

Green Engines with Hydrogen

During this study I converted a petrol engine to work with water as its fuel. This particular model first required the construction of a thermal insulating electrolysis chamber to produce green H₂ which the engine runs on. To make the electrolysis more self-sustained and reduce the requirement for an external battery we connected solar panels to power it. During the next step we had to make and change various parts such as the carburetor and the timing belt and do respective calculations for the particular engine so that the hydrogens combustion properties were supported by it. I came across a wide range of problems when trying to accommodate for this including gas leaks, overheating, back firing etc and after overcoming and creating a successful model I concluded that the overall efficiency of the system was very low to be used on a market scale.