

**SAKTHI POLYTECHNIC COLLEGE, SAKTHI NAGAR**  
**DEPARTMENT OF METALLURGY**  
**ACADEMIC YEAR 2023-2024**

**Guest Lecture Report**

Title: **Scope of Metallurgical Engineers in Various Industries**

**Guest Lecture Report**

**Event Overview**

On 10th July 2023, Sakthi Polytechnic College's Department of Metallurgy hosted a guest lecture on "Scope of Metallurgical Engineers in Various Industries." The lecture was delivered by Mr. R. Manikandan, M.E., Managing Director of Queen India Engineering Services (NDT Institute). The event took place at 10:00 AM in the Meeting Hall of Sakthi Polytechnic College, Sakthi Nagar.

**Speaker Profile**

Mr. R. Manikandan, a distinguished professional in the field of non-destructive testing (NDT), has made significant contributions to the industry. His extensive experience and expertise provided valuable insights to the students and faculty members present.

**Lecture Highlights**

- **Introduction to NDT:** Mr. Manikandan began the lecture by discussing the fundamentals of non-destructive testing and its importance in various engineering applications.
- **Techniques and Applications:** He elaborated on different NDT techniques, such as ultrasonic testing, radiographic testing, and magnetic particle testing, and their applications in the industry.
- **Case Studies:** Mr. Manikandan shared several case studies from his professional experience, illustrating the practical applications of NDT in real-world scenarios.
- **Q&A Session:** The lecture concluded with an interactive Q&A session, where students and faculty members had the opportunity to ask questions and engage in discussions with the speaker.

## Scope of Metallurgical Engineers in Various Industries

Metallurgical engineers have a broad scope in various industries due to their expertise in transforming metals into useful products. Some key areas include:

- **Automotive Industry:** Metallurgical engineers contribute to the development and manufacturing of automotive components, ensuring materials meet safety and performance standards.
- **Aerospace Industry:** They play a crucial role in designing and testing materials used in aircraft and spacecraft, focusing on strength, durability, and lightweight properties.
- **Electronics Industry:** Metallurgical engineers are involved in the production of electronic components, such as semiconductors and circuit boards, where precise material properties are essential.
- **Medical Technology:** They develop and improve materials for medical devices, including surgical implants and diagnostic equipment, ensuring biocompatibility and reliability.
- **Construction Industry:** Metallurgical engineers work on materials used in construction, such as steel and concrete, optimizing their properties for structural integrity and longevity.
- **Energy Sector:** They contribute to the development of materials for power generation and transmission, including those used in nuclear reactors and renewable energy systems.
- **Research and Development:** Metallurgical engineers engage in R&D to innovate new materials and processes, enhancing the performance and sustainability of various products.

## Program Agenda

- **Tamil Thai Vazhthu**
- **Welcome Address:** Mr. P. Govindarasu, B.E., MISTE, Lecturer / Metallurgy
- **Presidential Address:** Dr. N. Thangavelu, M.E., Ph.D., MISTE, Principal
- **Introduction to Chief Guest:** Mrs. A. Yogamalar Carunyam, B.E., MISTE, HOD (I/C) / Metallurgy (SF)
- **Guest Lecture:** Mr. R. Manikandan, M.E., Managing Director, Queen India Engineering Services (NDT Institute)
- **Vote of Thanks:** Selvan V. Vishnu, II Year / Metallurgy, Sakthi Polytechnic College
- **National Anthem**

## Coordination and Support

The program was coordinated by Mr. J. Yuvaraja, whose efforts ensured the smooth execution of the event. His coordination was instrumental in organizing the lecture and facilitating the interaction between the speaker and the attendees.

## Conclusion

The guest lecture by Mr. R. Manikandan was a resounding success, providing attendees with a deeper understanding of non-destructive testing and its applications. The insights and knowledge shared by the speaker were highly appreciated by all participants, making the event a memorable and enriching experience for the Department of Metallurgy at Sakthi Polytechnic College.

## PHOTOS



Guest Lecture Event Coordinator : Mr. J. Yuvaraja