



Středoškolská technika 2022

Setkání a prezentace prací středoškolských studentů na ČVUT

INVESTIGATION OF NOVEL AIR BREATHING REACTION ENGINES

Jan Stejskal

Gymnázium, Pardubice, Mozartova 449

Technecium – Talentcentrum průmyslu 4.0, Nádražní 641, Pardubice

Annotation:

The motivation of this project is to design series of pulsejet / ramjet / ramrocket as propulsion engines or thrusters for small sounding rockets, UAVs, jet-ski or paraglider and to investigate potential use of 3D printing in manufacturing of these engines. The relative simplicity and high thrust to mass ratio of these engines together with pulsejet ability to run on broad range of fuels including used vegetable oil with relatively clean emissions adds to their attractiveness. The ultimate goal is construction of ejector augmented pulsejet and investigation of conflagration to detonation transition for future work on PDE.

