

**A Report**  
For  
GUJCOST sponsored Two Day Workshop on  
**‘Recent Trends in Mechanical Engineering’**

Mechanical Engineering Department of Babaria Institute of Technology organized a GUJCOST sponsored Two Day Workshop on ‘Recent Trends in Mechanical Engineering’ on 3<sup>rd</sup> and 4<sup>th</sup> January, 2019. More than 40 faculty members participated in the workshop. The main objective of this workshop was to spread the knowledge of recent technologies in Mechanical Engineering field. The program covered topics related to advances in surface engineering, optimization techniques, manufacturing processes and welding technologies. Expert speakers from reputed institutions were invited to share their knowledge and expertise in this program. The program enhanced technical knowledge and provided new insights to faculties in different areas.

For the inaugural function of the workshop, Mr. Darshan Shukla, Sr. Deputy General Manager, L & T Power was invited along with Dr. Mukesh Bulsara, Associate Professor, G. H. Patel College of Engineering & Technology.



Details of technical sessions of workshop were as follows:

**Day 1 – 3<sup>rd</sup> January, 2019**

<b>Sr. No.</b>	<b>Name of Speaker</b>	<b>Topics discussed</b>
Technical Session 1	Dr. Mukesh Bulsara, GCET	Surface Engineering <ul style="list-style-type: none"><li>- Introduction &amp; significance</li><li>- Various techniques for surface modification including various types of coatings</li><li>- Applications of surface engineering</li></ul>
Technical Session 2	Dr. Vivek Patel, PDPU	Stochastic Optimization Techniques <ul style="list-style-type: none"><li>- Introduction of optimization</li><li>- Evolutionary &amp; Swarm Intelligence based techniques</li><li>- Teaching Learning Based Optimization (TLBO) technique</li></ul>

**Day 2 – 4<sup>th</sup> January, 2019**

<b>Sr. No.</b>	<b>Name of Speaker</b>	<b>Topics discussed</b>
Technical Session 1	Dr. Vishvesh Badheka, PDPU	Advance welding technology <ul style="list-style-type: none"><li>- Solid state welding</li><li>- Friction Stir Welding for similar and dissimilar metals</li><li>- Demonstration of Experimental results</li></ul>
Technical Session 2	Dr. Anand Joshi, GCET	Micro Electro Mechanical Systems (MEMS) and Micro Fabrication <ul style="list-style-type: none"><li>- Application of MEMS in Automobile &amp; Medical science</li><li>- Fabrication of MEMS</li></ul>