

Thermo-chemical degradation. History of small gas producer engine system. Chemistry of gasification. Gas producer – type, operating principle. Gasifier fuels, properties, preparation, conditioning of producer gas. Application, shaft power generation, thermal application and economics.

For Above topics use below link

<https://www.nrel.gov/docs/legosti/old/3022.pdf>

A range of bio-hydrogen production routes: For this topics use below link

<https://www.nrel.gov/docs/legosti/old/36262.pdf>