



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

Faculty of
Engineering

HIGH SPEED REACTING FLOW (HiREF) RESEARCH GROUP

NICHE AREA

- ❖ Flameless Combustion;
 - Liquid fueled direct injection flameless combustion, Vortex flameless combustion
- ❖ Future Propulsion System;
 - Pulse detonation engine, Radial detonation engine
- ❖ Mesoscale Combustion;
 - Vortex mesoscale combustion, Flameless mesoscale combustion
- ❖ Carbon Nanotube;
 - Flame synthesis of carbon nanotube
- ❖ Sustainable Fuel.

For further details, please contact:

Head of Research Group



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SERVICES AND FACILITIES

Consultation on high speed reacting flows, sustainable and green technologies, and a wide range of state of the art energy related problems

FLAGSHIP RESEARCH

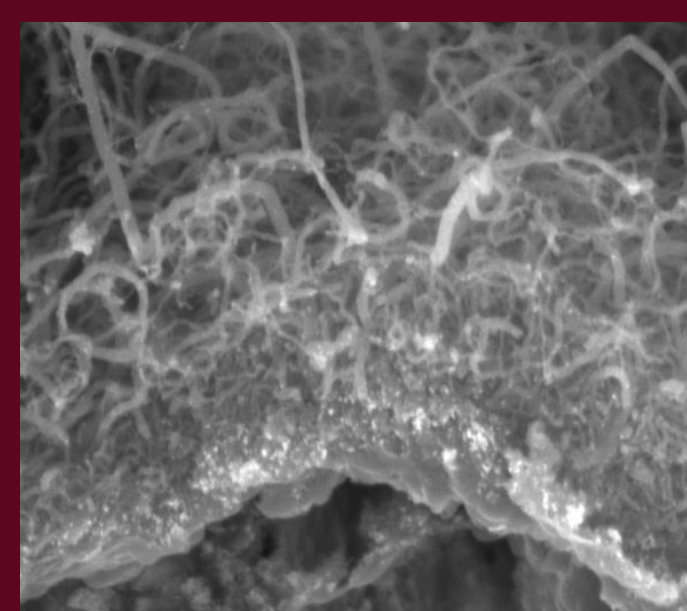
- a) Liquid Fueled Direct Injection Flameless Swirl Combustor (FSC)
- b) Radial Detonation Engine Propulsion System
- c) Flame Syntheses of Carbon Nanotube
- d) Mesoscale Vortex Flameless Combustion



(a)



(b)



(c)



(d)