

## Guest Lecture on Importance of Strength of Materials in Engineering

Date: 09/11/2024 (Saturday)

### Report: Guest Lecture on Importance of Strength of Materials in Engineering

The Department of Mechanical Engineering, organised Guest Lecture on Importance of Strength of Materials in Engineering, on 09/11/2024, at Seminar Hall 6, from 1:30 PM to 4.00PM. The resource speaker Mr Salim Basha, Product Manager Alstom, Pvt Ltd. The guest lecture was organized at the Department level for third and final year students of Mechanical Engineering, Aeronautical Engineering and Aerospace Engineering around 100 participants. The program was inaugurated by Dr. Shrinivas L Gombi, Dean Academics MVJCE, and Dr. Santhosh N, HOD Mechanical Engineering Department, MVJCE, with guidance from Dr. Umamaheshwaran, Principal MVJCE, Dr. A C Niranjanappa, Dean Research & Development MVJCE, Dr. M Brindha, Dean Affiliation, Dr. Hameem Shanavas, Student Affairs MVJCE, Dean - IQAC Dr. Asha Joseph.



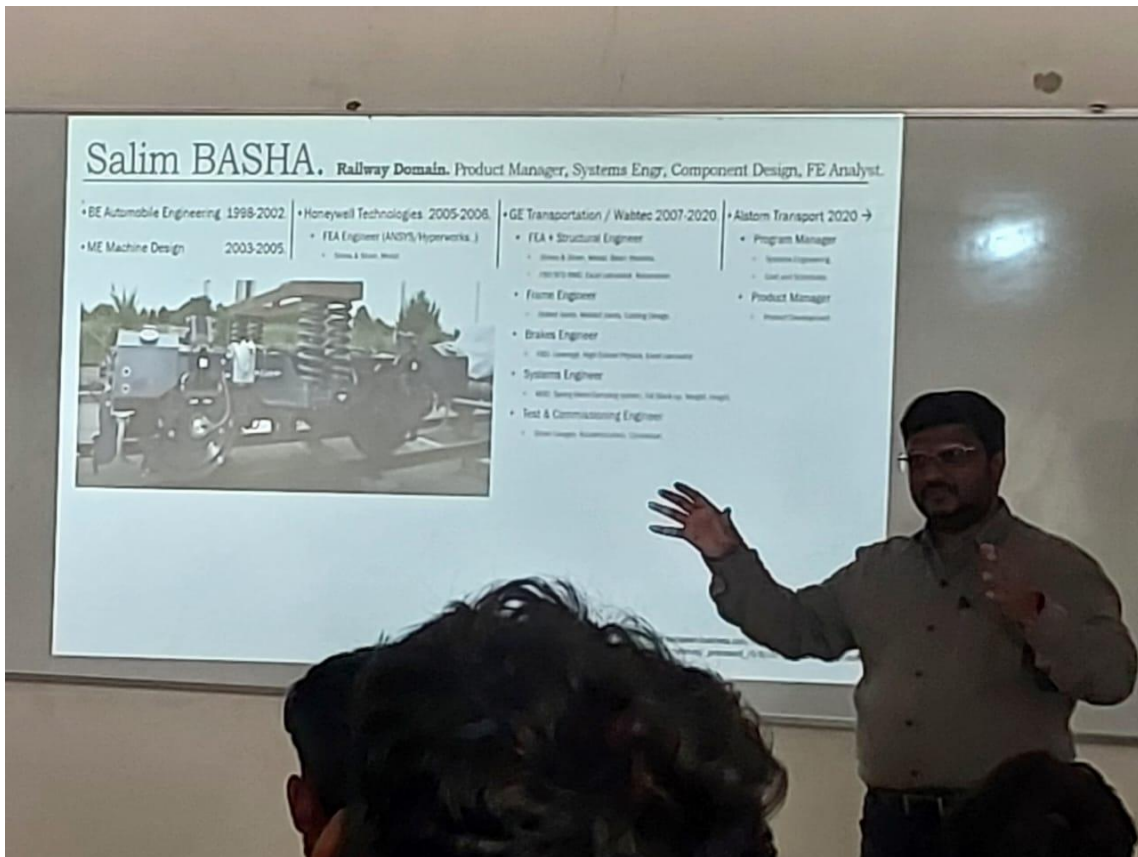
Dr. Shrinivas L Gombi, (right side), Dr. Santhosh (middle), Mr Salim Basha Guest Speaker (left) Product Manager Alstom, during the inaugural session of the guest lecture.



Dr. Shrinivas L Gombi, (right side) Dean Academics, MVJCE, addressing the gathering during inaugural session of the guest lecture.

The inauguration was followed with welcome speech by Dr. Shrinivas L Gombi, Dean Academics MVJCE addressing the requirement of such programs to nurture the students to bridge the gap between the industry-academia.

The lecture by Mr Salim Basha, the Importance of Strength of Materials in Engineering. The lecture covers briefly about the stress, strain, crack growth and failure analysis. The property of a material is increased by adding some impure foreign particles to the parent material like steel was explained clearly by using stress-strain graph. The different types of beam and different types of loads acting on the beam was practically demonstrated using a video to show how a train wheels roll on the track is subjected to simply supported beam structure. And the wheel is having a tapered flange to maintain the speed ration while taking a turn and collar to avoid derail was phenomenal. And finally a video was played to show the company Alstom holds world record to produce the fastest moving train around 578.4 KMPH in the year 2008 and till now no other company has crossed the record which was appreciated by students. Overall the lecture left satisfactory note to all its participants.



Mr Salim Basha Guest Speaker (left) Product Manager Alstom Bangalore, lecturing on the topic Importance of Strength of Materials in Engineering



Dr Santhosh N HoD Mechanical Engineering, giving vote

The Guest Lecture created an opportunity for students to understand the need for Materials property.

**Outcomes of the Event:**

By attending the seminar, the Mechanical Engineering students of second and third year understood how

- The properties of the materials can be improved.
- Structure can take different types of loads.
- Importance is the material synthesis and analysis.
- The current industry adopts the theoretical concepts of our textbooks .