

DETechnologies

Memorial University of Newfoundland Faculty of Engineering and Applied Science

What is a Rotating Detonation Rocket Engine?

A Rotating Detonation Rocket Engine (RDRE) is a groundbreaking propulsion technology that harnesses supersonic combustion for a 25% more efficient combustion!

Why a RDRE?

At DETechnologies, our mission is to develop a modular RDRE driven by renewable fuels — paving the way for the future of green energy-fueled rocketry. RDREs have applications as;

- Launch Vehicle Propulsion
- Satellite Thrusters

Project Objectives

- Gas-Gas, non-premixed RDRE
- Multi-wave detonation control
- Modular design
- Maximize thrust
- Liquid cooled

Areas Seeking Support

We are preparing to begin manufacturing a fully functional prototype and are seeking support in the following areas:

- Testing Equipment/Laboratory Space
- Manufacturing Support
- Financial Support

Project Timeline

 Theoretical Model

 Development
 November 2023

 February 2023
 • Start of Manufacturing



Testing & Validation

February 2024



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Support Levels

Manufacturing and testing budgets total **\$150,000**, help us bring green rocketry combustion closer to a reality by supporting our work.



Commemorative 3D Printed Model

Meet & Greet Event

Logo size on Team Gear*





Team gear includes all social medias & marketing materials

Contact Us! DETechnologies@mun.ca www.DETechnologies.ca

Meet the Team

We are a group of senior undergrad & grad students interested in pushing the Aerospace/Rocketry field closer to green energy, with our work on RDREs.





Logan Palmer



Aidan Clark

