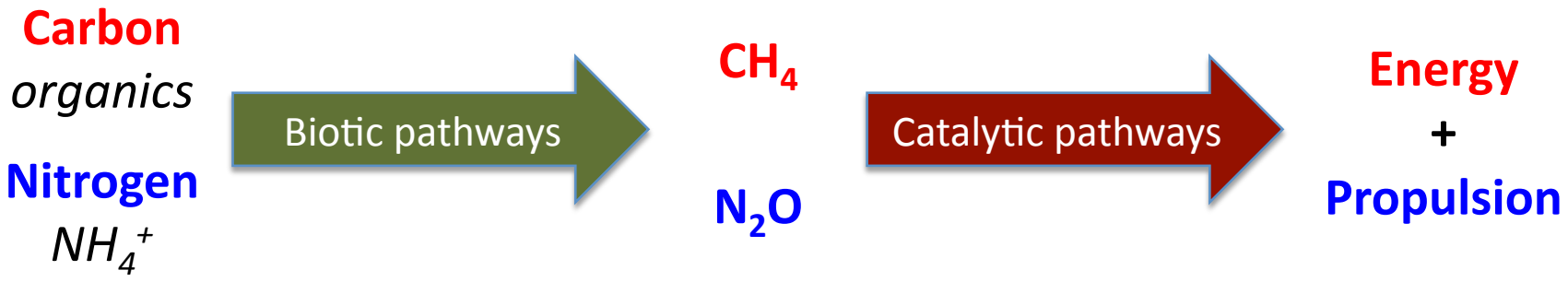
Yaniv Dror Scherson

Stanford Univercity

The Completely Autotrophic Nitrous Decomposition Operation (CANDO) :

Converting waste into power



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Stanford University

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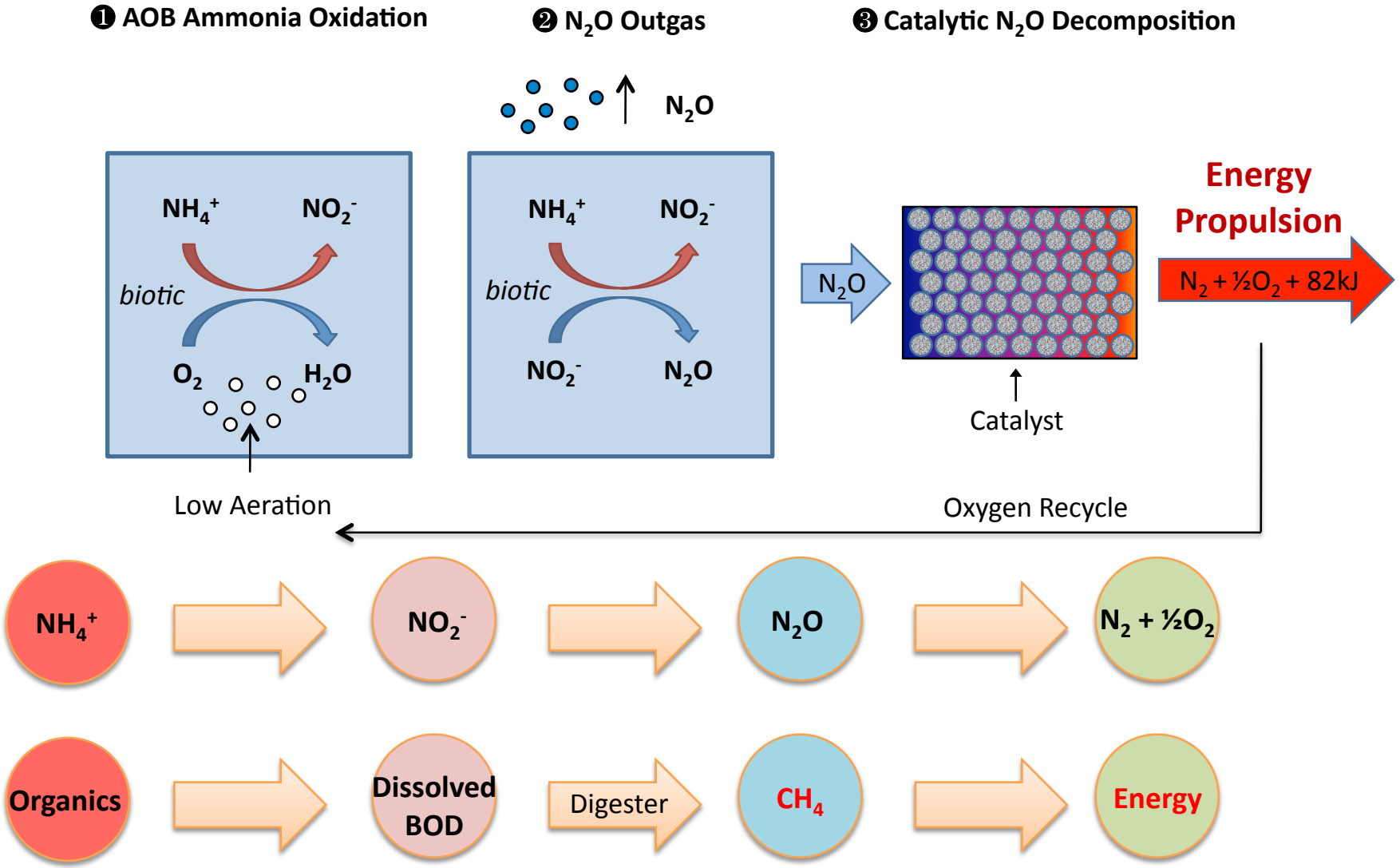
CANDO Process Steps

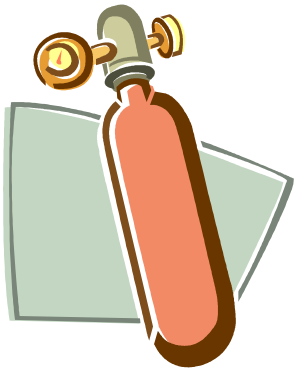


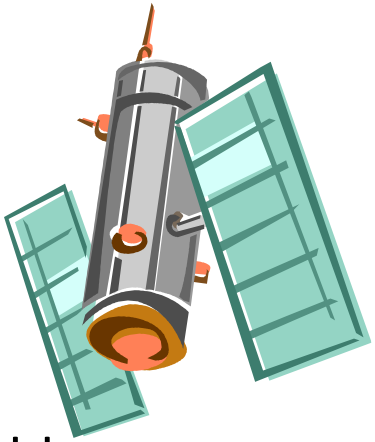
Applications of N_2O

Reliable, simple, and restartable **igniter** for a larger rocket engine

Oxidizer for an auto-ignitable bipropellant **liquid** or **hybrid rocket engine**

Propellant **tank pressurization**





Storable, **monopropellant thruster** for satellites

Hot gas generator (GG) for **driving a turbine** for power generation

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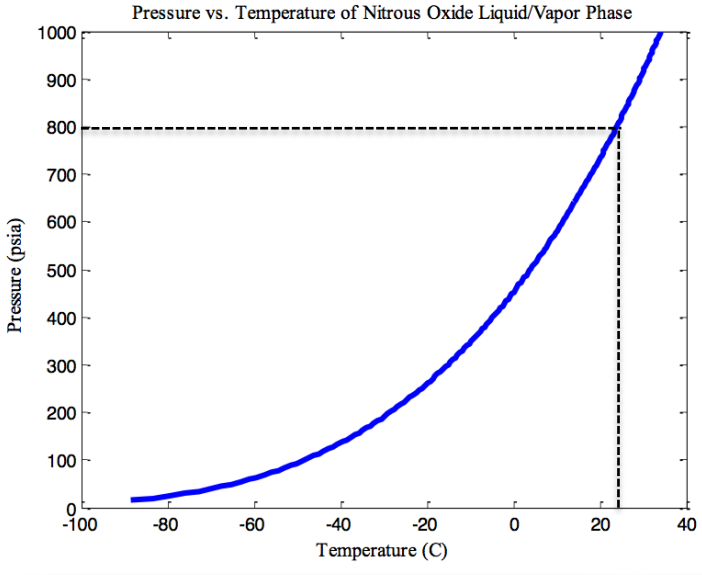
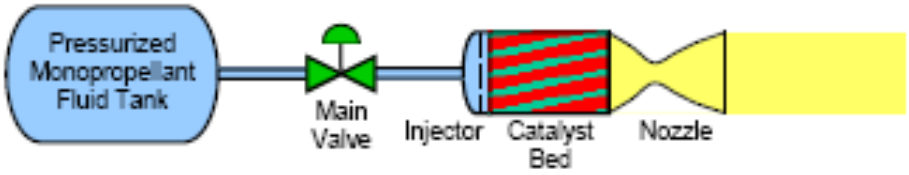
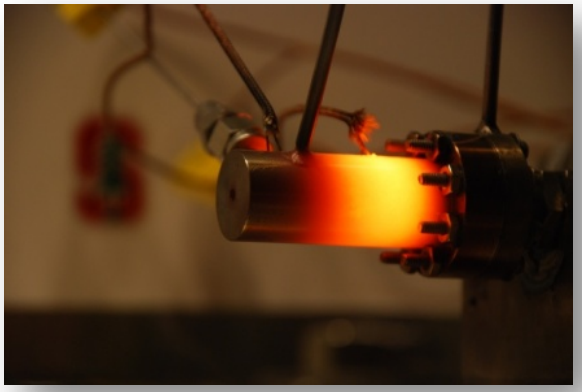
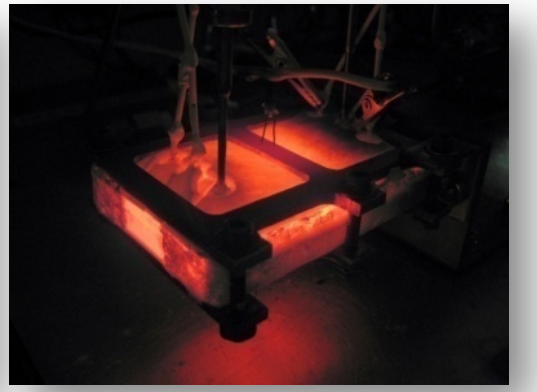
N_2O as a Propellant

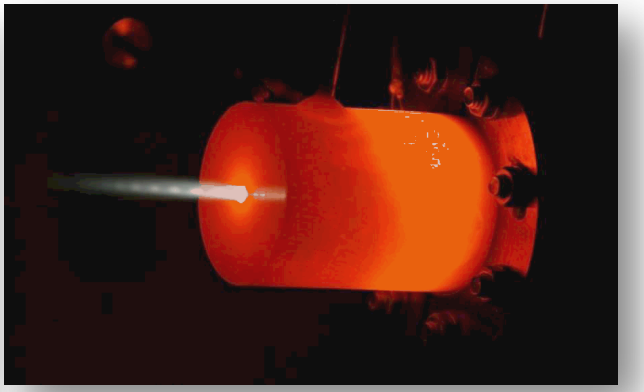




Bed Loading	c^*	η_{c^*}	$T_{chamber}$	Thrust
3.25 $kg/m^2/s$	832 m/s	75 %	1470°C	1.4N







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