

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

Testing & Validation

February 2023

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.

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	Platinum	Gold	Silver
	\$25,000 +	\$15,000	\$5,000
Private Demo Event			
Commemorative 3D Printed Model		\	
Meet & Greet Event	\	\	/
Logo size on Team Gear*	Large	Medium	Small
	*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.











Aidan Clark



Patrick Cleary