

**EXPERIMENTAL INVESTIGATION OF  
BALLISTIC IMPACT BEHAVIOR OF  
ECO POLYMER COMPOSITE**

**A PROJECT REPORT**

*Submitted by*

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*in partial fulfillment for the award of the degree*

*of*

**BACHELOR OF ENGINEERING**

*in*

**MECHANICAL ENGINEERING**



**T.J.S. ENGINEERING COLLEGE**



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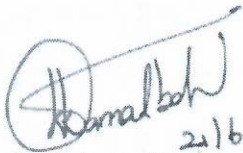


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**BONAFIDE CERTIFICATE**

Certified that this project report "EXPERIMENTAL INVESTIGATION OF BALLISTIC IMPACT BEHAVIOR OF ECO POLYMER COMPOSITE" is the bonafide work of "BODILINGALAPADU VASANTH (112818114007), KATURU BHUVAN CHANDU (112818114021), KUPPAN.M(112818114024), MOHENDAR.D (112818114027)," who carried out the project work under my supervision.

  
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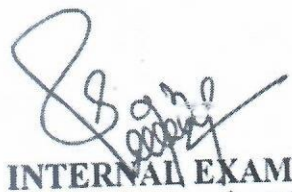
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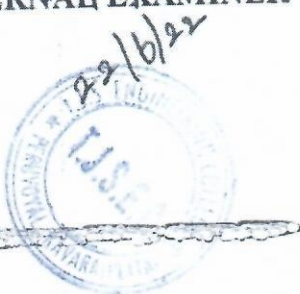
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## ABSTRACT

In defense industry, ballistic impact is common scenario occurs often. The materials used for making vests, automobile covering parts, aerospace parts affected due to impact of projectile. These materials should possess good impact strength and energy absorption for its damage resistance and providing safety for the industry.

Usually cork filler used for its well-known impact strength. TAMARIND SEED POWDER tends to improve its property with respect to cost. Thus, it is important to calculate its impact strength and energy absorption factor of reinforced composites.

In this thesis, TAMARIND SEED POWDER is for its good resistance to impact and the ballistic impact test is carried out with lead projectile for studying its behavior, impact strength and energy absorption.

From the results, it is sufficient to conclude that usage of 20 % TAMARIND SEED POWDER composite behavior with impact of projectile.



  
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