

## Rathmalana, Sri Lanka | 12th, December 2024

## A REVIEW ON CHASSIS SYSTEMS OF TRICYCLES

## D.A.T.Deshan, H.D.D.M.S.S.Namal, M.T.Dhanushka, H.N.W. Gunasekara, and S.V.R. Gamage

Department of Electro-Mechanical Technology, University of Vocational Technology, Sri Lanka hasith.gunasekara@uovt.ac.lk

**Abstract**: This review paper examines the current advancement in the design and enhancement of tricycle chassis, focusing on innovations and design approaches that enhance the performance, safety, and functionality of tricycles. This paper explores various design principles, materials, and engineering techniques employed in the construction of tricycle chassis. Key topics include structural analysis, durability, load distribution, stability improvements, rider's comfort and the integration of modern technologies such as lightweight materials. Additionally, the review highlights recent research findings and trends that address the challenges faced in optimizing tricycle chassis for different applications, from commercial use to recreational and mobility aids. By synthesizing current knowledge and identifying gaps in existing research, this paper aims to provide a comprehensive understanding of tricycle chassis design, offering insights for future research and development in this field.

Keywords: Tricycle, Tadpole, Delta, Chassis, Stability