

Dr.Mahalingam College of Engineering and Technology, Pollachi-642003

**Office of Dean Research and Innovation
&
Department of Mechanical & Automobile Engineering
Report**

“Navigating Research Opportunities for Success – Knowledge Sharing Session”

Date: 31.08.2023

About the Session

The Office Dean Research and Innovation and Department of Mechanical & Automobile Engineering organized a seminar on **Navigating Research Opportunities for Success – Knowledge Sharing Session** for the benefit of the faculty members of MCET. The session details are given below for your kind reference.

S.No	Name of the Resource Person	Topic	Date & Time	Venue	No of Participants
1	Dr. R. Santhanam, Senior Scientist ‘F’, Defence R&D Organization (DRDO), Hyderabad ,Ministry of India, Government of India.	Navigating Research Opportunities for Success	22.08.2023 & 2.00 pm to 4.30 pm	OBE Seminar Hall (B110)	30

The seminar started with the prayer song. Dr. S. Ramakrishnan, Dean of R&I delivered the Welcome address and welcomed the chief guest and participants of the seminar. Dr.M.Jayaraj, IPR Coordinator delivered the chief guest's introduction.

The sessions covered a wide range of topics related to smart materials, applications, funding opportunities in DRDO

Topics Covered:

- ❖ Smart materials
- ❖ Application

Examples of Smart Materials

- ❖ Piezoelectric (PZT)
- ❖ Shape Memory Alloy (SMA)
- ❖ Electro Rheological Fluids
- ❖ Magneto Rheological Fluids
- ❖ Electrostrictive Material (ESM)
- ❖ Magnetostrictive Material (MSM)

Advantages of Smart Materials

- ❖ Light Weight.
- ❖ Compact
- ❖ Move Power to Weight ratio
- ❖ Move power to Volume ratio
- ❖ Number of components / subcomponents used is less.

Applications of Smart Materials

- ❖ Aerospace
- ❖ MEMS
- ❖ Sensors and Actuators
- ❖ Artificial Muscle
- ❖ Safety
- ❖ Vibration prevention
- ❖ Morphing Structures
- ❖ High strain energy absorbing applications

Session on missiles

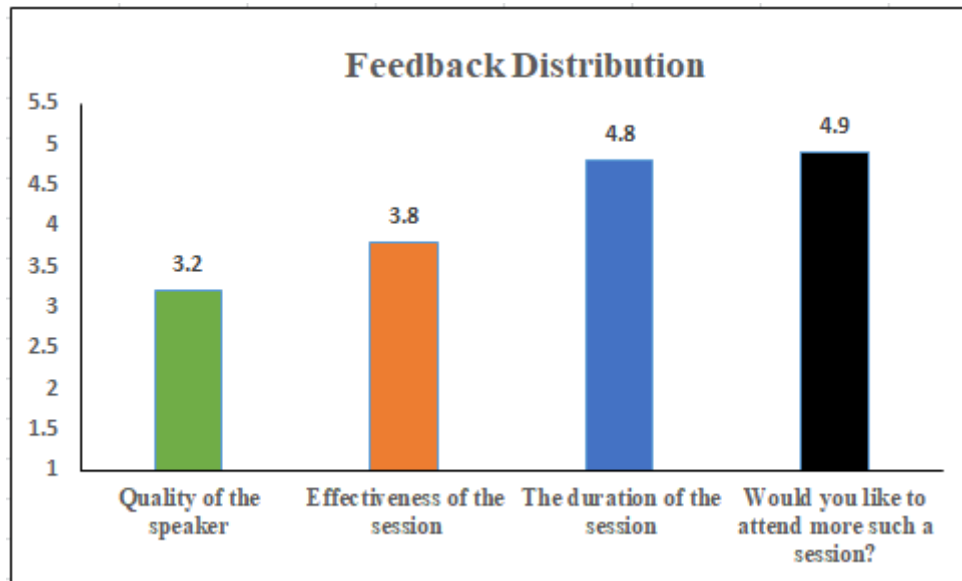
A presentation and video session on the missiles produced at DRDO was also presented and He shared his experience with the faculties.

Photos Taken During Seminar



Feedback and Assessment

Feedback was collected from all participants and they shared positive views about the session. Based on the topic discussed multiple choice questions assessment was given to participants to assess the effectiveness of the session.



Interaction:

How do collaborative the work with DRDO?

Problem of the area it would be critical or much needed to the society, then only DRDO collaborative with some other organization

Any internship or MoU opportunities are available in DRDO.

He said No, But Students had best problem definition definitely DRDO will allow to the internship

What are the problems right now solved by DRDO?

Electric Vehicle Propulsion Technologies and shape memory alloy material application is successfully applied in DRDO in recent scenario.

How to find the materials application and important in DRDO applications.


Discover materials applications and their significance in DRDO applications; begin by researching DRDO's specialized areas.

Outcomes

The Expert talk was very useful for the faculty members in gaining Knowledge on Smart Materials and Missile Launching and Technical Parameters of Missiles. Participants could write the funding project in the area of smart material and also funding opportunities in DRDO were clarified. The meeting successfully created awareness and generated interest in the smart materials and funding project, laying the foundation for future collaborations with DRDO and advancements in the field of education and research.

Valedictory Address

Dr. Rama Thirumurugan, HoD i/c & Professor / Mechanical wined up the session with a Vote of Thanks. He extended his gratitude of thanks to the Management, secretary, Principal, Resource Person, Dean R&I and all participants for the successful completion of session.



Prepared by
Dr. M. Jayaraj
(AP (SS)/Mech)



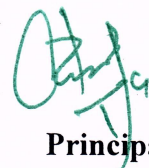
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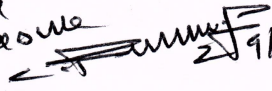
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Dean R&I



Principal

Noted with
please

Secretary 29/9/2025

Dr. Mahalingam College of Engineering and Technology, Pollachi - 642 003
(An Autonomous Institution)

**Office of Dean Research and Innovation
&**

Department of Mechanical and Automobile Engg.

Seminar on “Navigating Research Opportunities for Success - Knowledge Sharing Session” – Faculty Attendance Sheet

Venue: OBE Conference Hall (B110)

Time 02.00PM to 4.00PM

Date: 22.08.2023

S.No	Name of the faculty with Designation	Department	Signature
1.	Dr. B. Vinoth Kumar ASP	EEE	
2.	Dr.K.Umamaheshwari, AP(SG)	EEE	
3.	Dr.K.Saranya, AP(SS)	EEE	
4.	Dr.K.Rameshkumar, AP	EEE	
5.	Dr.G.Anupriya, Prof & Head	CSE	
6.	Dr.A.Noble Mary Juliet, ASP	CSE	
7.	Dr.M.Pandi, ASP	CSE	
8.	Dr.J.Bhavithra, AP(SG)	CSE	
9.	Dr.S.Raja Rajeswari, AP/CA	MCA	
10.	Dr.R.Ramesh, AP/Maths	S&H	
11.	Ms.B.Maheshwari, AP/Maths	S&H	
12.	Dr.J.Johnsonwilliam, AP/Physics	S&H	
13.	Dr.K.Shanmugapriya, AP/Chemistry	S&H	
14.	Dr.Regina Delcy, AP/Physics	S&H	
15.	Ms.N.Chithra, AP/Chemistry	S&H	
16.	Dr.N.Suba Rani, ASP	AIDS	
17.	Dr.M.Balakrishnan, ASP	AIDS	
18.	Dr.S.Bharathi, AP(SG)	ECE	
19.	Dr.N.Saravanakumar, Asso.Prof	ECE	
20.	Dr.R.S.Venkatesan, AP(SG)	ECE	
21.	Dr.C.Moorthy, AP	ECE	
22.	Dr.S.Ayyappan	Mech	
23.	Dr.D.Nathan	Mech	
24.	Dr.S.Madhusudhanan	Mech	
25.	Dr.M.Jayaraj	Mech	
26.	Dr.A.P.Janani, Asso. Prof.	IT	
27.	Dr.A.B.Arockia Christopher, Asso. Prof.	IT	
28.	Dr.S.Ponni @ Sathya, AP(SG)	IT	
29.	Dr.J.Thimmia Raja, AP(SS)	IT	
30.	DY. M. KALIAMDORTHY PROF	EEE	
31.	Mr. R. Muthu bhavathi / AP(SS)	EEE	
32.			
33.			
34.			
35.			

Co-ordinator

Dean R&I