

**REPORT OF THE ONE-DAY SEMINAR
ORGANISED BY PONDICHERRY STATE CENTRE, PUDUCHERRY
FOR PUBLICATION IN WEBSITE**

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| Name of Centre / Overseas Chapter: | IE(I) Puducherry State Centre, Puducherry | | |
| Title of Activity: | <i>One Day Seminar</i> | | |
| Activity under Divisional Board | Production Division Board, IEI | | |
| Date: | 26.03.2025 | Venue: | Seminar Hall, Sri Manakula Vinayagar Engineering College |

INVITATION

The Institution of Engineers (India)
(Established 1920, Incorporated by Royal Charter 1935)
PUDUCHERRY STATE CENTRE
(Ground Floor, PWD Campus, No:63, N.S.C. Bose Salai, Puducherry-605001)
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**SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE**
(AN AUTONOMOUS INSTITUTION)

Department of Mechanical Engineering
Jointly Organize
One Day Seminar
Under the aegis of the Production Engineering Division Board (IEI)
On
Additive Manufacturing in Production: Challenges and opportunities

26 March 2025, 10.00 a.m at Seminar Hall

The Management, Director, Deans and Faculties Cordially invite you all for the event

Chief Guest

Dr. E. Gnana Manoharan
Associate Professor,
Annamalai University, Chidambaram

Shri Vijayaraj Shanmugam
System Engineer and Machine
Design Enthusiast, TCS Chennai.

Shri. M. Dhanasekaran
Chancellor, Takshashila University, Tindivanam, Tamil Nadu,
Chairman and Managing Director, SMVE Trust

Presides

Dr. K. Narayanasamy **Shri. D. Rajarajan** **Shri. S. Velayudham**
Secretary, SMVE Trust Treasurer, SMVE Trust Joint Secretary, SMVE Trust

Felicitate

Dr. V.S.K. Venkatachalapathy
Director cum Principal, SMVEC

Guest of Honour

Dr. S. Thirougnaname, FIE **Er. K. Soundararajan, FIE**
Chairman, IE (I), PSC Honorary Secretary, IE (I), PSC

Gratitude Note

Dr. S. Jayakumar **Dr. S. Anbumalar** **Dr. K. Velmurugan** **Dr. A.A. Arivalagar**
Controller of Examination Dean Academics Dean Research Dean Academics

Dr. N.S.N. Cailassame **Dr. L.M. Varalakshmi,** **Dr. G.G. Sozhamannan**
Dean Placement HoD ICE, IEI Student Chapter HoD Mechanical

Dr. L. Martin
Committee Member, Mechanical Engineering Division, IEI PSC

PROGRAM SCHEDULE



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|---------------------------------|---|
| 10.00 a.m. | Invocation |
| 10.02 a.m. | Welcome address: Dr. K. Velmurugan , Dean Research |
| 10.07 a.m. to 10.25 a.m. | Felicitation address: Dr. A. A. Arivalagar , Dean Academics (Core) About IEI Seminar: Dr. G. G. Sozhamannan , HOD /Mech Address by Chairman: Dr. S. Thirougnaname , FIE, Chairman, IEI, PSC |
| 10.25. a.m. | Presidential Address: Dr. L.M. Varalakshmi , HoD ICE, IEI Student Chapter |
| 10.30. a.m. | Speaker introduction: Dr. L. Martin , Associate Professor Address Guest Speaker: Dr. E. Gnana Manoharan Associate Professor, ECE Annamalai University, Chidambaram Shri Vijayaraj Shanmugam System Engineer and Machine Design Enthusiast, TCS Chennai. |
| 10.50. a.m. | Honouring the dignitaries |
| 10.55. a.m. | Vote of Thanks: Er. K. Soundararajan , FIE, Honorary Secretary, IEI, PSC |
| 11.00 a.m to 11.15 a.m | Tea Break |
| Session – 1 | |
| 11.15 a.m to 12.15 p.m | Additive manufacturing and metallization of high-frequency communication devices Dr. E. Gnana Manoharan Associate Professor, ECE Annamalai University, Chidambaram |
| 12.15 p.m to 1.15 p.m | Integration of Additive Manufacturing into Traditional Production Lines: Shri Vijayaraj Shanmugam System Engineer and Machine Design Enthusiast, TCS Chennai. |
| 1.15 p.m to 2.00 p.m | Lunch Break |

| Session-2 | |
|-------------------------|--|
| 2.00 p.m to 3.00 p.m | Additive Manufacturing in the Semiconductor Industry: Technology Penetration and Roadmap Saravanan. A, CEO, Saravanan Paper Machinery India Pvt Ltd, Puducherry |
| 3.00 p.m to 3.15 p.m | Tea Break |
| 3.15 p.m to 4.15 p.m | Advancements in Materials for Additive Manufacturing Dr. Karunakaran, FIE, Associate Professor, Department of Mechanical Engineering, SMVEC |
| Valedictory Session | |
| 4.17 p.m. | Welcome address: Dr. K. Velmurugan , Dean Research |
| 4.22 p.m. to 4.30 p.m. | Felicitation address: Dr. A. A. Arivalagar , Dean Academics (Core) Address by Chairman: Dr. S. Thirougnaname , FIE, Chairman, IEI, PSC |
| 4.30 p.m. | Presidential Address: Dr. L.M. Varalakshmi , HoD ICE, IEI Student Chapter |
| 4.40 p.m. | Certificate Distribution |
| 4.45 p.m. | Vote of Thanks: Er. K. Soundararajan , FIE, Honorary Secretary, IEI, PSC |
| ****National Anthem *** | |



Invocation and Welcome Address by Dr. K. Velmurugan (Dean Research)



Felicitation Address by Dr. A. A. Arivalagar (Dean Academics).



Chairman's Address by Dr. S. Thirugnaname (IEI, PSC).



Vote of Thanks by Er. K. Soundararajan.

Photo of Inaugural Session with banner of IEI



Dr. E. Gnana Manoharan discussed additive manufacturing and metallization for high-frequency communication devices.



Dr. Karunakaran discussed advancements in materials for additive manufacturing.



Saravanan A., CEO, presented on additive manufacturing in the semiconductor industry.



Shri Vijayaraj Shanmugam detailed the integration of additive manufacturing in traditional production lines.

Photo of Technical Session

Brief Details about the Programme:

The "One Day Seminar" organized by the IE(I) Puducherry State Centre, Puducherry under the Production Division Board, IEI, was held on 26.03.2025 at the Seminar Hall of Sri Manakula Vinayagar Engineering College, showcasing a blend of academic insight and industry expertise in the field of additive manufacturing.

The seminar commenced at 10:00 a.m. with a brief invocation, setting a respectful tone for the day, followed by welcome and felicitation addresses by Dr. K. Velmurugan, Dean Research, and Dr. A. A. Arivalagar, Dean Academics, respectively, which underscored the significance of technological innovation and academic leadership.

Dr. G. G. Sozhamannan provided an introductory overview, outlining the seminar's objectives and the relevance of emerging manufacturing techniques, while Dr. L. Martin played a pivotal role by introducing the guest speakers to the audience.

Special addresses were delivered by Chairman Dr. S. Thirougnaname and a presidential message from Dr. L.M. Varalakshmi, HoD ICE and IEI Student Chapter, emphasizing the necessity of bridging theoretical research with practical applications.

The technical sessions featured comprehensive presentations, with Dr. E. Gnana Manoharan detailing the advancements in additive manufacturing and metallization for high-frequency communication devices, and Shri Vijayaraj Shanmugam discussing the integration of these innovative technologies into traditional production lines.

In the subsequent session, industry perspectives were shared by Saravanan A., CEO of Saravanan Paper Machinery India Pvt Ltd, focusing on the semiconductor industry's adoption of additive manufacturing, and by Dr. Karunakaran from SMVEC, who highlighted advancements in materials tailored for these applications. The seminar concluded with certificate distribution and a vote of thanks by Honorary Secretary Er. K. Soundararajan, followed by the National Anthem, leaving the participants inspired and equipped with new knowledge to drive future innovations.

Details of the Sessions:

Day-1 (Forenoon)
Inaugural Session
Inaugural programme,
Two invited lectures

1. Lecture by: Dr. E. Gnana Manoharan, MIE. **Topic:** Additive manufacturing and metallization of high-frequency communication device

2. Lecture by: Shri Vijayaraj Shanmugam **Topic:** Integration of Additive Manufacturing into Traditional Production Lines

Day-1 (Afternoon)
Technical Session I
Minimum 3 papers or two
invited lectures /
presentations

1. Lecture by: Shri Saravanan. A
Topic: Additive Manufacturing in the Semiconductor Industry: Technology Penetration and Roadmap

2. Lecture by: Dr. Karunakaran, FIE
Topic: Advancements in Materials for Additive Manufacturing