Project Description

Team 18 will be designing a process to produce Lanthanum (III) Iron Oxide (LaFeO₃). LaFeO₃ is a photocatalyst used for solar generation of H₂, and its nanoparticles are used as a novel alternative for semiconductors to produce solar panels. Current semiconductors used in solar panels need “external bias” which means that it needs DC voltage to set up operating conditions. Solar panels produced using LaFeO₃ as a semiconductor do not require an external bias! LaFeO₃ has been successfully synthesized under laboratory conditions, and Team 18 will design a large-scale production plant to produce LaFeO₃ nanopowder.