A zero emissions source of immense heat which can **replace fossil fuel within existing power stations** and supply combustion free industrial heat. Meet:



# The Hydrogen Energy Release Optimiser

Star Scientific's HERO® produces unlimited, affordable, safe and reliable heat — with zero emissions. HERO® technology puts hydrogen into use across the world today as the energy and industrial heat choice of the future.

## **HOW IT WORKS**



The powerful heat comes from the interaction of hydrogen and oxygen with an advanced catalyst, applied to a metal surface.



HERO® ramps up to more than 700° C in minutes.



The reaction is scalable. The greater the surface area the catalyst covers, the more hydrogen and oxygen, the more heat it produces.



# **BENEFITS**

#### Safe

A controllable reaction.

#### Limitless

Relies on the most abundant element in the world and uses a catalyst that doesn't degrade.

### Clean

Green hydrogen as an input, just pure water as an output. Water can be re-used for hydrogen generation.

## Affordable & Efficient

No pre-heating required. HERO® will accelerate the demand and reduce the cost of green hydrogen production.

## Reliable

Rapid and dependable power generation and heat on-demand that isn't reliant on wind or sun.

# **TOP APPLICATIONS**



Industrial processes requiring heat



Off grid heating systems



Coal fired generation substitute



Off-grid Power

Find out more at www.starscientific.com.au or get in touch at

Star Scientific Limited



