The purpose of this paper is to present experimental data on designing and analyzing a carbon fiber suspension system for Formula SAE cars. The reason carbon fiber suspensions are favored by Formula SAE teams is because of its high specific stiffness and strength. Carbon fiber suspensions also become the predominant structural material at the highest levels of International motorsport and are also gaining widespread popularity in collegiate design competitions.

DESIGN AND DEVELOPMENT OF COMPOSITE SUSPENSION PUSH ROD FOR FORMULA STUDENT RACE CAR MOHD HAFIZI BIN ABDUL RAHMAN This technical report is submitted in accordance with the requirements of the student branch at the University of Texas at Austin after a prior asphalt racing competition proved to be unsustainable. The design of Formula SAE suspension - TIP Engineering

Designing Composite Suspension Arms for a Formula SAE Vehicle 2011-01-1262 Due to their high specific stiffness and strength, carbon-fiber composites have become a predominant structural material at the highest levels of International motorsport and are also gaining widespread popularity in collegiate design competitions. The suspension components covered in this paper include control arms, uprights, spindles, hubs, pullrods, and rockers. The purpose of this paper is to present experimental data on designing and analyzing a carbon fiber suspension system for Formula SAE cars. The reason carbon fiber suspensions are favored by Formula SAE teams is because of its high specific stiffness and strength. Carbon fiber suspensions also become the predominant structural material at the highest levels of International motorsport and are also gaining widespread popularity in collegiate design competitions.