## A Critical Review on Fluid flow Simulation and Analysis of LNG-driven IC Engine

## Kiran M.B.

Department of Mechanical Engineering School of Technology, Pandit Deendayal Energy University, Gandhinagar, Gujarat, INDIA MB.Kiran@sot.pdpu.ac.in

## **Abstract**

Internal combustion engines make use of the increased use of fossil fuels. Fossil fuels are very harmful to the atmosphere as they emit Greenhouse gases. To overcome these limitations, LNG-driven IC Engines came into being. An effort has been made in the current research to study the existing technologies or methods available for analyzing the flow performance of LNG-driven IC Engines. The work will also focus on the methods available for predicting the pressure and velocity of the gas not only in the engine cylinder but also in the exhaust manifold. Various boundary conditions considered for the study are also elaborated. The outcome of the current research work would be helpful not only to the academicians and researchers but also to the practitioners.

## **Keywords**

Internal combustion Engine, Fluid Flow Simulation, LNG-driven IC Engine, Simulation, CFD.

Proceedings of the 3rd South American International Industrial Engineering and Operations Management Conference, Asuncion, Paraguay, July 19-21, 2022