Dr. Sofyane ABBOU, SAFRAN H2 microgrid applications for aerospace technologies

Hydrogen as a fuel has the potential of zero emissions (CO_2 , NO_x , ...). and is the most likely energy carrier for the future of aviation. This presentation focuses on hydrogen use for propulsive and non-propulsive aeronautical applications. Various strategies are analyzed in order to evaluate hydrogen's feasibility as a fuel including fuel cell configurations, engine configurations based on H₂ combustion, aircraft configurations. The main challenges raised by H₂ infrastructure and system certification are also discussed.