 13   | 922120114014 | MANIKANDAN G           | Mohilles P      |
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| 22   | 922120114025 | SANJAY KUMAR S         | Sanloghund      |

Faculty In-charge

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Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po).

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One Day Hands-on Training Program Report: Injection Molding & Plastics Processing

Date: August 16th, 2022

Venue: CIPET:CSTS Madurai

Participants: 44 Third Year Mechanical Engineering Students, SSMIET, Dindigul.

#### **Program Overview:**

This one-day hands-on training program at CIPET:CSTS Madurai provided SSMIET, Dindigul's third-year mechanical engineering students with an immersive learning experience in injection molding and plastics processing. The program aimed to bridge the gap between theoretical knowledge and practical application, equipping students with industry-relevant skills and insights.

#### Session Breakdown:

Morning Session (Theory):

**Deep Dive into Injection Molding:** Comprehensive process overview, applications across diverse industries.

Machine Demystification: Exploring various types of injection molding machines - hydraulic, electric, and hybrid systems.

Mold Matters: Delving into mold design principles, hot runner vs. cold runner systems, and crucial material considerations.

**Polymer Power:** Understanding common plastics, their properties, and selection criteria for specific applications.

**Process Parameter Precision:** Mastering injection pressure, holding pressure, cooling time, and cycle time optimization.

Quality Control Champions: Equipping students with techniques for defect identification and troubleshooting.

#### Afternoon Session (Hands-on):

Mastering the Machine: Students took control under instructor guidance, operating injection molding machines with confidence.

Material Magic: Hands-on experience in material preparation, feeding, and setting process parameters for different parts.

Molding Marvels: Students created test samples, analyzed the results, and gained insights

into process variations.

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**Defect Detectives:** Identifying common molding defects through close examination and applying troubleshooting strategies.

#### **Key Learnings:**

- Students gained a comprehensive understanding of the injection molding process, from concept to finished product.
- They developed practical skills in machine operation, mold design considerations, and process parameter optimization.
- Hands-on experience fostered problem-solving abilities through defect identification and troubleshooting exercises.
- The program enhanced students' awareness of quality control measures and their importance in the industry.

#### Feedback and Outcomes:

The program received enthusiastic feedback from SSMIET students, who appreciated the blend of theoretical knowledge and practical application. They found the hands-on sessions invaluable, highlighting the importance of real-world experience in complementing classroom learning. This training program aimed to:

- Increase students' employability in the plastics industry.
- Prepare them for further studies and research in injection molding and related fields.
- Equip them with the confidence and skills to excel in their future careers.

#### Recommendations:

Future programs could incorporate advanced topics like multi-material injection molding and automation technologies.

Partnering with plastics industry players could provide students with internship opportunities and exposure to cutting-edge advancements.

#### Conclusion:

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This one-day hands-on training program successfully transformed SSMIET's third-year mechanical engineering students into confident and knowledgeable practitioners in the realm of injection molding and plastics processing. The program equipped them with valuable skills and insights, preparing them to make a significant impact in this dynamic and ever-growing industry.

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# SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi / Affiliated to Anna University / Accredited by NAAC)
Dindigul- Palani Highway, Dindigul – 624 002.

# Department of Mechanical Engineering

| Name of the Student: Swah - B (Optional)  |                                 |                          |                          |          |          |              |                    |
|---|---------------------------------|--------------------------|--------------------------|----------|----------|--------------|--------------------|
| Event Title : One-Day Hands Training or   | n Injection                     | Moldin                   | g and Pl                 | astics   | Proces   | sing         | LOW  LOW  LOW  LOW |
| ate :16.08.2022   |                                 |                          |                          |          |          | 0            |                    |
| lease respond to the following questions by ticking one box onl<br>improvement. Your views are very important and will help us to | ly for each qu<br>improve our e | estion. if<br>vents, fac | you have<br>ilities, etc | any crit | icism or | sugge        | stions for         |
| Scoring Example   |                                 | 5                        | 4                        | 3        | 2        | 1            | ]                  |
| 1. Information provided at this event is relevant to you  | High                            |                          |                          |          |          |              | LOW                |
| 2. You are likely to use this information in the future   | High                            |                          |                          |          |          |              | LOW                |
| 3. Presentations were interesting   | High                            |                          |                          |          |          |              | Low                |
|   |                                 |                          |                          |          |          |              |                    |
| 4. You would recommend this event to others   | High                            |                          |                          |          |          |              | LOW                |
| 5. Overall, the event was worthwhile  | High                            | <u> </u>                 |                          |          |          |              | Low                |
|   |                                 |                          |                          |          |          |              |                    |
| 6. The venue was suitable   | High                            |                          |                          |          |          | ·            | LOW                |
| 7. Comments/ suggestions (If any)   | 1                               | ή I                      | 2                        |          |          |              |                    |
| Dr.D.SE   | NTHIL KUMAI<br>Princi           |                          | Ph.D., (NUS)             | 22       | 5        | hgg<br>Sign: | んり<br>ature        |

SSM institute of Engineering and Technology Euttathupatti Village, Sindalagundu (Po), Palani Road, Dindigul - 624 002.



SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

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Dindigul- Palani Highway, Dindigul – 624 002.

# Department of Mechanical Engineering

| Name of the Student: Navin Joe . J   | (Optional)   |      |
|--|--|------|
| Event Title : One-Day Hands Training on  | Injection Molding and Plastics Processing  |      |
| :16.08.2022  | y v  |      |
| ease respond to the following questions by ticking one box only improvement. Your views are very important and will help us to i | y for each question. if you have any criticism or suggestions improve our events, facilities, etc. | s fo |
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| (2) (2)  | SENTHIL KUMARAN, M.E., Ph.D., (NUS)  Principal Institute of Engineering and Technology             | , J  |
| Kut  | ttathupatti Village, Sindalagundu (Po),  |      |

Palani Road, Dindigul - 624 002.

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# SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY (Approved by AICTE, New Delhi / Affiliated to Anna University / Accredited by NAAC) Dindigul- Palani Highway, Dindigul – 624 002.

# Department of Mechanical Engineering

| Name of the Stu                          | udent: DINESH KUMAR R   | (  | Optional           |                           |           |          |         |           |
|--|---|--|--------------------|---------------------------|-----------|----------|---------|-----------|
| Event Title                              | : One-Day Hands Training (  |  | _                  | ,                         | Plastics  | Proce    | esina   |           |
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| lease respond to the improvement. Your v | following questions by ticking one box or<br>views are very important and will help us to | nly for each quo improve our e                                       | estion. if         | you have<br>cilities, etc | e any cri | ticism o | r sugge | estions f |
|  | Scoring Example   |  | 5                  | 4                         | 3         | 2        | 1       | 7         |
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| 3. Presentation                          | ns were interesting   | High   |                    |                           |           |          |         | Low       |
| 4. You would a others                    | recommend this event to   | High   | <b>N</b>           |                           |           |          |         | Low       |
|  |   |  |                    |                           | -         |          |         |           |
| 5. Overall, the                          | event was worthwhile  | High   |                    | n                         |           |          |         | Low       |
| 6. The venue wa                          | as suitable   | High   | V                  |                           |           |          |         | Low       |
| 7. Comments/s (If any)                   | suggestions   |  |                    |                           |           |          |         |           |
| SSW Institute or                         | SSM Ins   | ENTHIL KUMAR<br>Princip<br>titute of Engineer<br>thupatti Village, S | pal<br>ting and To | chnology                  |           |          | Signa   | ture      |

Palani Road, Dindigul - 624 002