## Dr. Babasaheb Ambedkar Technological University



A

**SEMINAR REPORT** 

On

"CVT"

SUBMITTED BY

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## CERTIFICATE This is to certify that

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Has satisfactorily completed Seminar Report entitled

"CVT"

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Dr. Babasaheb Ambedkar Technological University

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## **ABSTRACT**

After more than a century of research and development, the internal combustion (IC) engine is nearing both perfection and obsolescence: engineers continue to explore the outer limits of IC efficiency and performance, but advancements in fuel economy and emissions have effectively stalled. While many IC vehicles meet Low Emissions Vehicle standards, these will give way to new, stricter government regulations in the very near future. With limited room for improvement, automobile manufacturers have begun full-scale development of alternative power vehicles. Still, manufacturers are loath to scrap a century of development and billions or possibly even trillions of dollars in IC infrastructure, especially for technologies with no history of commercial success. Thus, the ideal interim solution is to further optimize the overall efficiency of IC vehicles.One potential solution to this fuel economy dilemma is the continuously variable transmission (CVT), an old idea that has only recently become a bastion of hope to automakers. CVTs could potentially allow IC vehicles to meet the first wave of new fuel regulations while development of hybrid electric and fuel cell vehicles continues. Rather than selecting one of four or five gears, a CVT constantly changes its gear ratio to optimize engine efficiency with a perfectly smooth torque-speed curve. This improves both gas mileage and acceleration compared to traditional transmissionsThe fundamental theory behind CVTs has undeniable potential, but lax fuel regulations and booming sales in recent years have given manufacturers a sense of complacency: if consumers are buying millions of cars with conventional transmissions, why spend billions to