4th Quarter Business Presentation

120718

Overview

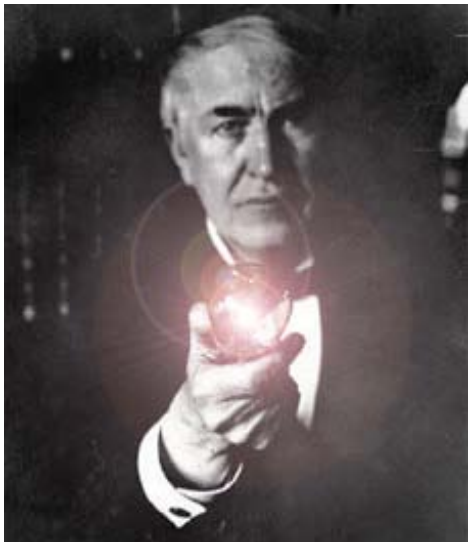
Brilliant Light Power, Inc. is developing a new zero-pollution, primary energy source applicable to essentially all power applications wherein the latent energy of the hydrogen atom from water molecules serving as the fuel source is released by forming Hydrinos®, a more stable chemical form of hydrogen. The SunCell® cell was invented by Dr. Mills to release this energy as brilliant light converted to electricity at an anticipated cost of a small percentage of any competing source of electricity.

Brilliant Light Power's path forward is to:

- Prove the hydrino power source by power and hydrino analysis
- Develop the technology
- Engineer products
- Commercialize solutions

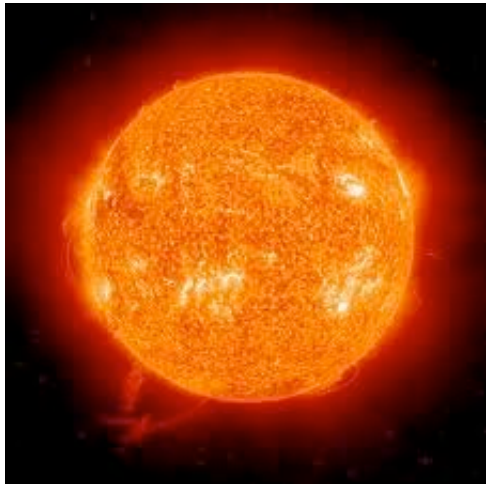
About Brilliant Light Power

- Reinventing electricity, independence of being completely off grid and independent of fuels infrastructure
- New, sustainable, nonpolluting energy
- Technology and science validated by independent third parties
- Extensive proprietary methods and systems
- Electricity company, sales via lease agreement, no metering
- Partnership & outsource business model
- Transitioning from research to reality
- Profound implications for electric power – accessible, affordable, clean



The Energy Solution: SunCell®

- Continuous power source, developed with proprietary technology
- Non-polluting: by-product is harmless lower energy state of hydrogen called Hydrino®, lighter than air, vents to space
- System is sealed with H_2O fuel injected with nonreactive, recirculated silver, absolutely safe materials and operation
- Capital cost estimated at $50 per kW at production power & scale, versus $3,463 for solar
- No Metering: Electricity sold at about $0.05 per kWh via a per diem lease fee.
- Low operating cost, only consumable is minimal amounts of water
- Scalable from 10kW to 10 MWs
- Initially heating applications, stationary electric, developing to motive



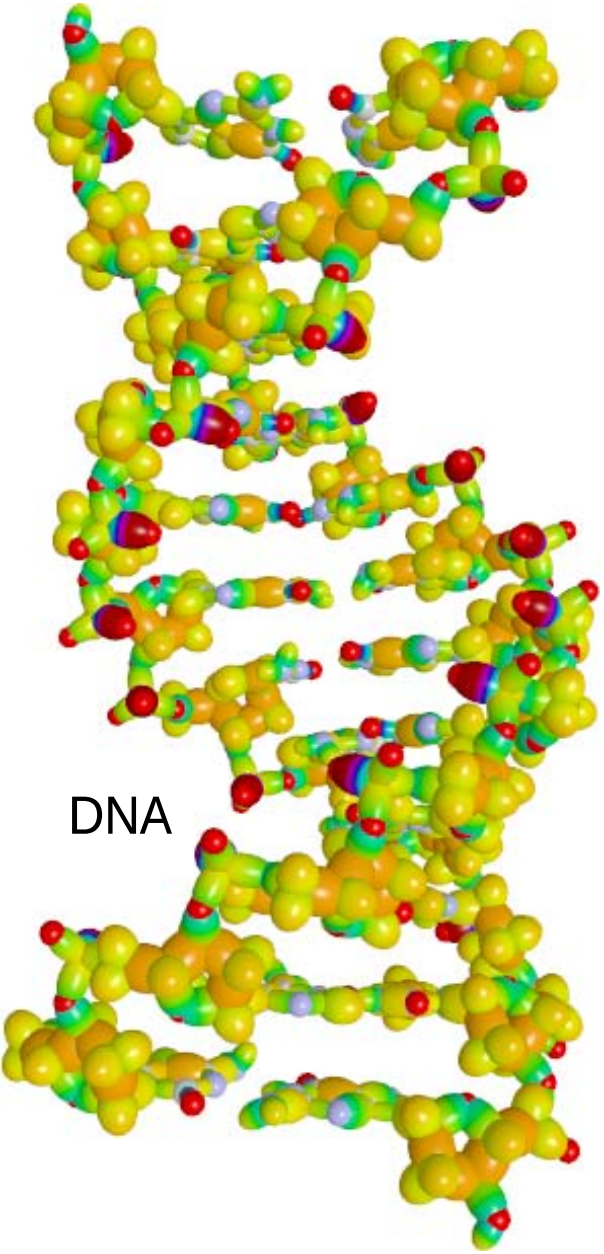
Hydrino® energy key points

years of research, success and invention…

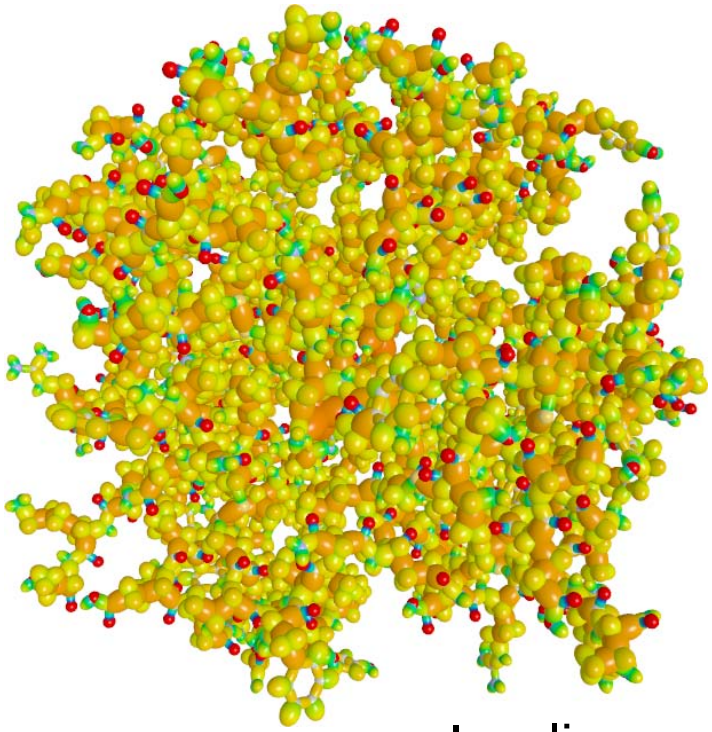
- Hydrino® power has a higher power density than any other power source known to man. Recent NIST calibrated results show 20 MW peak optical power as unique signature of a high energy continuum emission spectrum and an energy gain of 200 to 500 times.
- Product Hydrino® “in a bottle” identified by multiple analytical methods.
- The Hydrino® energy source has been validated by more than 10 different methods including the latest, gold standard, NIST calibrated light sources and commercial calorimetry.
- The Hydrino® is ubiquitous in nature, and matches astrophysicists conclusions that so-named dark matter is a different allotrope or different chemical form of hydrogen.
- There are five validation reports published on the Brilliant Light Power website from leading experts identifying massive power output from the process. Multiple other validation reports are available under NDA and upon request from unfunded assessments.
- New validation on energetic materials application reporting 10X TNT.
- Brilliant Light Power will support all requests for validation testing from **qualified** scientists.
- There are more than 100 peer reviewed publications to support the Hydrino® including external scientific authors.
- Every evolutionary step has produced a higher power density leading up to the commercial development of SunCell®.

Theory Based on Classical Laws

Millsian 2.0: Modeling Molecules

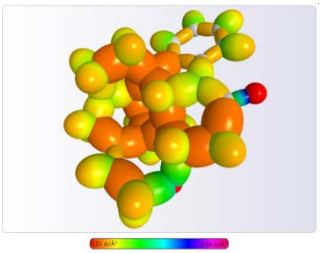


DNA

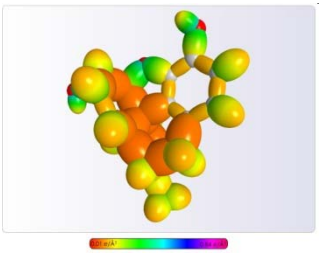


Insulin

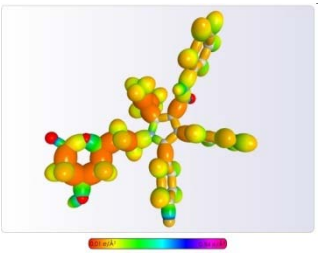
Strychnine



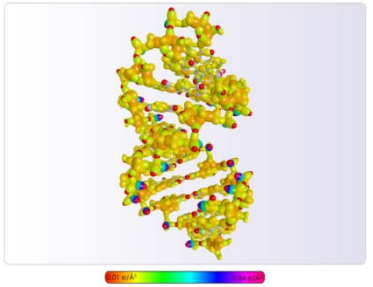
Morphine



Lipitor



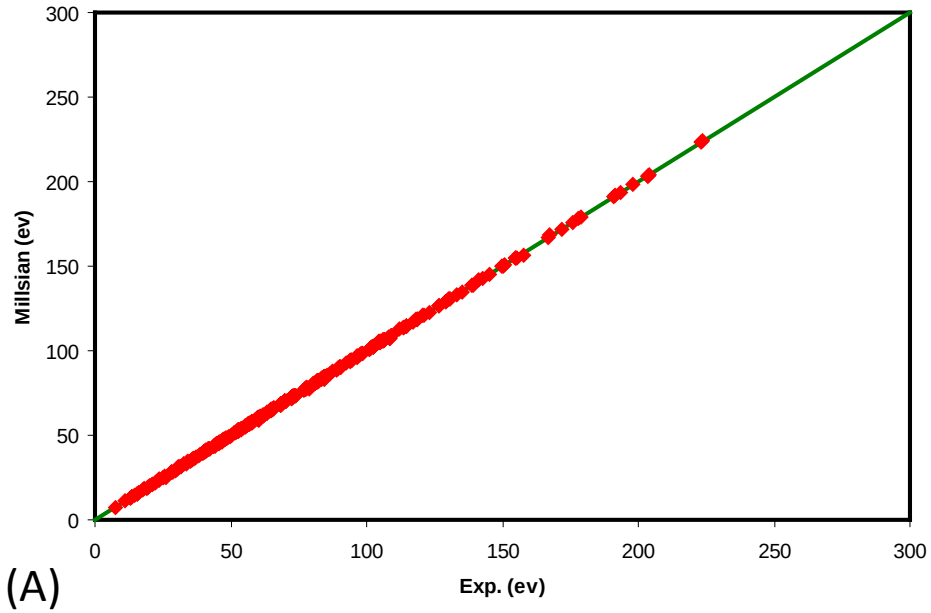
RNA



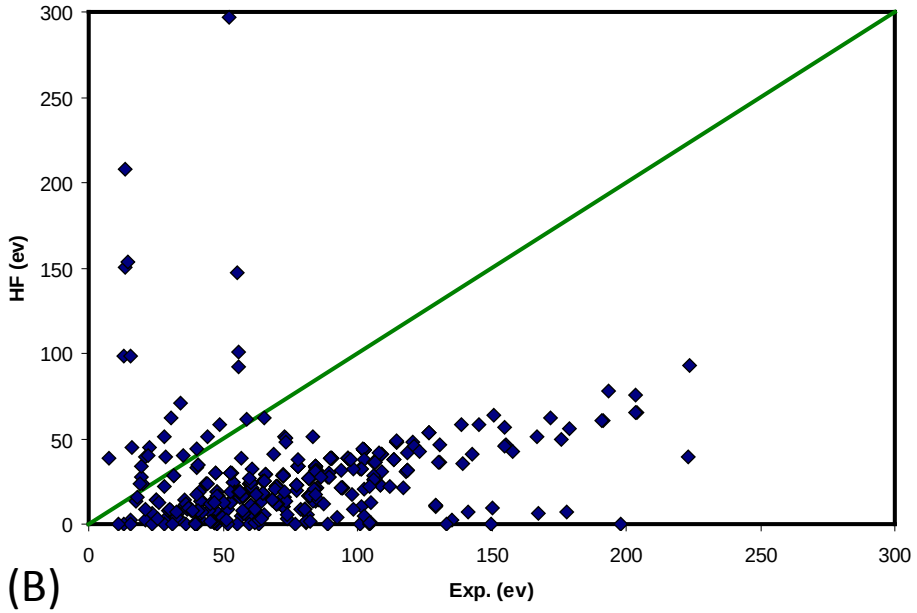
millsian.com

Comparison of Classical to Quantum Mechanical Performance

The total bond energies of exact classical solutions of 415 molecules generated by Millsian 1.0 and those from a modern quantum mechanics-based program, Spartan's pre-computed database using 6-31G* basis set at the Hartree-Fock level of theory, were compared to experimental values. (A) The Millsian results were consistently within an average relative deviation of about 0.1% of the experimentally values. (B) In contrast, the 6-31G* results deviated over a wide range of relative error, typically being >30-150% with a large percentage of catastrophic failures, depending on functional group type and basis set.



(A)

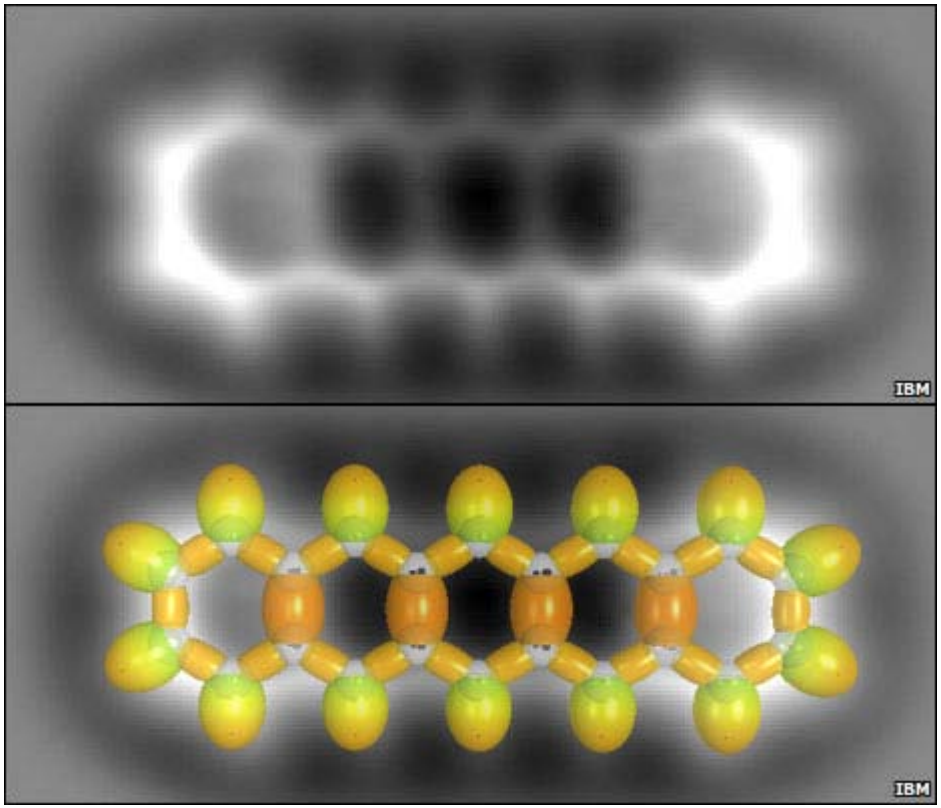


(B)

R. L. Mills, B. Holverstott, W. Good, A. Makwana, J. Paulus, "Total Bond Energies of Exact Classical Solutions of Molecules Generated by Millsian 1.0 Compared to Those Computed Using Modern 3-21G and 6-31G* Basis Sets," Phys. Essays 23, 153 (2010); doi: 10.4006/1.3310832

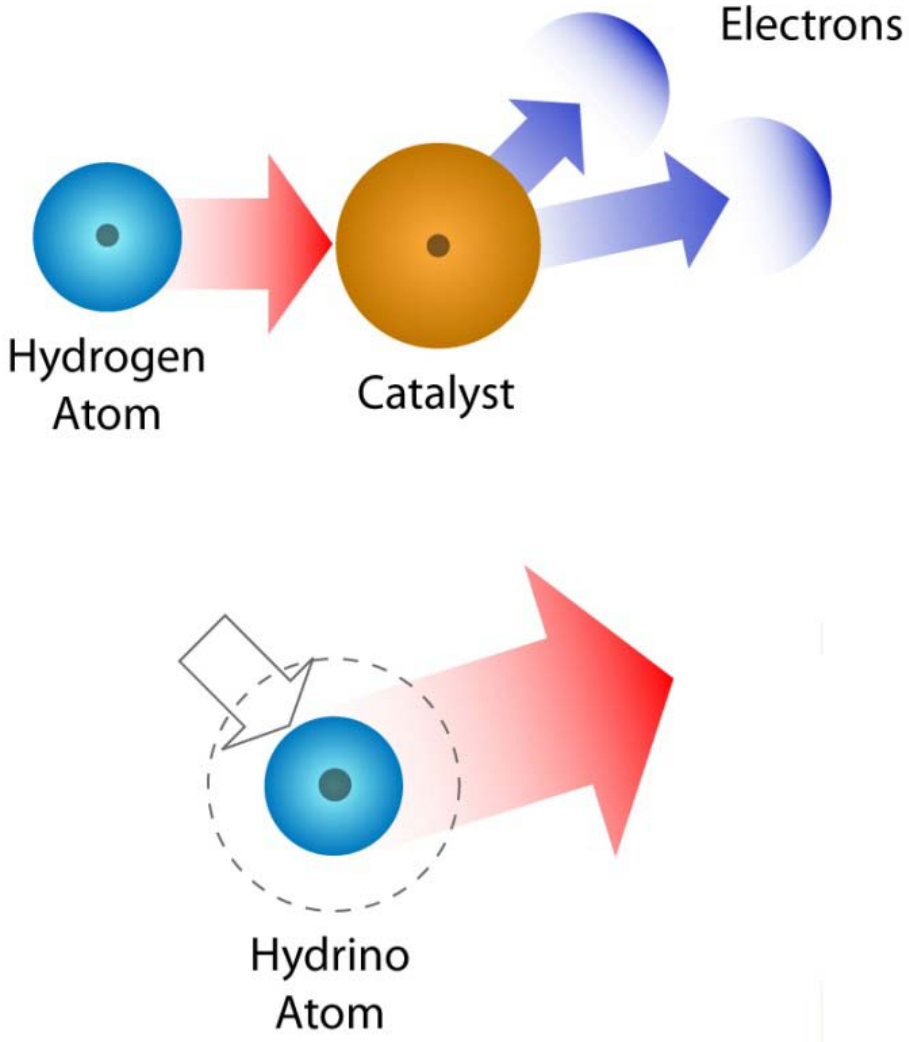
Physical Image Compared to Physical Solution

The polycyclic aromatic hydrocarbon pentacene was imaged by atomic force microscopy using a single CO molecule as the probe. The resulting breakthrough in resolution revealed that in contrast to the fuzzy images touted by quantum theoreticians as proof of the cloud model of the electron, the images showed localized bonding MOs and AOs in agreement with the classical solution.

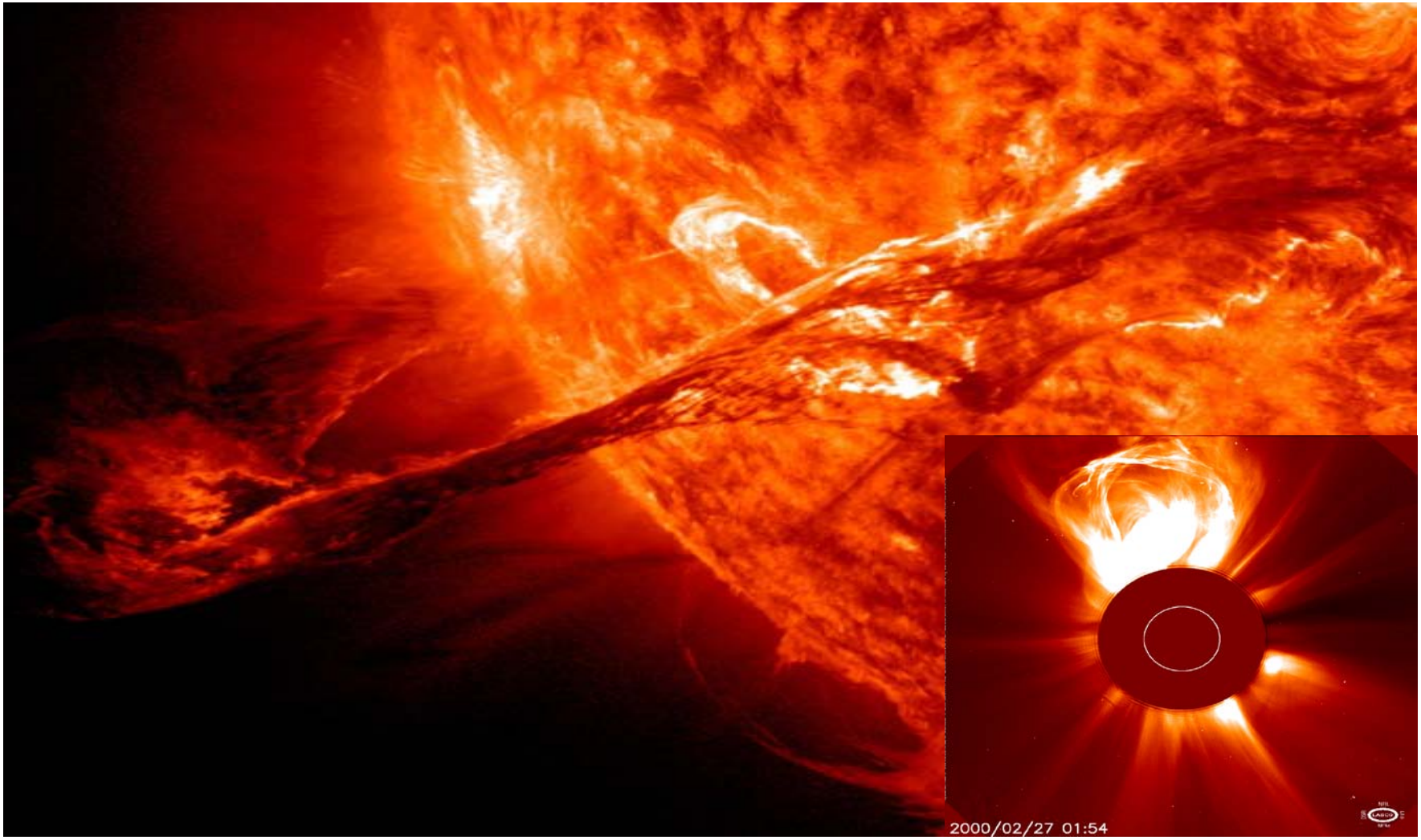


Atomic force microscopy image of pentacene by Gross et al. Bottom, the superimposed analytical classical solution that matches the physical structure. [L. Gross, F. Mohn, N. Moll, P. Liljeroth, G. Meyer, "The chemical structure of a molecule resolved by atomic force microscopy", Science, Vol. 325, (2009), pp. 1110-1114.]

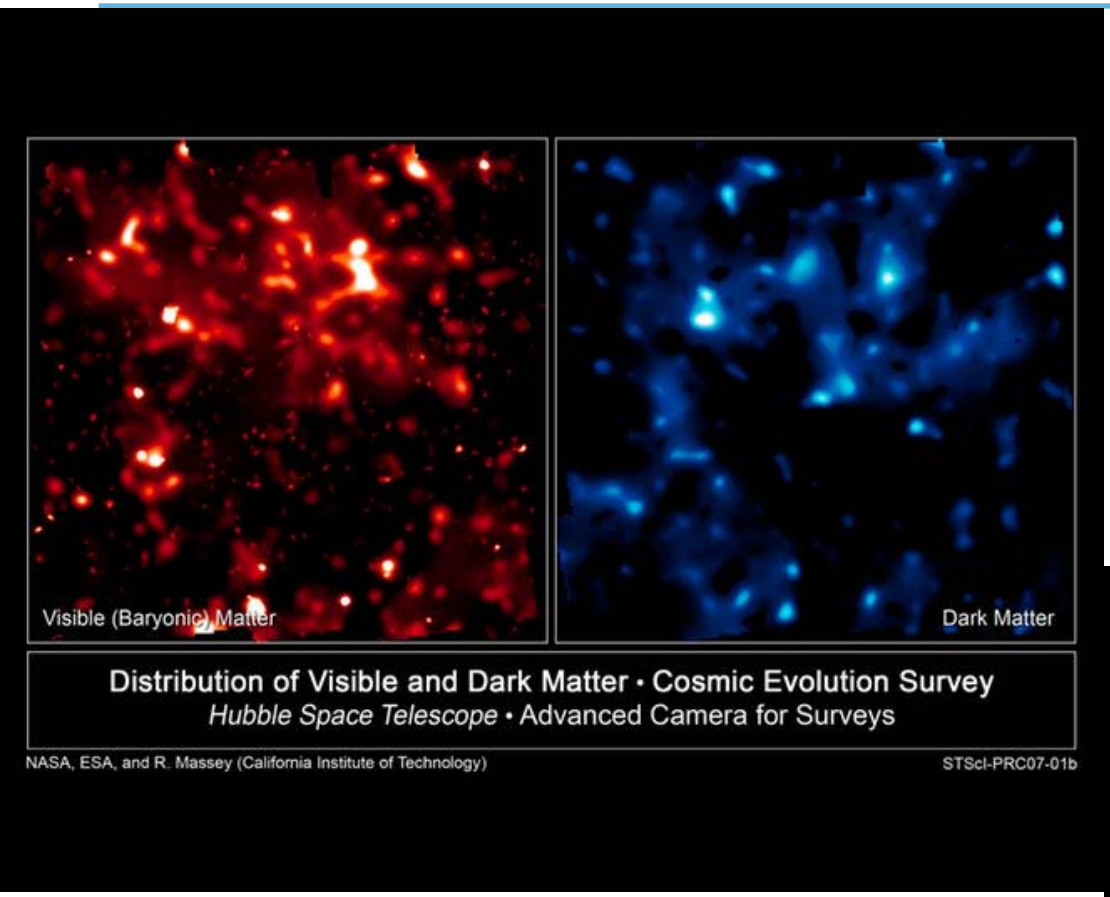
Catalytic Reaction of Atomic Hydrogen to Hydrino®

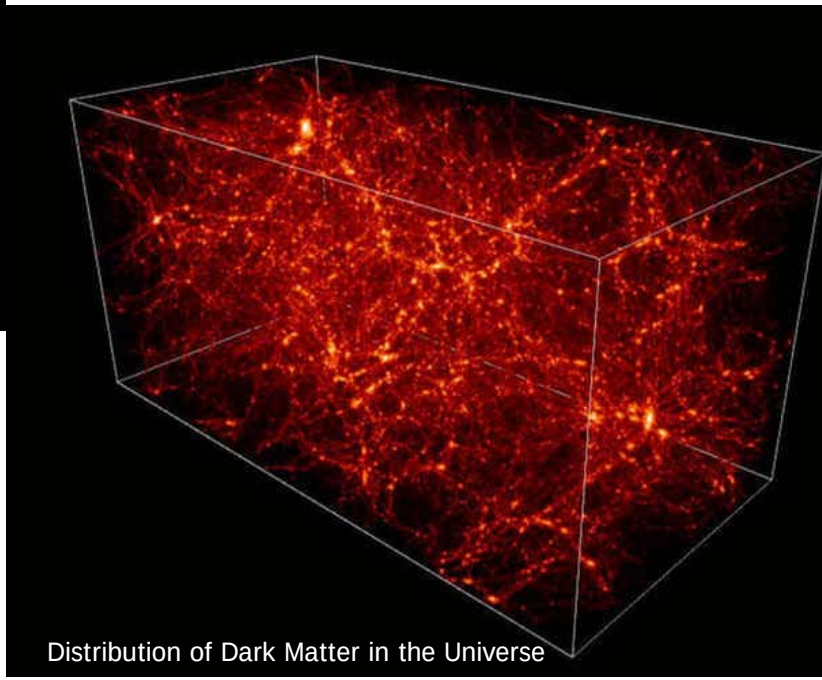


The Hydrino® and the Suns corona



Dark Matter: The Hydrino® observed in nature

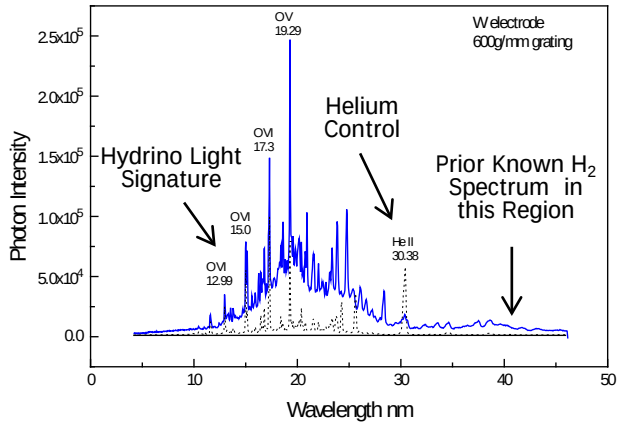




Distribution of Dark Matter in the Universe

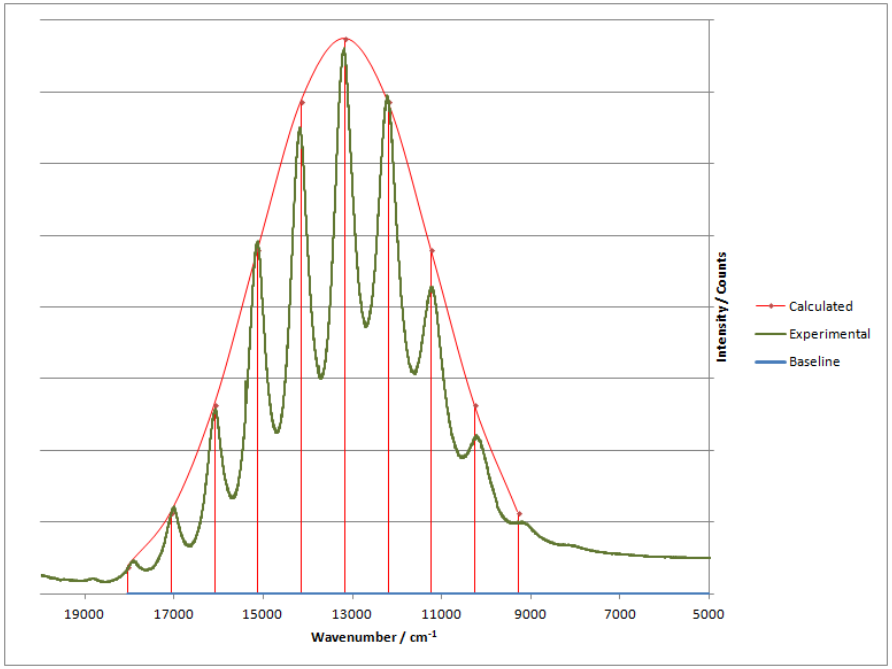
Dark Matter ring in galaxy cluster

$$\lambda = \frac{91.2}{m^2}\ nm \quad (\text{m} = \text{integer})$$



Beyond the over 100 peer reviewed publications, completed author's proofs of an important new paper regarding the confirmation of the fundamental Hydrino reaction, the SunCell's power source

Methods for measuring Hydrino® product



- GUT
- Molecular modeling
- H(1/2) and H(1/4) hydrino transitions observed by continuum radiation
- Astronomy data verifying hydrinos such as H(1/2), H(1/3), and H(1/4) hydrino transitions
- H (1/4) spin-nuclear hyperfine transition
- Hydrino trapped on witness plates and in alkali halide-hydride crystals
- Polymeric molecular hydrino compounds
- In situ H_2 (1/4) gas synthesis in argon and analysis

- H_2 (1/4) ro-vib spectrum in crystals by e-beam excitation emission spectroscopy
- H_2 (1/4) X-ray photoelectron spectroscopy (XPS) binding energy
- H_2 (1/4) Fourier Transform Infrared (FTIR)
- H_2 (1/4) Inverse Raman effect (IRE)
- H_2 (1/4) Photoluminescence spectroscopy
- Electron Paramagnetic Resonance Spectroscopy (EPR)
- Time of Flight Secondary Ion Mass Spectroscopy (ToF-SIMs) and Electrospray Ionization Time of Flight (ESI-ToF) identification of hydrino compounds
- MAS H NMR
- Thermogravimetric analysis (TGA)
- Cryogenic gas chromatography
- Fast H in plasma including microwave and rt-plasmas
- Rt-plasma with filament and discharge
- Afterglow
- Highly pumped states
- H inversion
- Commercial differential scanning calorimetric (DSC) and water flow calorimetry with multiple solid fuels chemistries
- Arbin-Instrument measured electricity gain over theoretical in CIHT cells
- SunCell® fully ionized energetic plasma and electromagnetic pulse
- 20 MW extreme ultraviolet NIST-calibrated optically measured power in shot blasts
- Commercial bomb calorimetry of energetic shots
- Shock wave 10X TNT

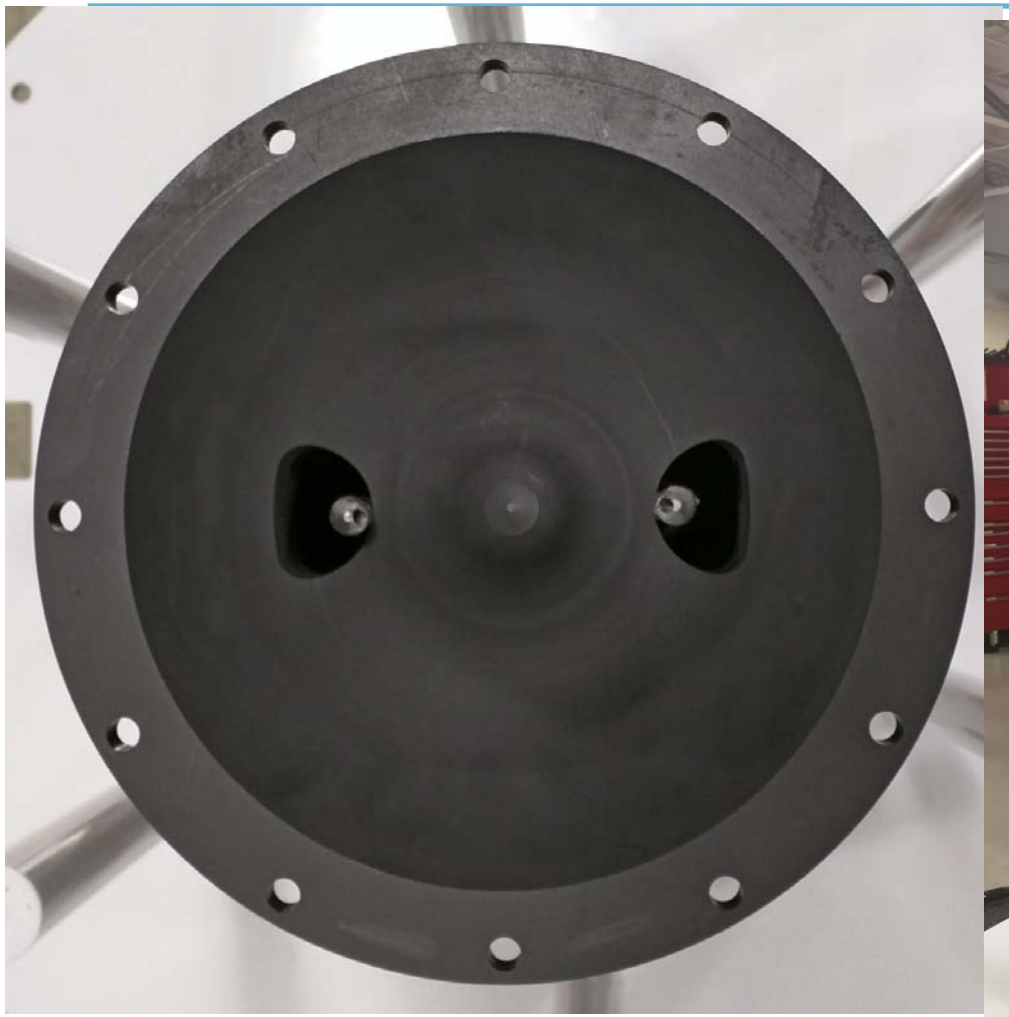
Explosive power

Click the above image to view on YouTube:
https://www.youtube.com/watch?v=SDhRvnYZbng

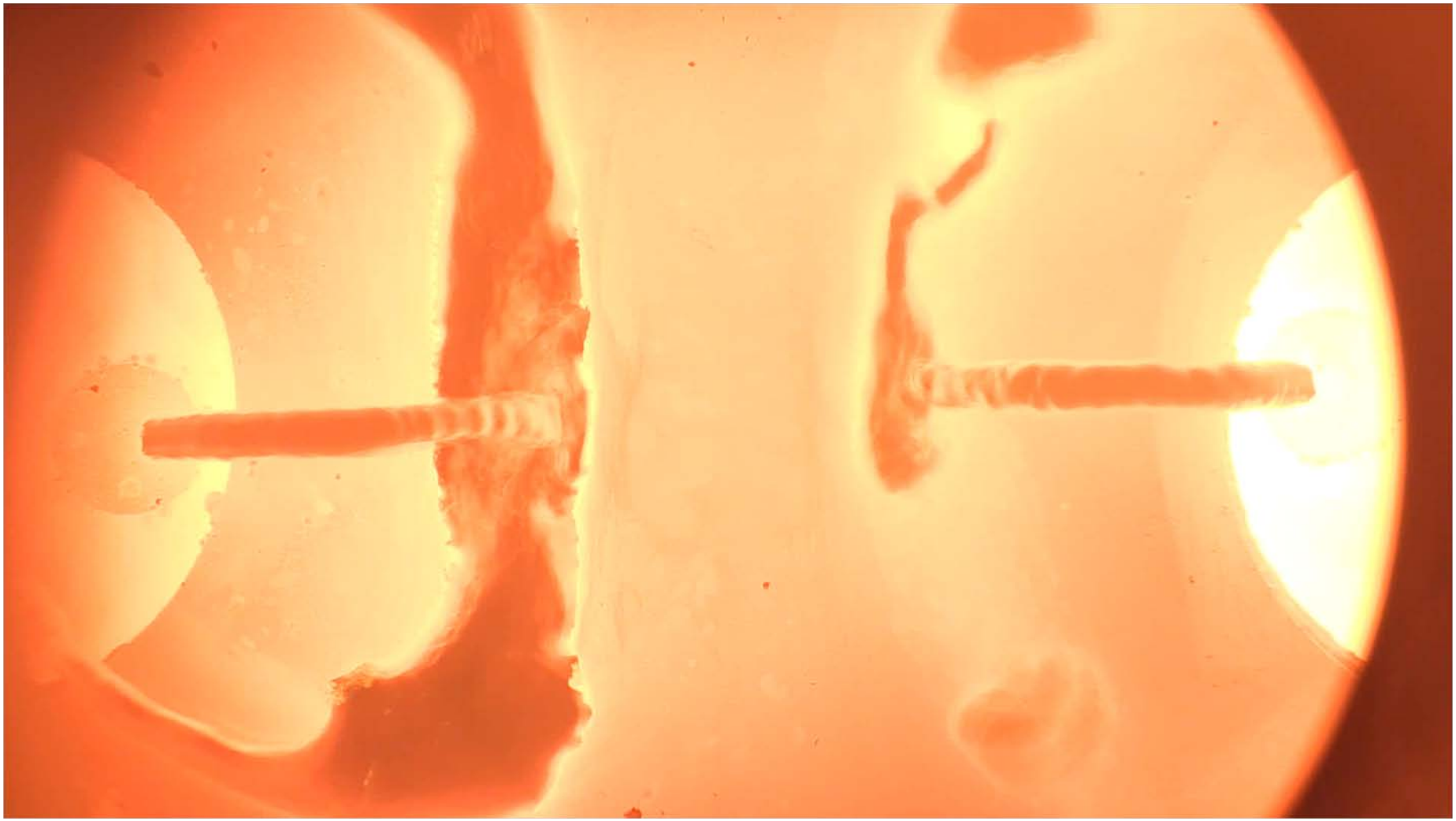
A million watts in a teacup

Click the above image to view on YouTube:
https://www.youtube.com/watch?v=1G07iVwthno

Key invention – Liquid electrode injectors



SunCell® in operation

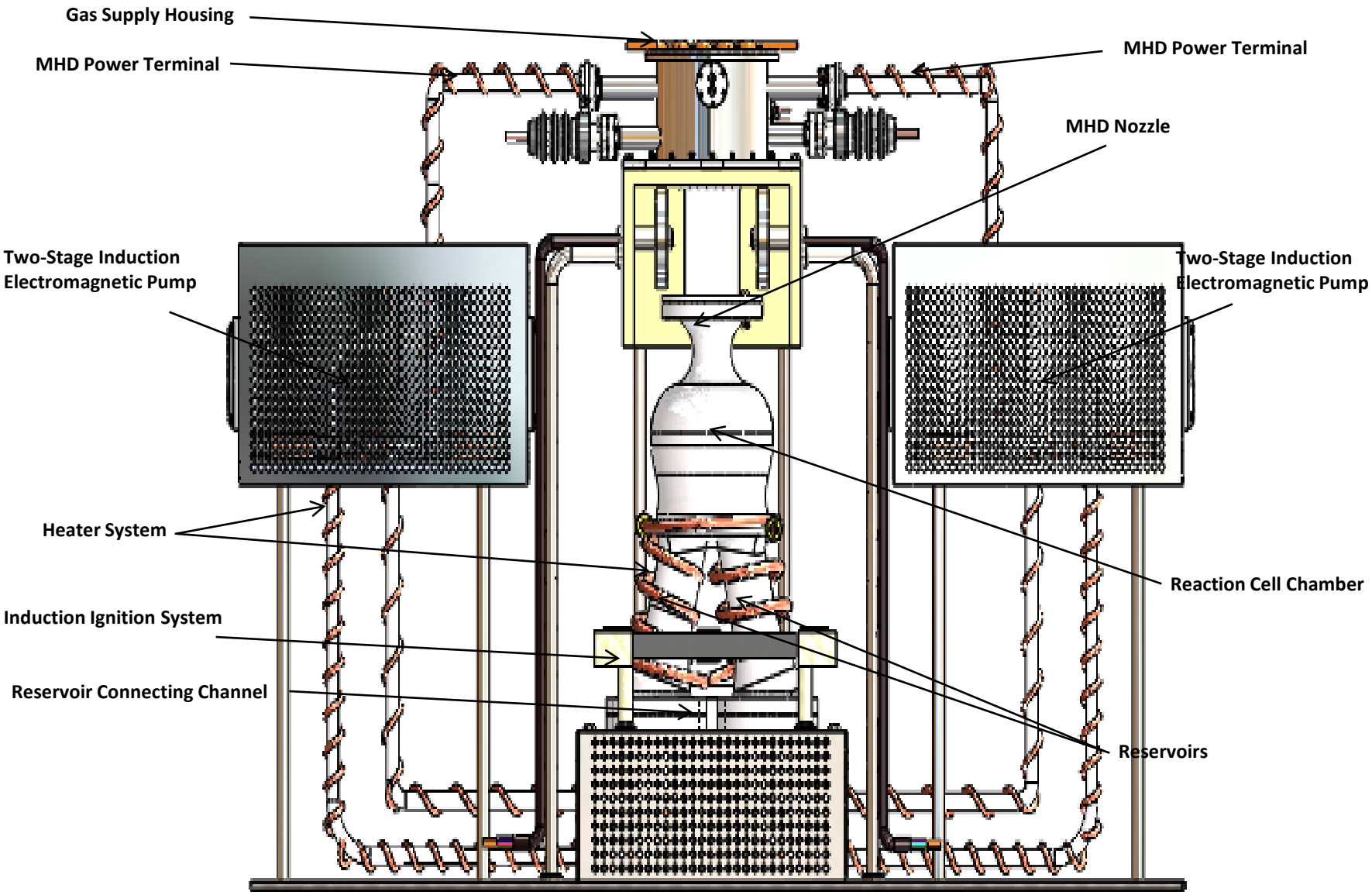


Click the above image to view the video on YouTube:
https://www.youtube.com/watch?v=jUBheBH9eio

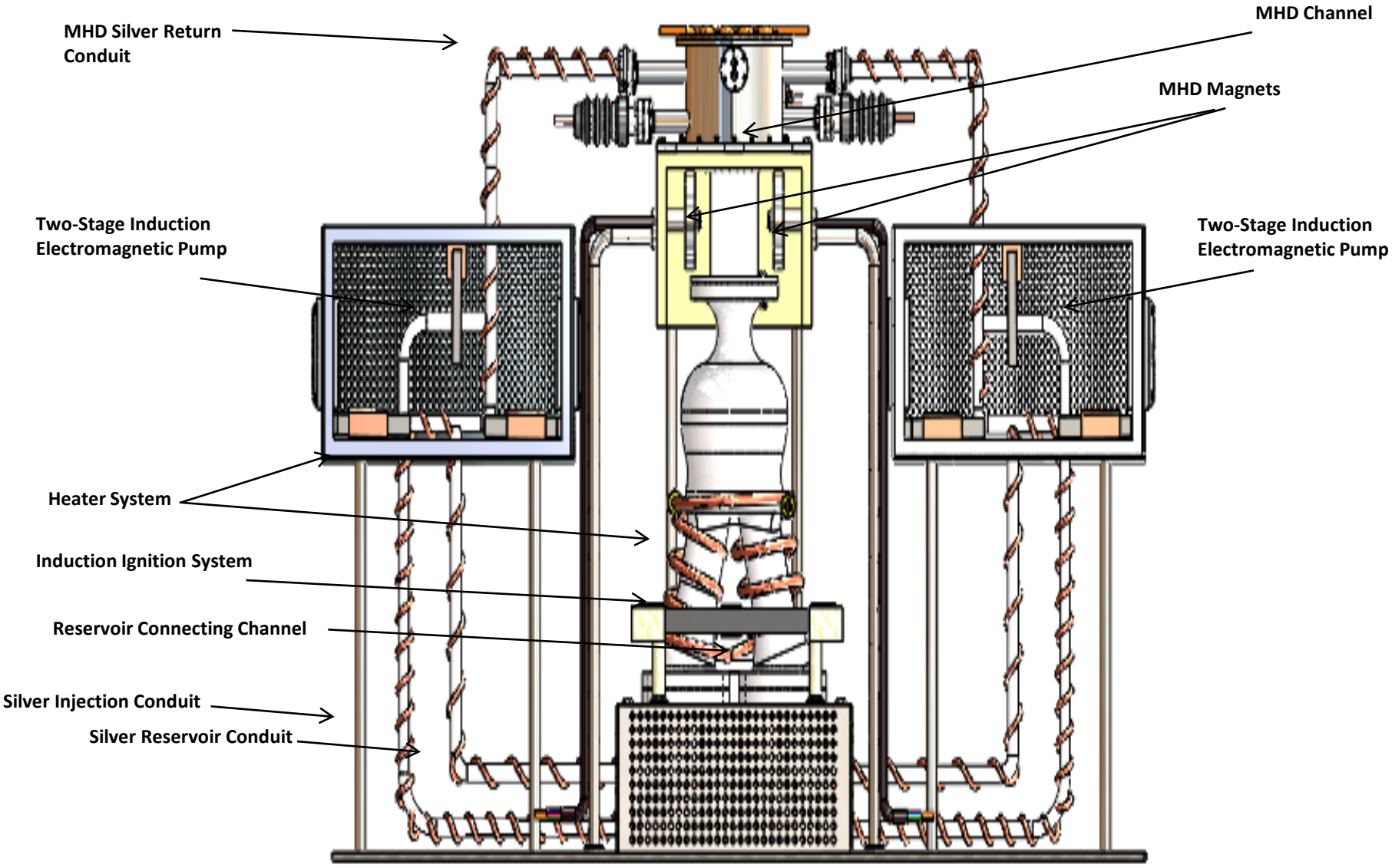
SunCell® in operation cont'd

SunCell Evolution

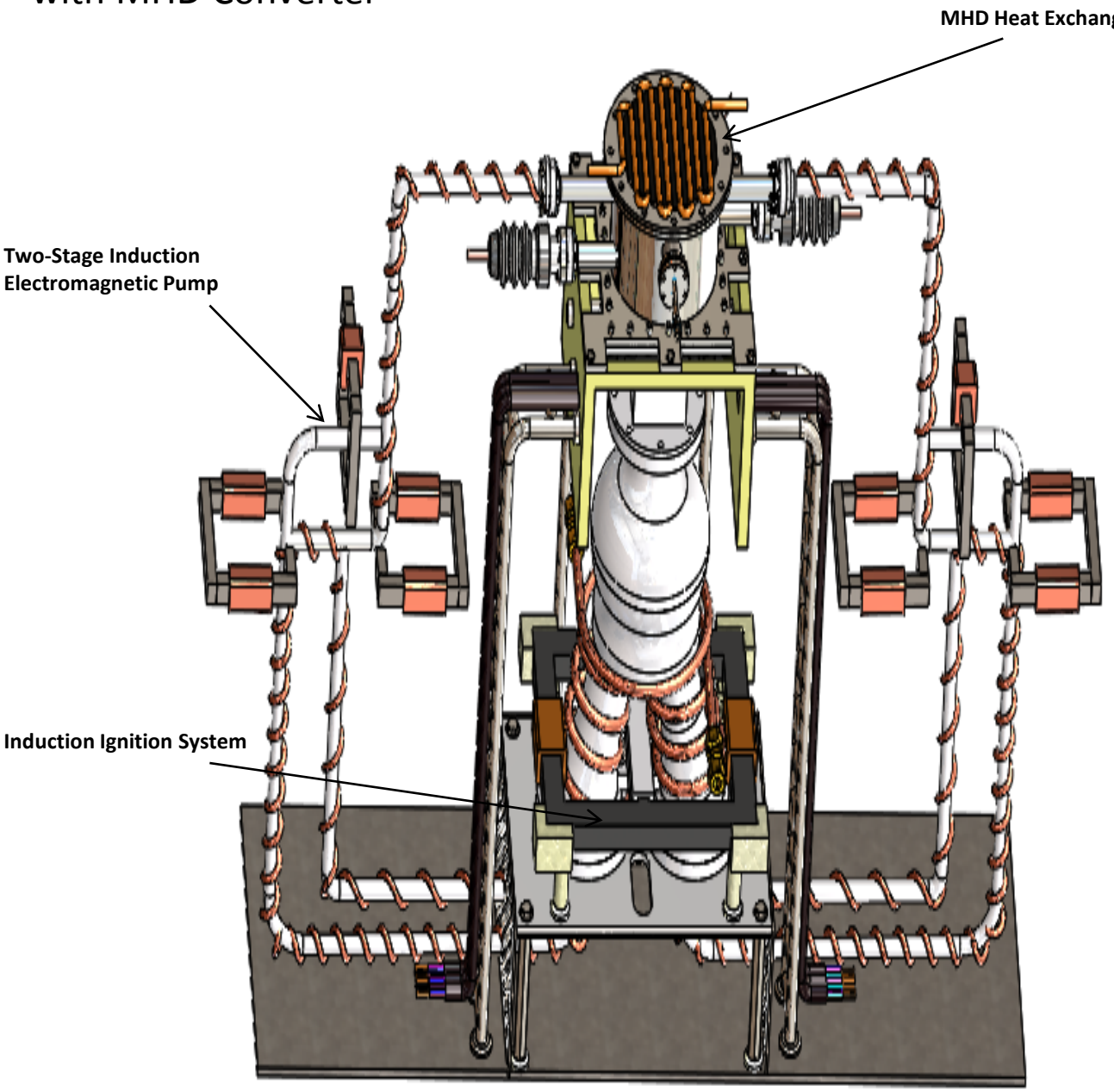
SunCell® with MHD Converter



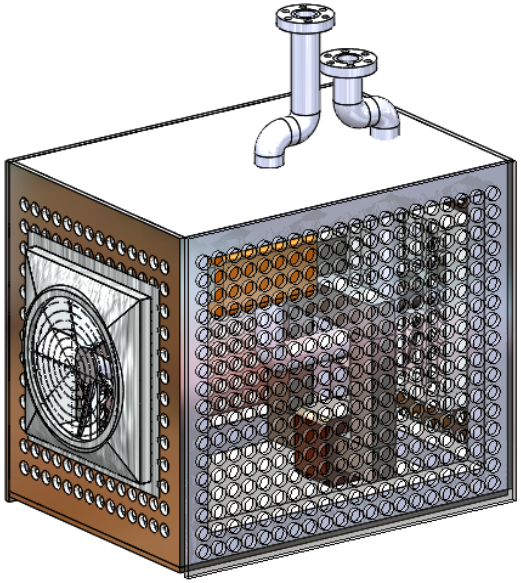
SunCell® with MHD Converter



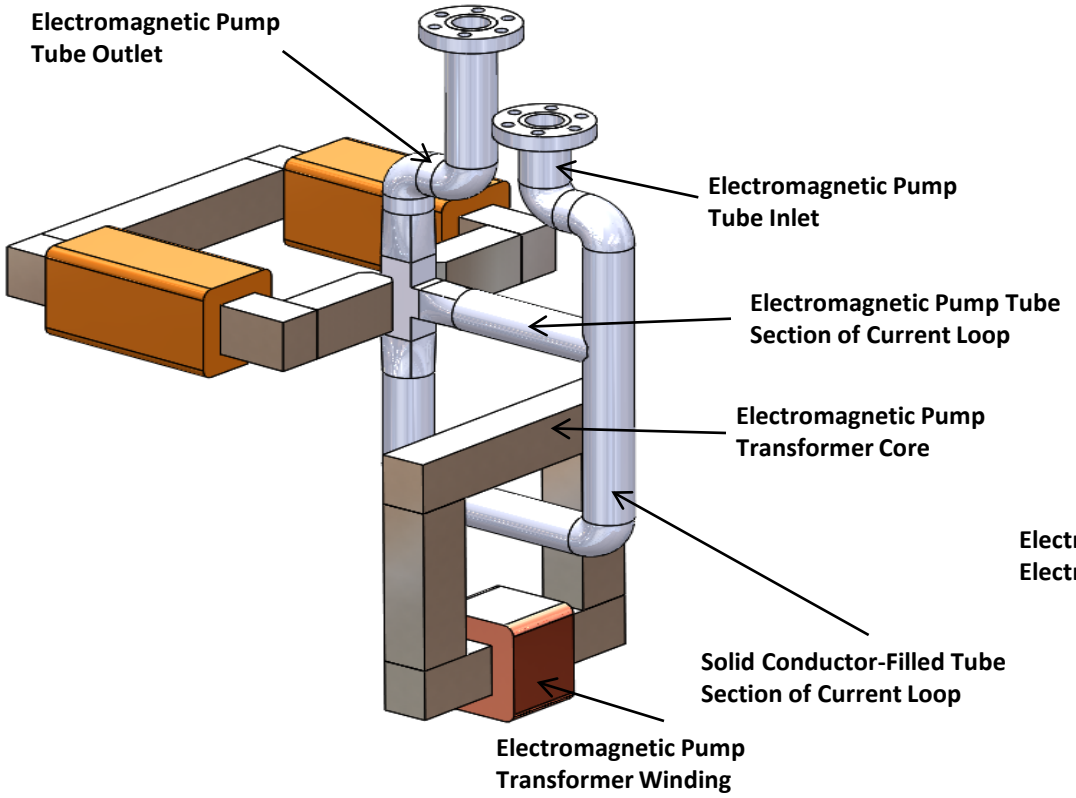
SunCell® with MHD Converter

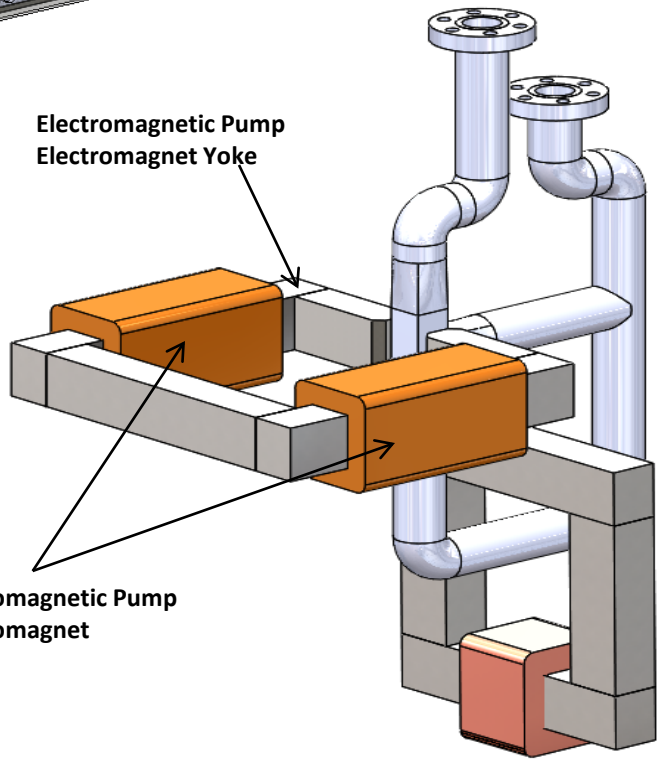


Single-Stage EM Pump

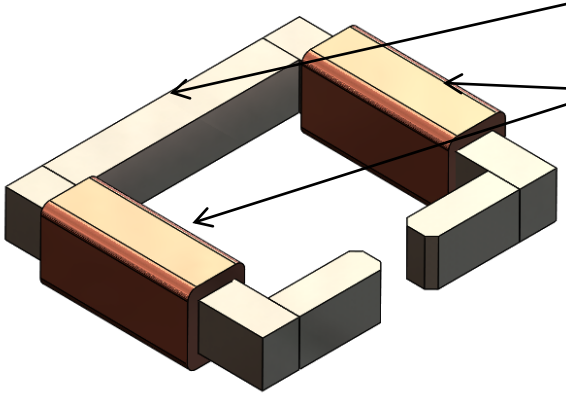


Single-Stage Induction
Electromagnetic Pump

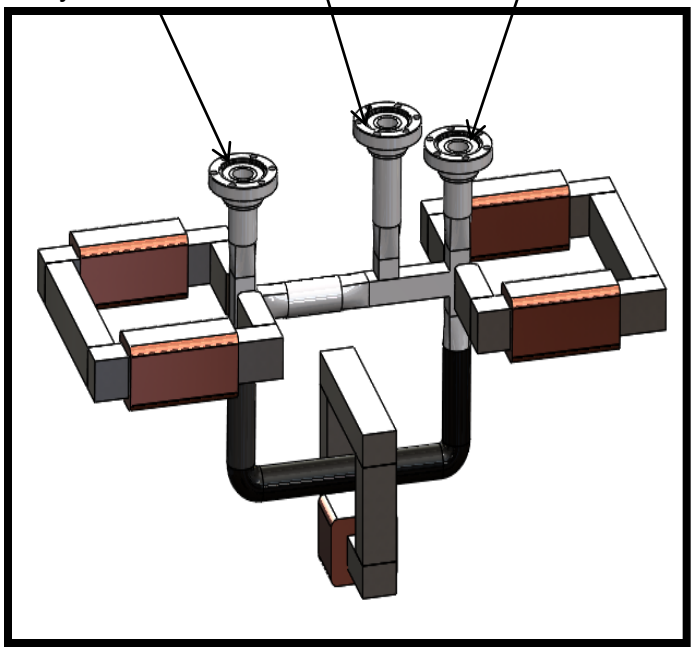




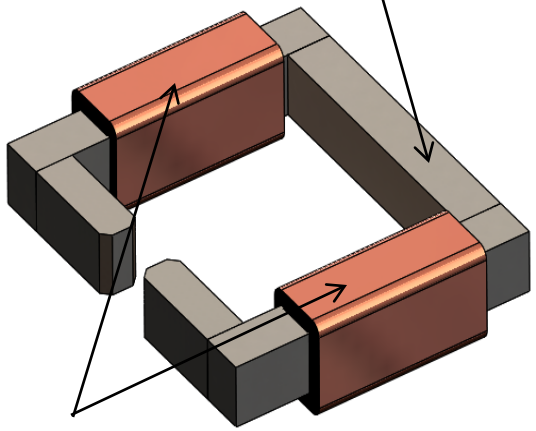
Two-Stage EM Pump



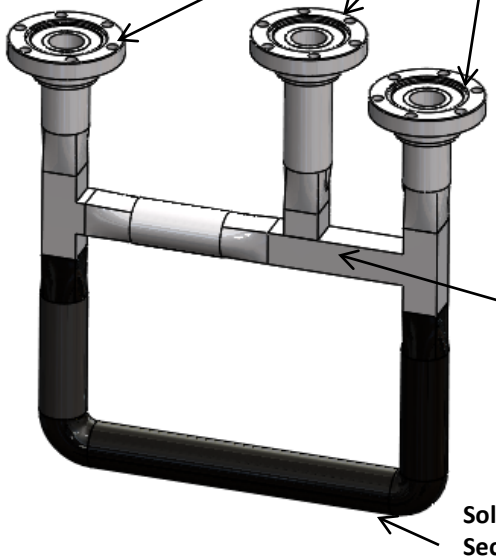
2nd Stage EM Pump Electromagnetic Assembly

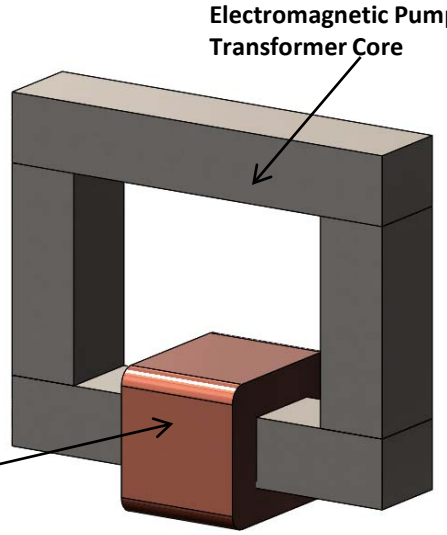


Two-Stage Induction Electromagnetic Pump



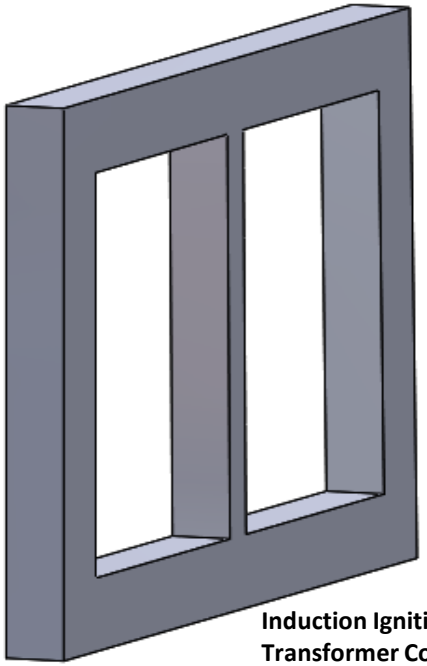
1st Stage EM Pump Electromagnetic Assembly



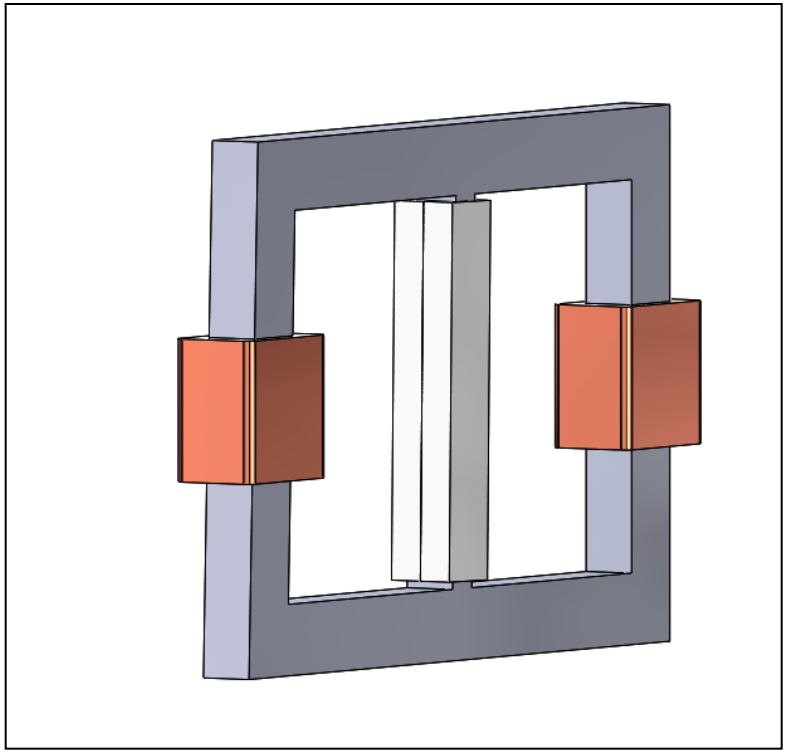


Electromagnetic Pump Transformer Winding Assembly

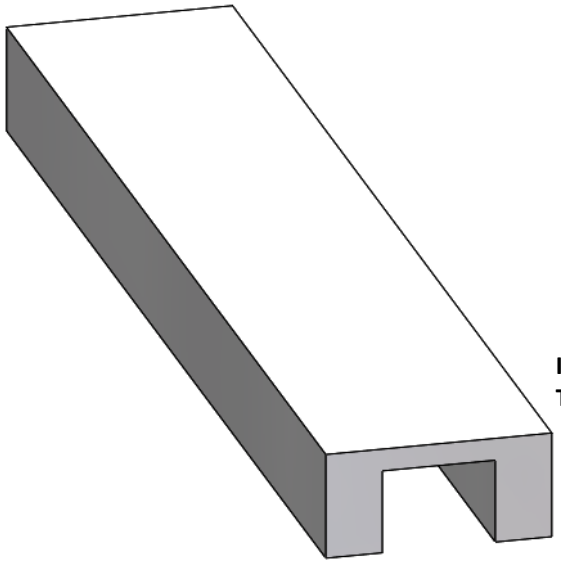
Induction Ignition System



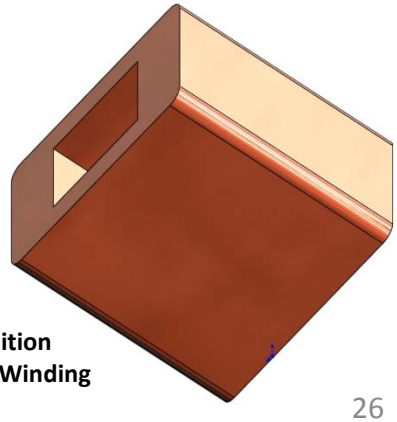
Induction Ignition Transformer Core



Induction Ignition Transformer Assembly

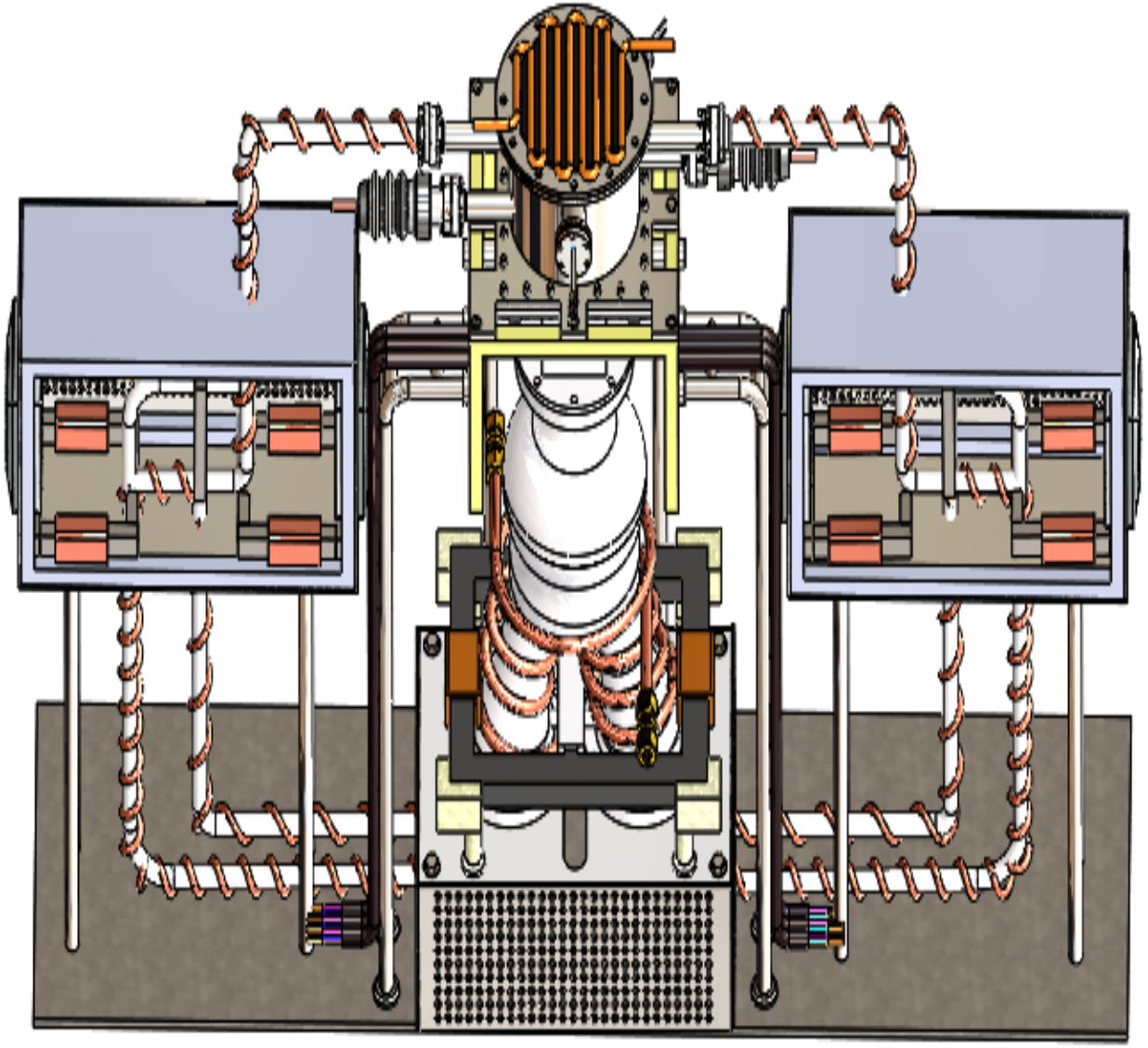


Induction Ignition Transformer Core Insulator

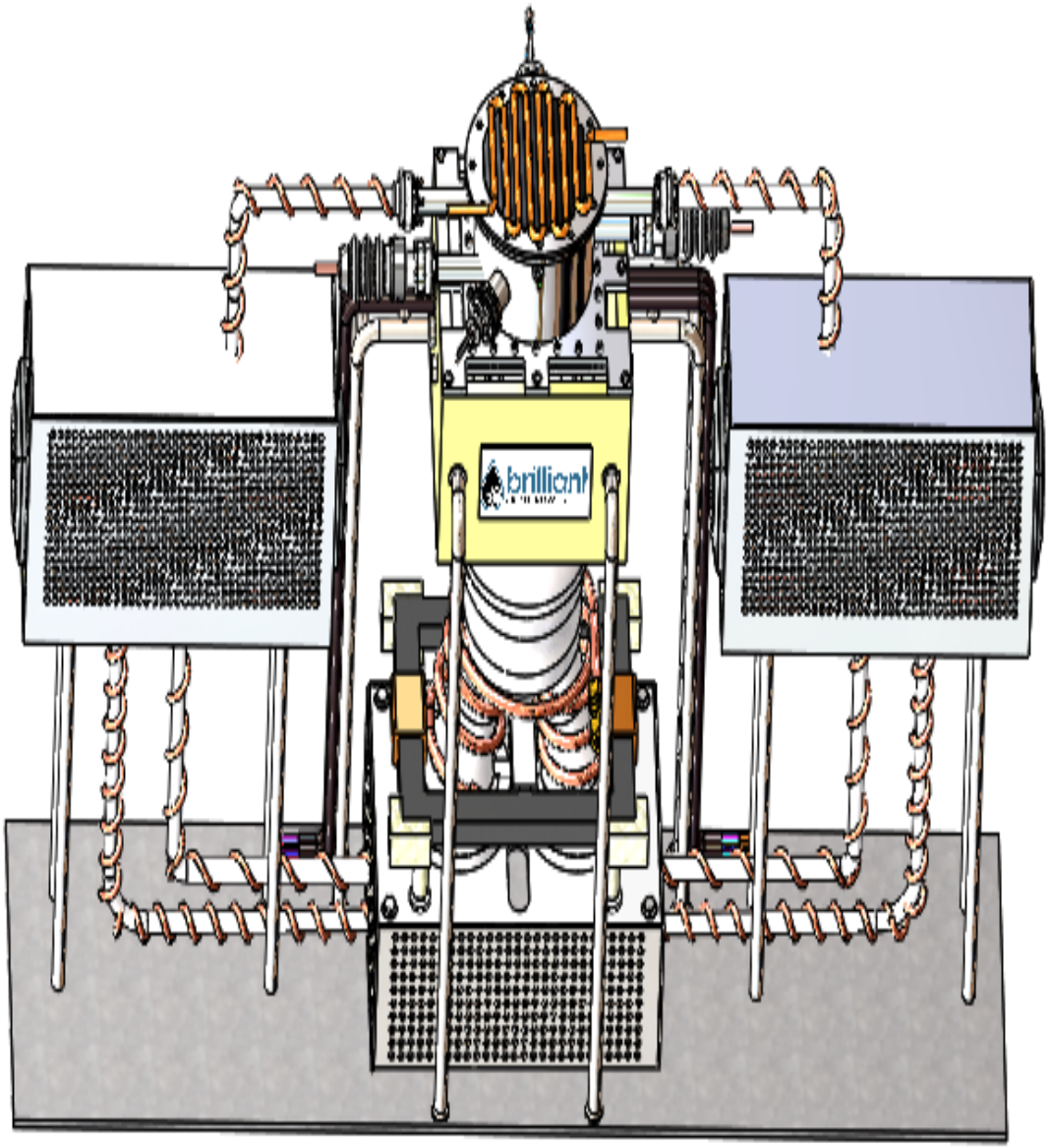


Induction Ignition Transformer Winding

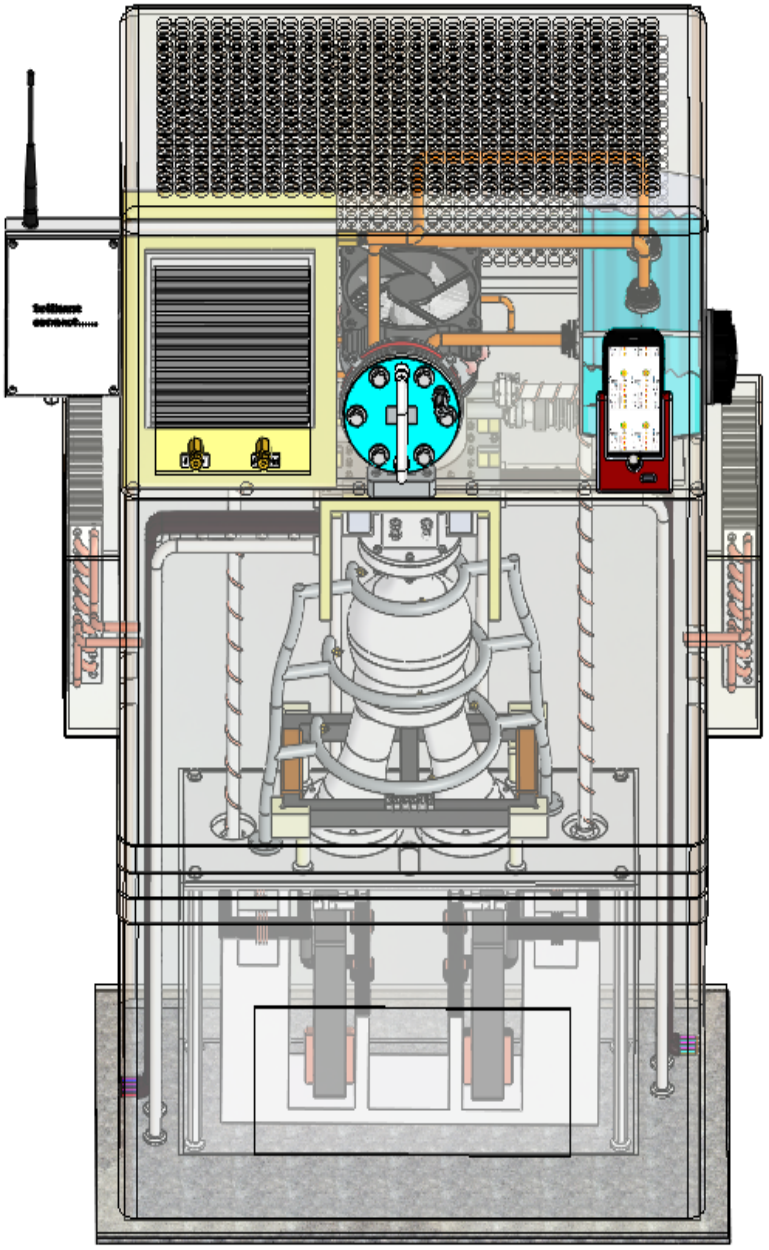
SunCell® with MHD Converter

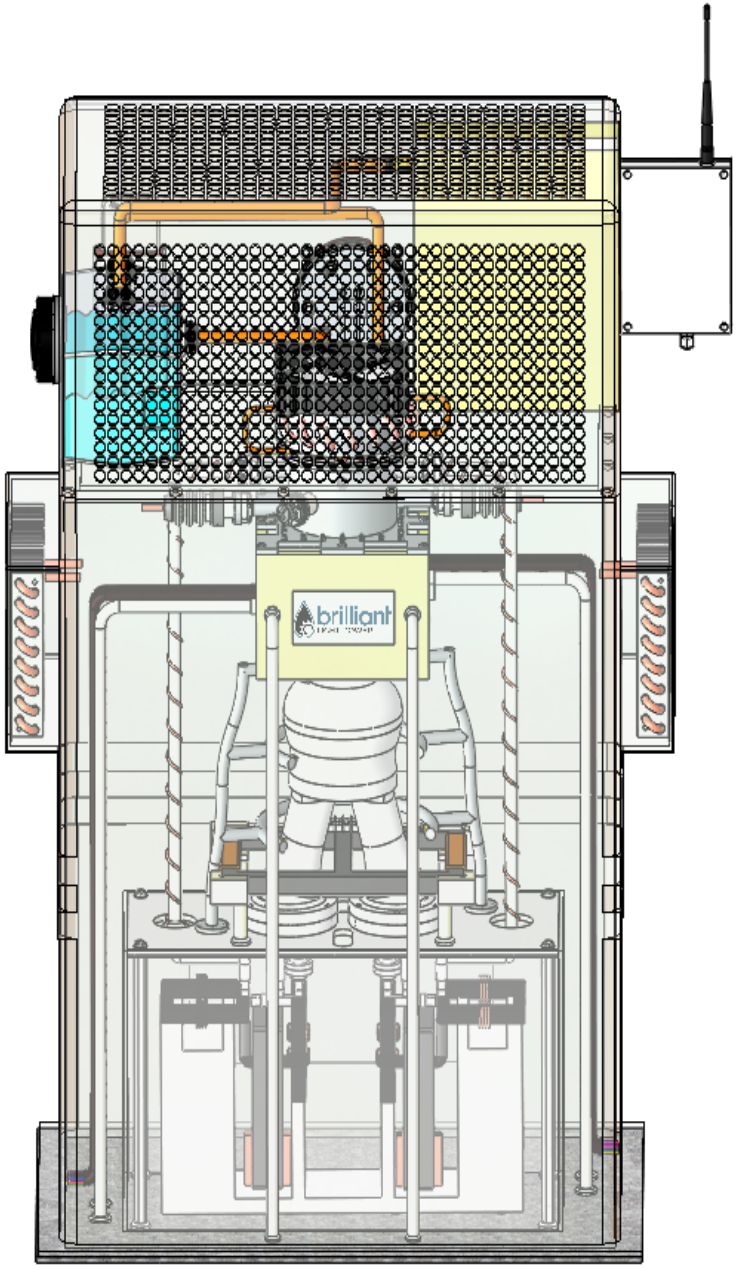


SunCell® with MHD Converter

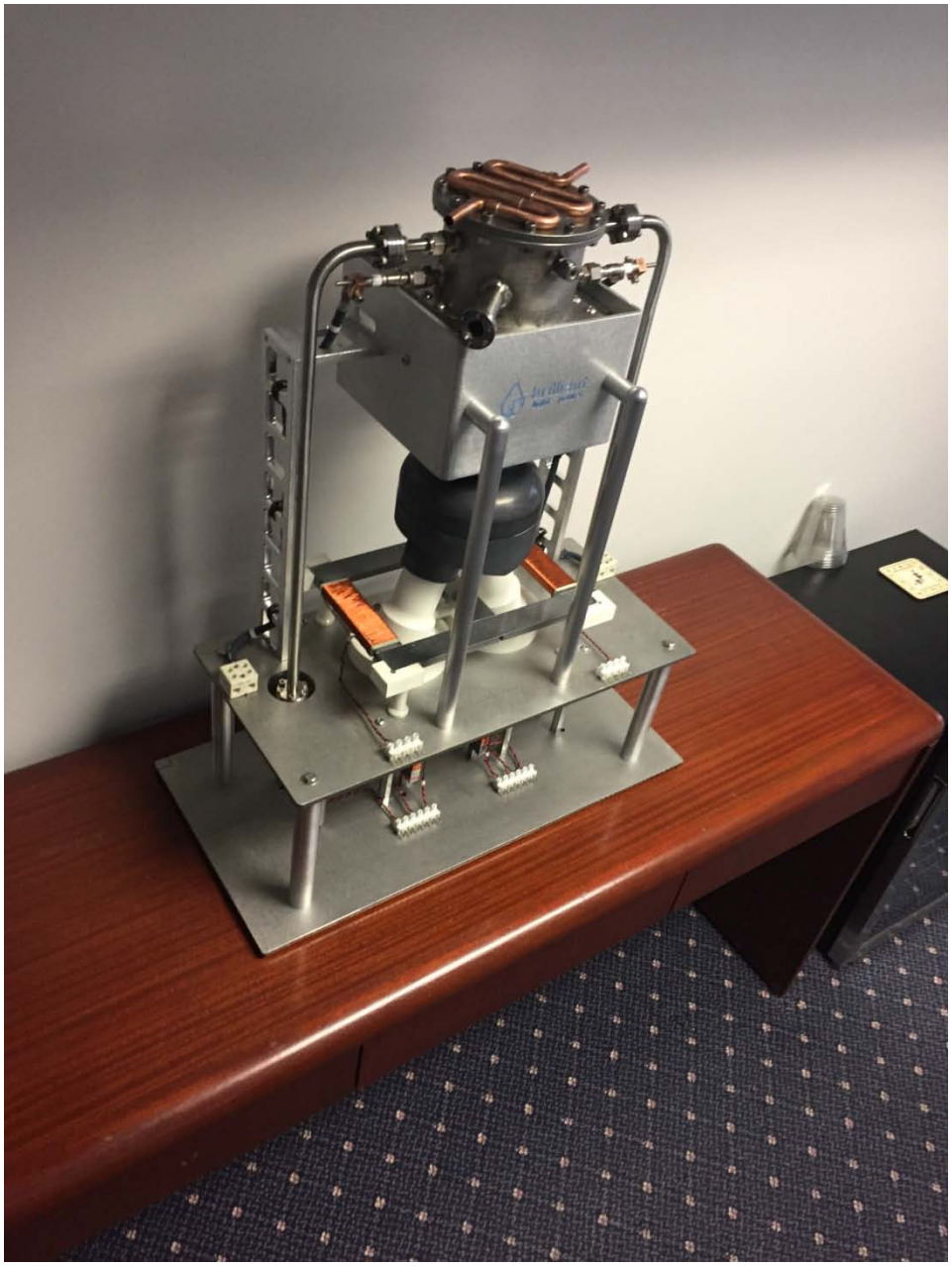


SunCell® with MHD Converter

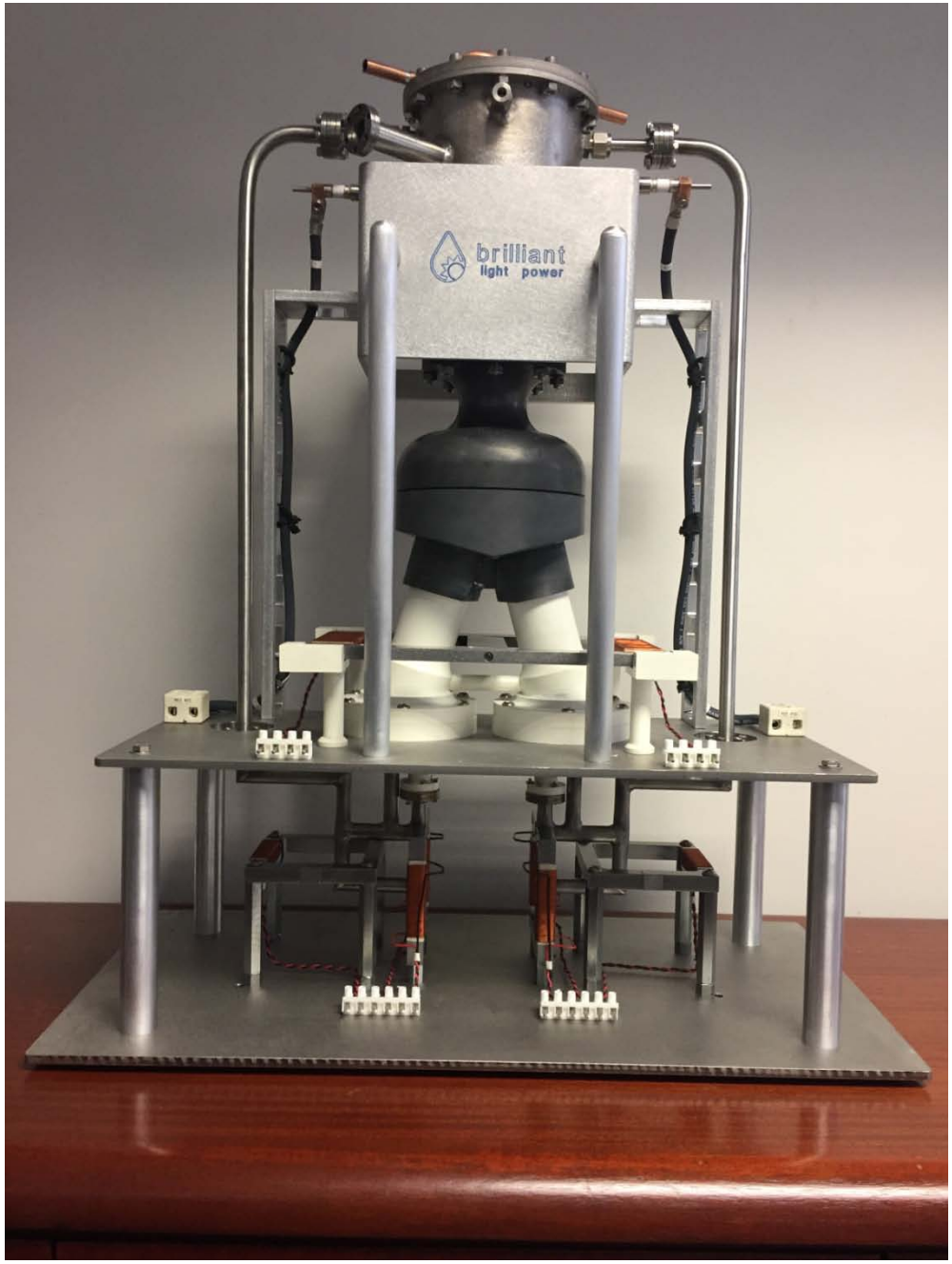




SunCell®-MHD Converter Model



SunCell®-MHD Converter Model



SunCell®-MHD Converter Model

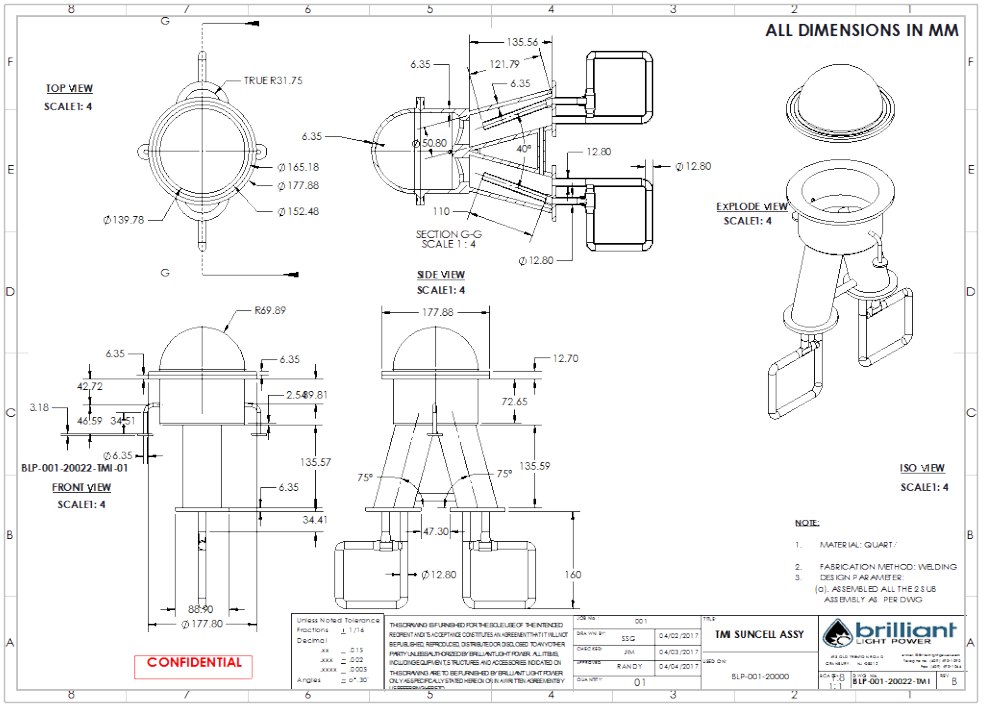
SunCell®-MHD Converter Ceramic

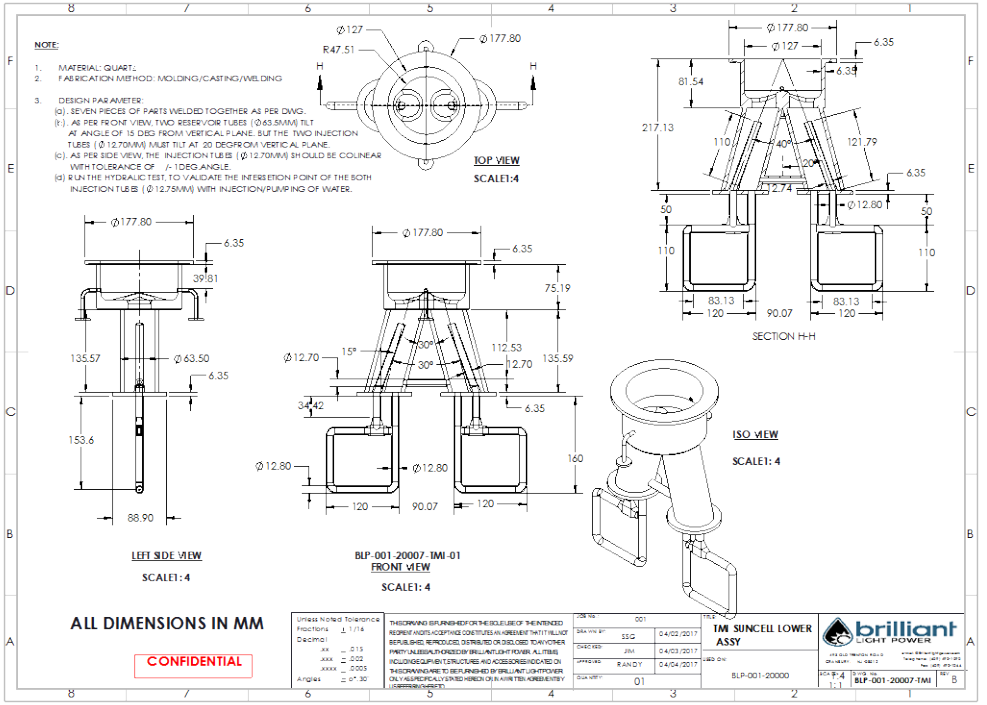
SunCell Engineering

- We have developed an H_2, O_2, and H_2O compatible all-quartz cell that has been fabricated by a vendor.
- We have developed a resistive heater for the silver SunCell to replace the inductively coupled heater.
- Developed a reversible thermal insulation to permit thermal power flow to a heat exchanger following startup of the silver cell.
- Outsourced engineering and fabrication of induction ignition transformer.
- We have advanced the inductive electromagnetic pump to required specifications:
  - EM pump transformer
  - Electromagnet
  - Phase synchronization
- Outsourced engineering and fabrication of inductive electromagnetic pump.

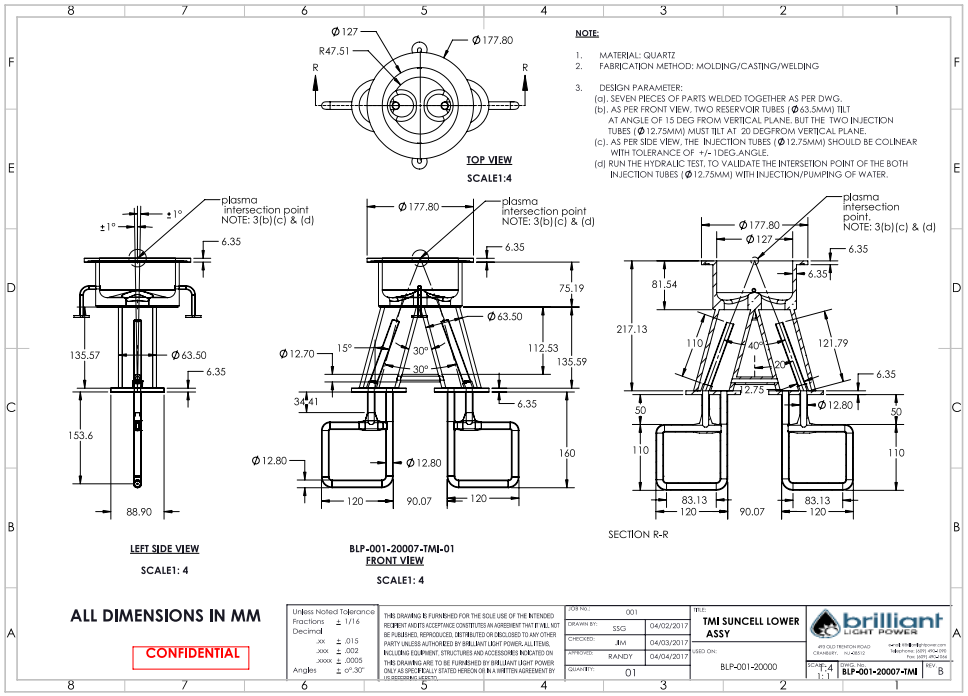
Quartz Cell

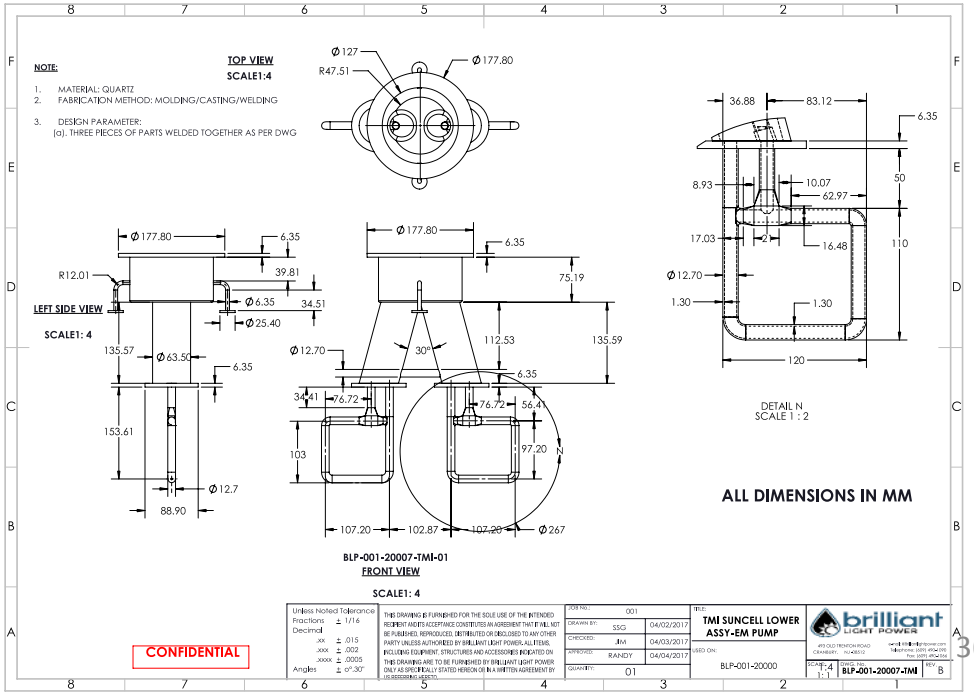
Outsourced the fabrication of a quartz SunCell to vendor



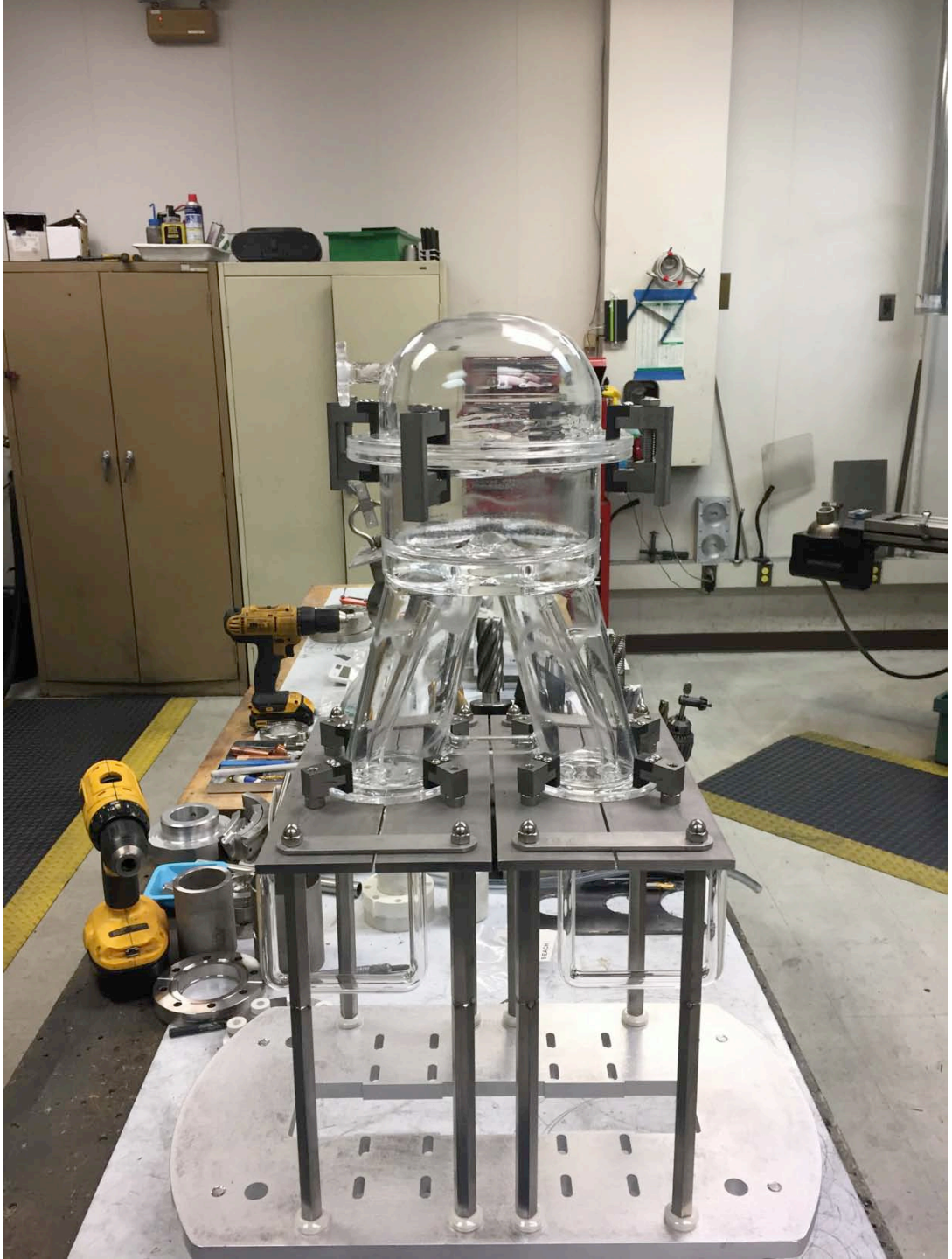


Quartz Cell Cont'd





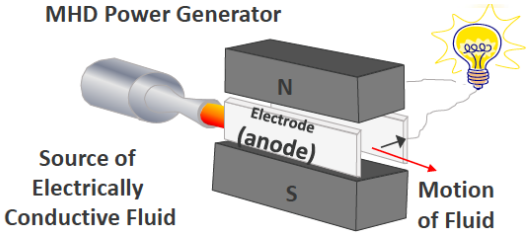
Quartz Cell Cont’d

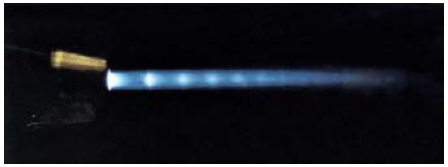


Quartz Cell Cont’d

SunCell MHD Converter

- Direct power extraction (DPE), emerging technology to directly convert thermal & kinetic power to electrical power.
- Advantages:
  - Basic research development has been supported by energy agencies worldwide
  - Offers breakthrough power generation efficiency (80%+ conversion efficiency)
  - Simplest system physically possible
  - No moving mechanical parts
  - Extraordinarily compact size with DC power output (modeled power density of 5 MW/liter; 5000+ times more compact than CPV)



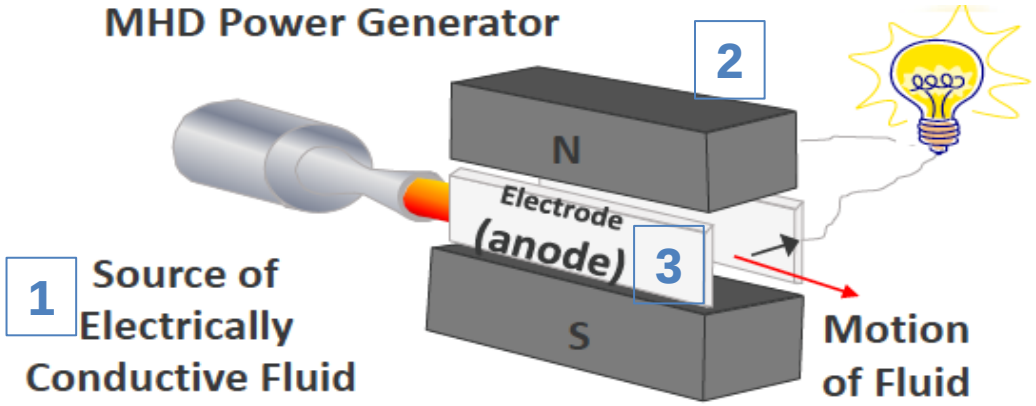


- SunCell-MHD unique advantages
  - Heat exchanger is an infrared radiator with no moving parts or coolant, self adjusts to heat load as T^4.
  - Silver working medium protects rather than corrodes the refractory metal electrodes.
  - Conductivity >100,000X that of ion-seeded combustion flame with no loss of conductivity with temperature drop in MHD channel.
  - Essentially 100% unconverted heat recovery due to molten silver recirculation rather than gases.

Magnetohydrodynamic (MHD) Generators

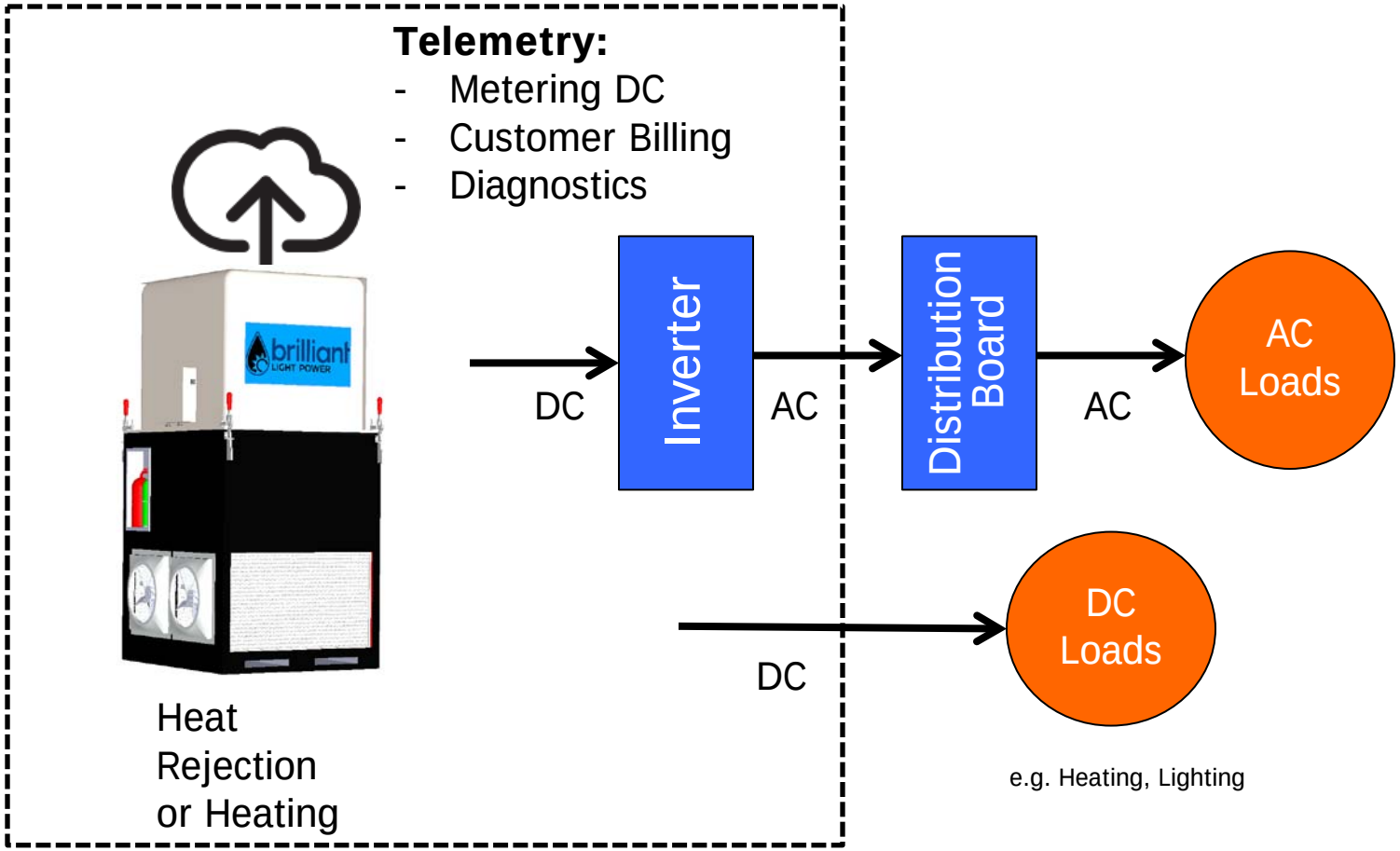
- Typical MHD method is to expand a high-pressure gas seeded with ions through a nozzle to create high-speed flow through the crossed magnetic field with a set of electrodes crossed with respect to the deflecting field to receive the deflected ions and generates an DC voltage output.

1. A super-hot plasma is created, ionizing the atoms of the fuel mixture, source of electrically conductive fluid (already in place from SunCell).
2. The magnetic field deflects positive and negative charges in different directions.
3. Collecting plates-electrodes, a conductor through which electricity enters for the charges providing a DC voltage out.



Prototype MHD generators have demonstrated some large-scale commercial feasibility. Failure modes of very low conductivity and corrosion of ion-seeded combustion gas eliminated by SunCell-MHD

SunCell Turnkey System (Basic)

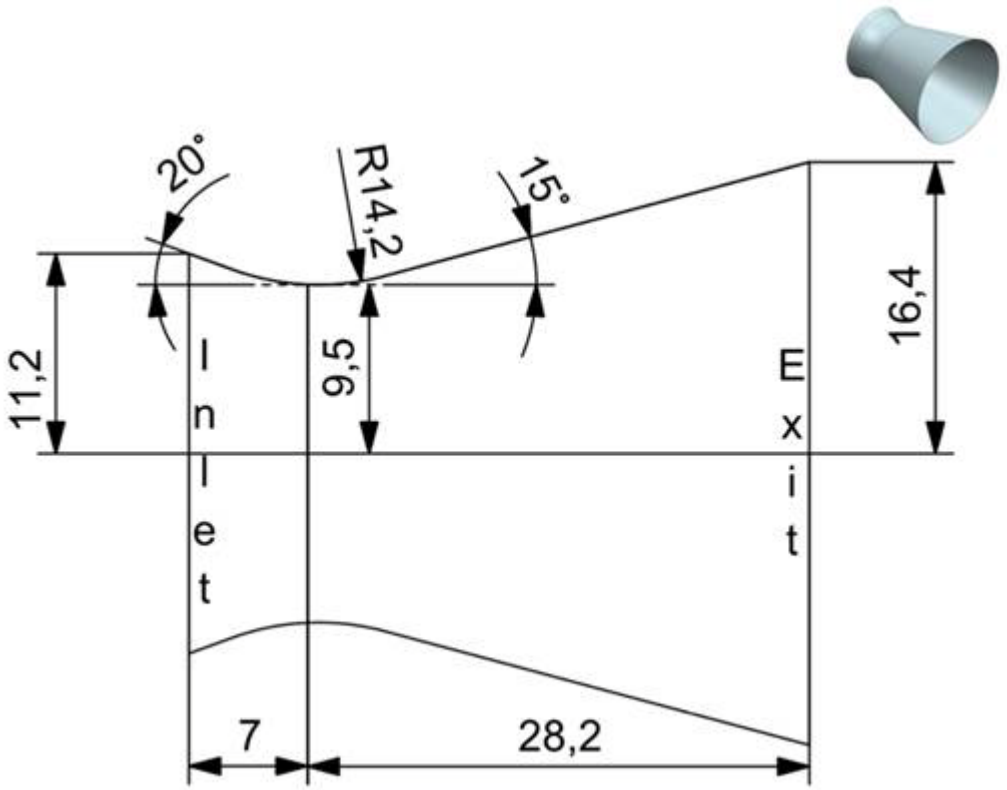


The SunCell® can support either direct DC loads or AC loads with the addition of standard inverter technology as used by the solar industry today.

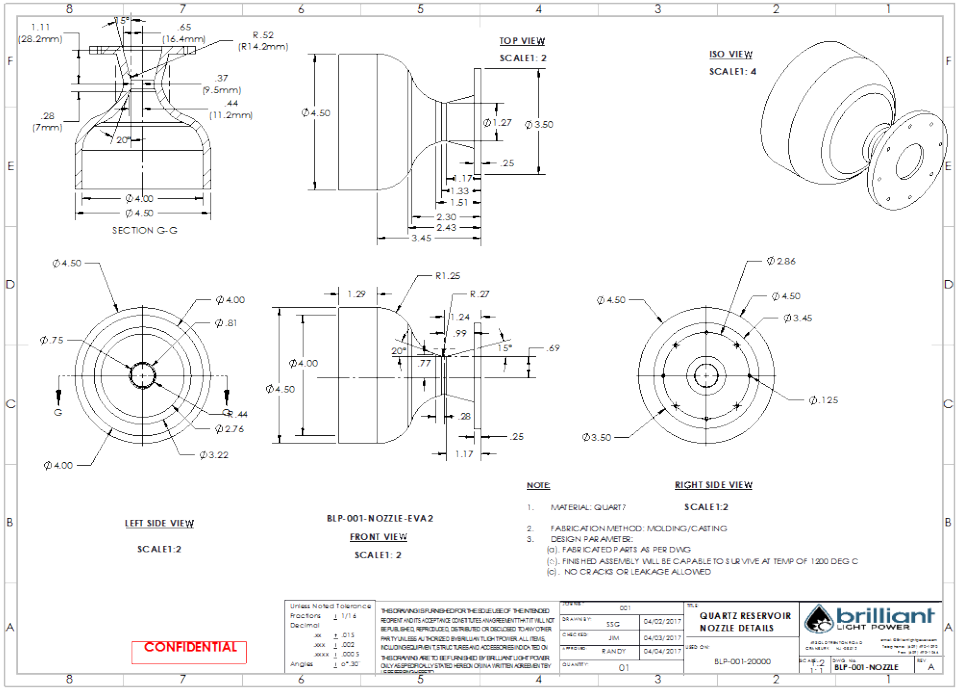
Magnetohydrodynamic (MHD) Engineering

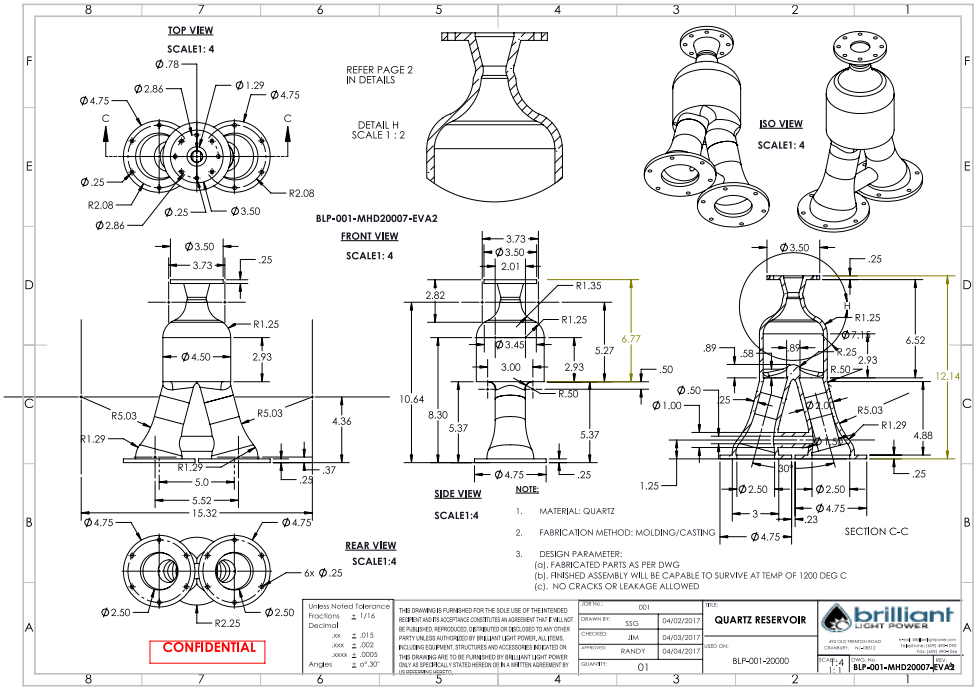
- Kinetics studies.
- Completed modeling of multiple MHD thermodynamic cycles and parameter variations and invented cycle that works according to thermodynamic laws.
- Experimental design and fabrication.

MHD Nozzle Design

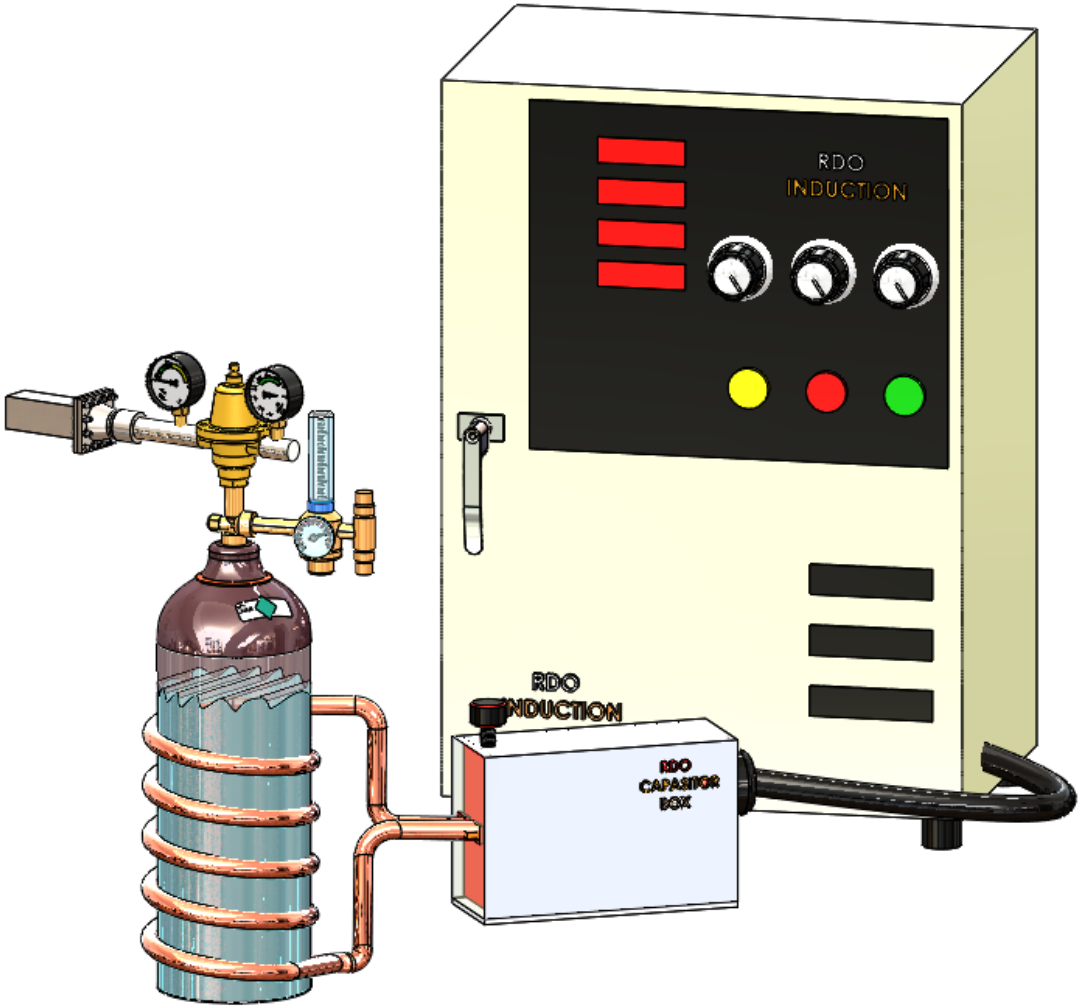


MHD Nozzle Design Cont'd

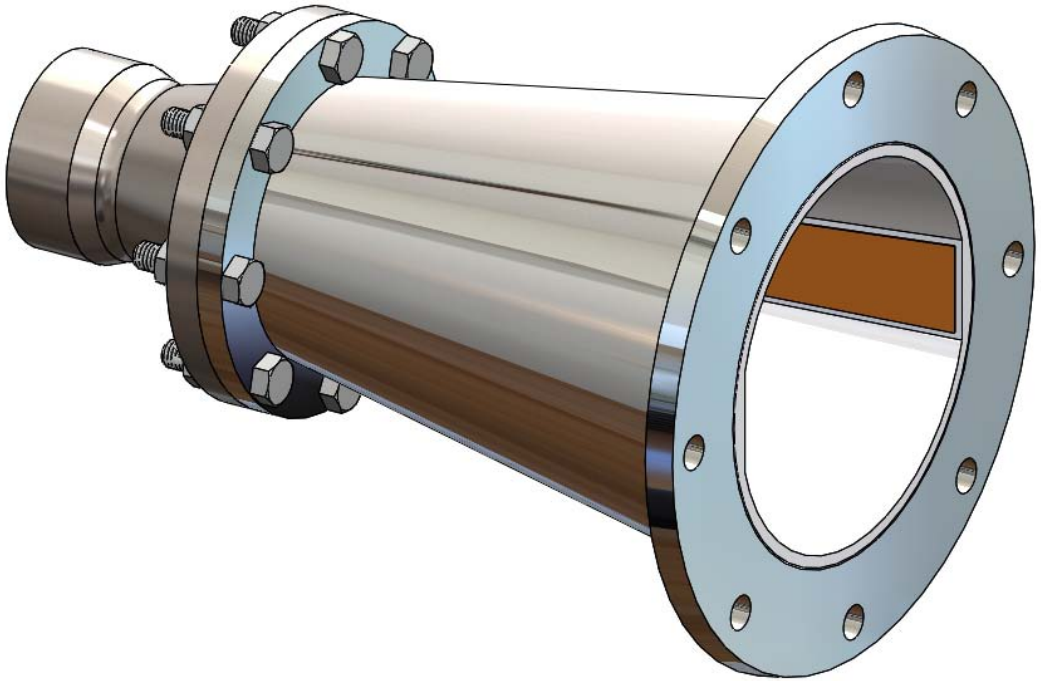




MHD Nozzle Experiment



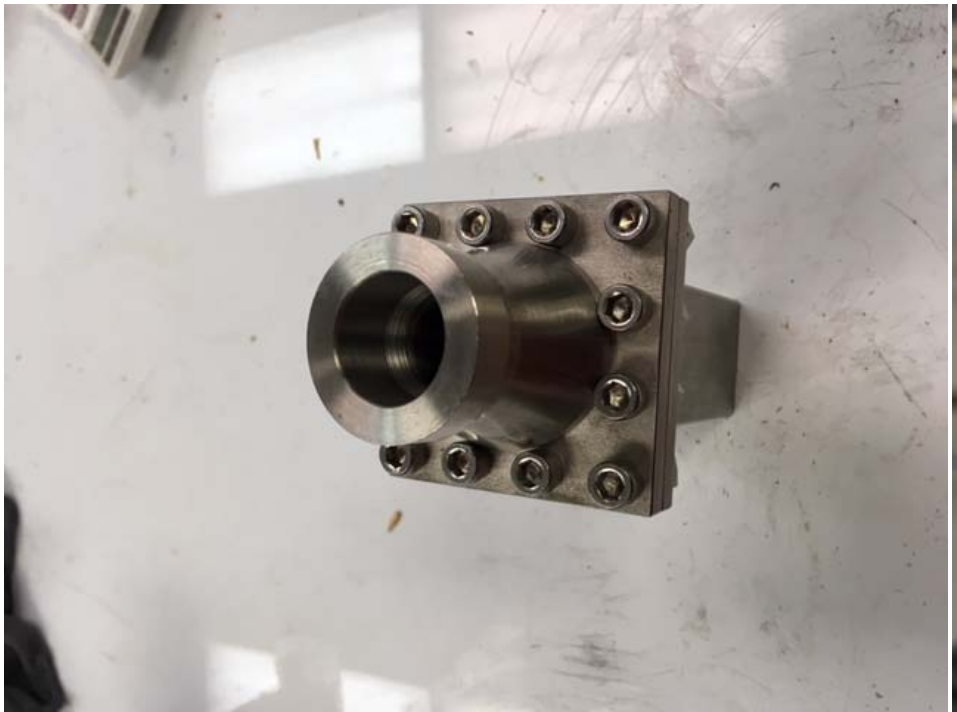
MHD Nozzle Experiment



Nozzle with MHD Channel and Electrode

MHD Nozzle

MHD Nozzle Experiment

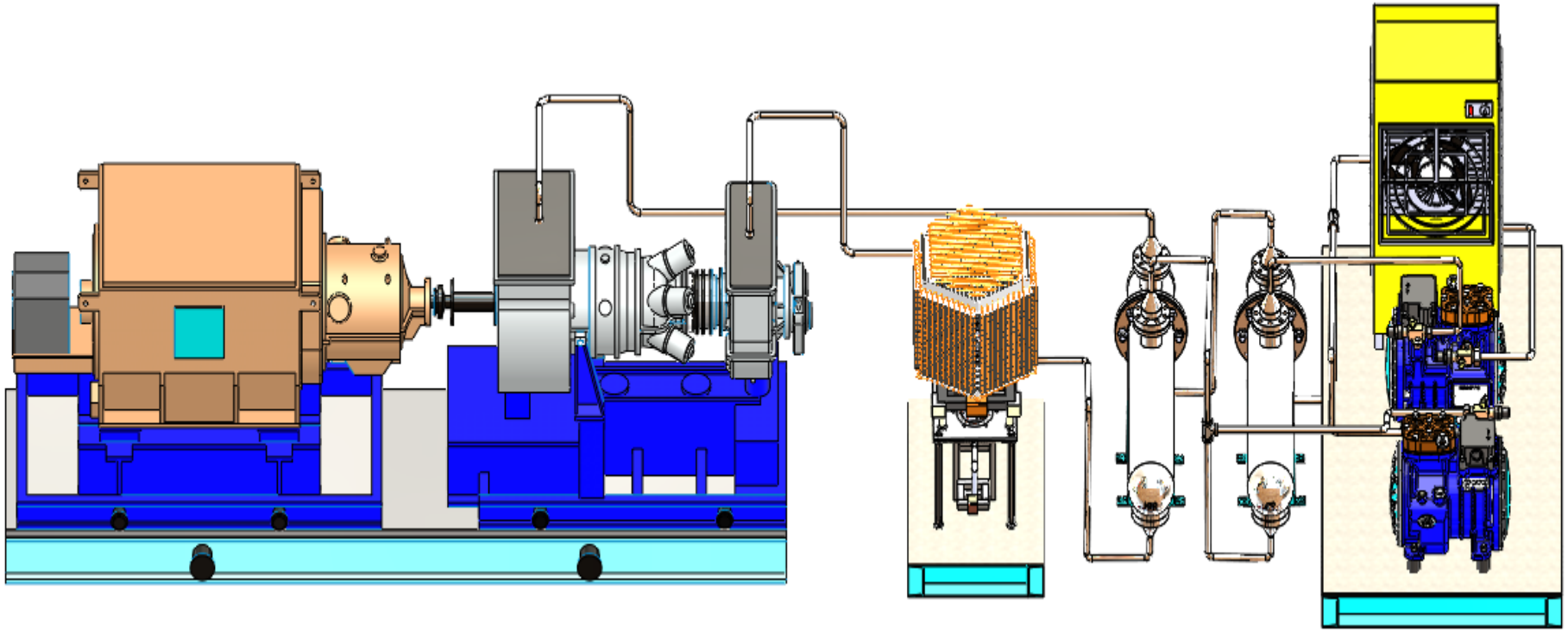


SunCell®-MHD Converter Mold

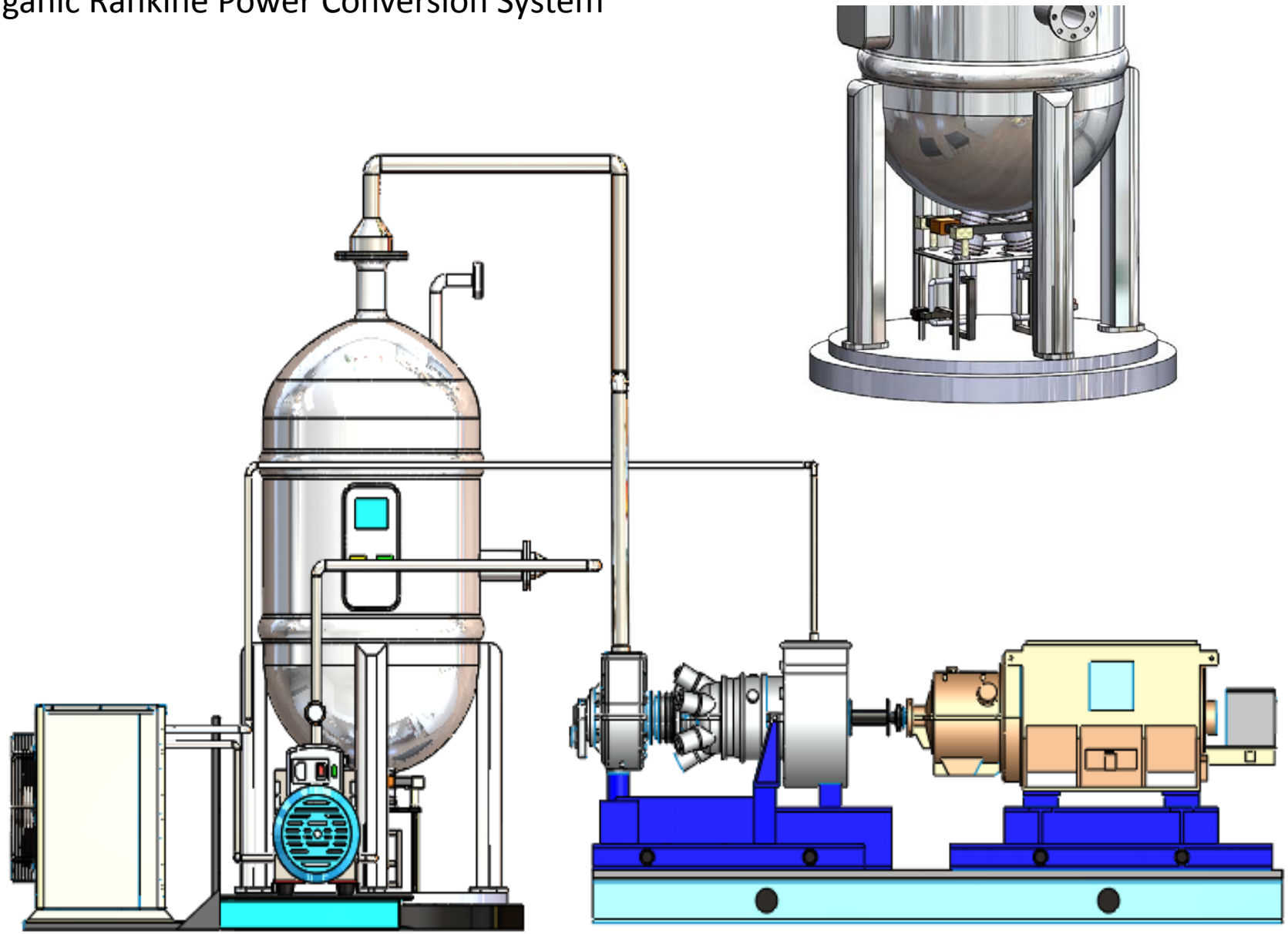
Alternative Conventional Power Conversion Systems

- Supercritical CO_2 Power Conversion System
- Organic Rankine Power Conversion System
- External Combustor Brayton Power Conversion System
- Steam Rankine Power Conversion System
- Sterling Power Conversion System

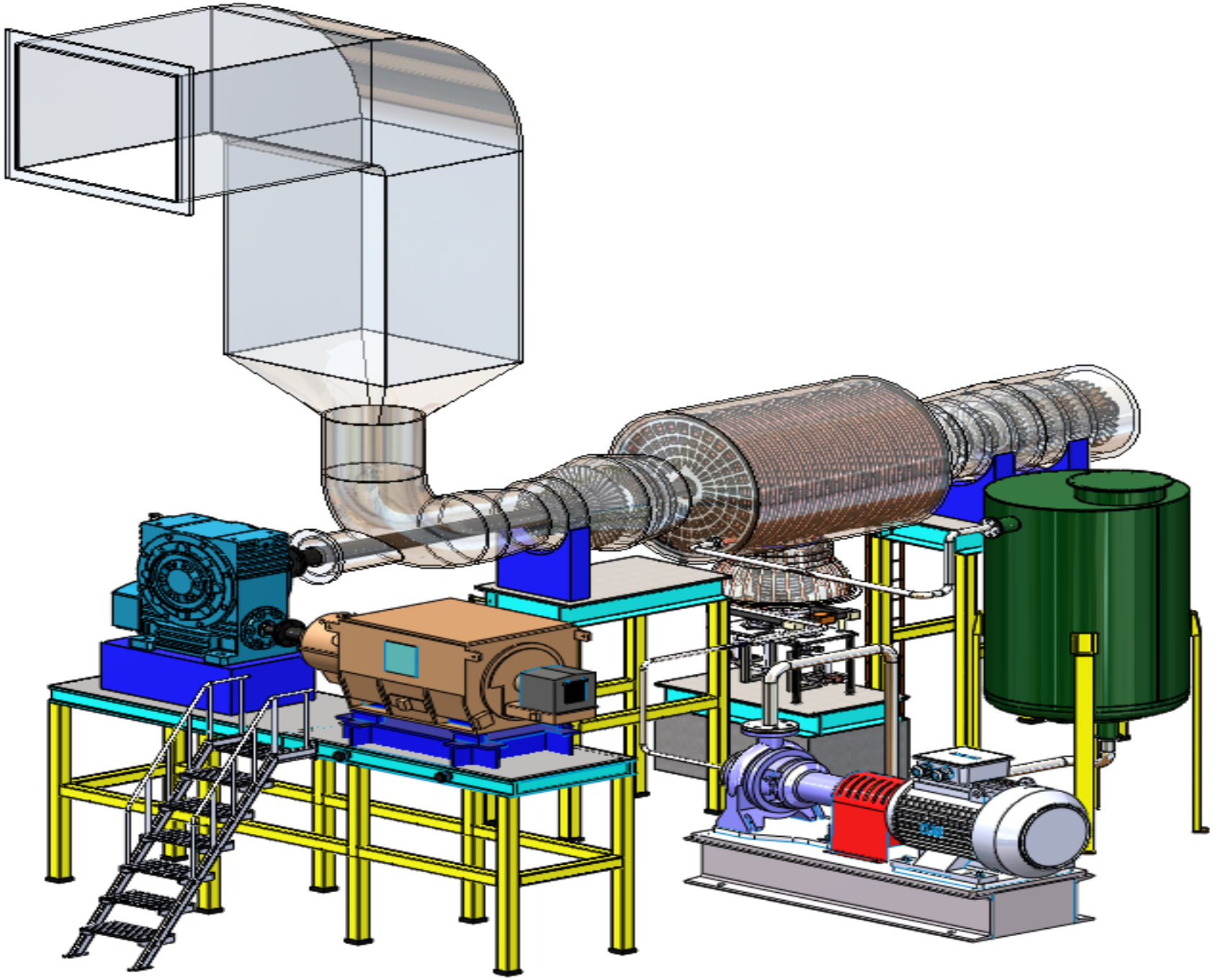
Supercritical CO_2 Power Conversion System



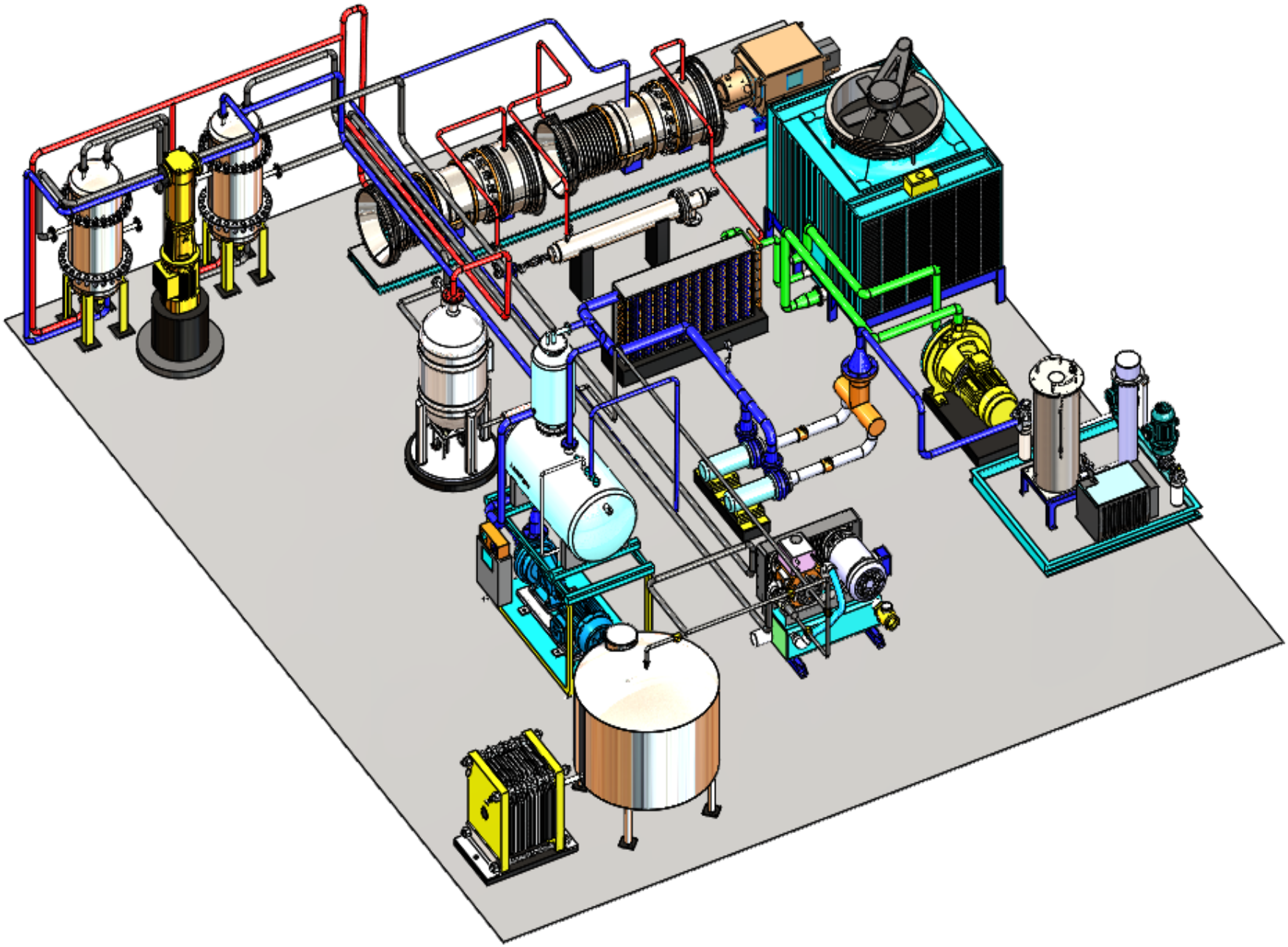
Organic Rankine Power Conversion System



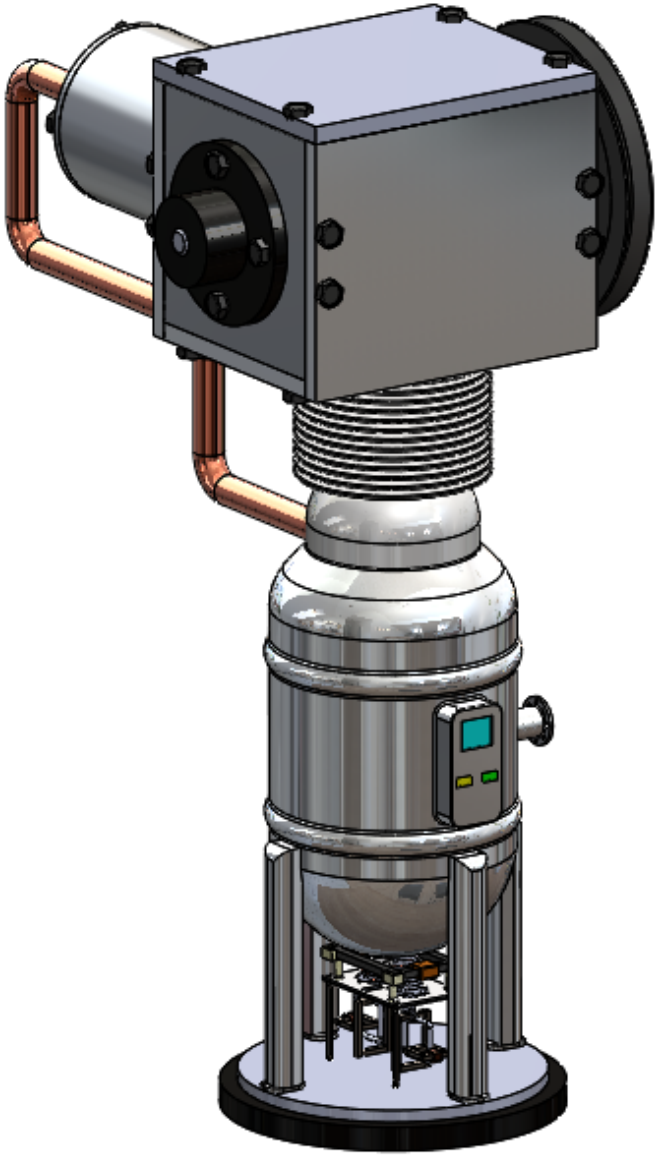
External Combustor Brayton Power Conversion System

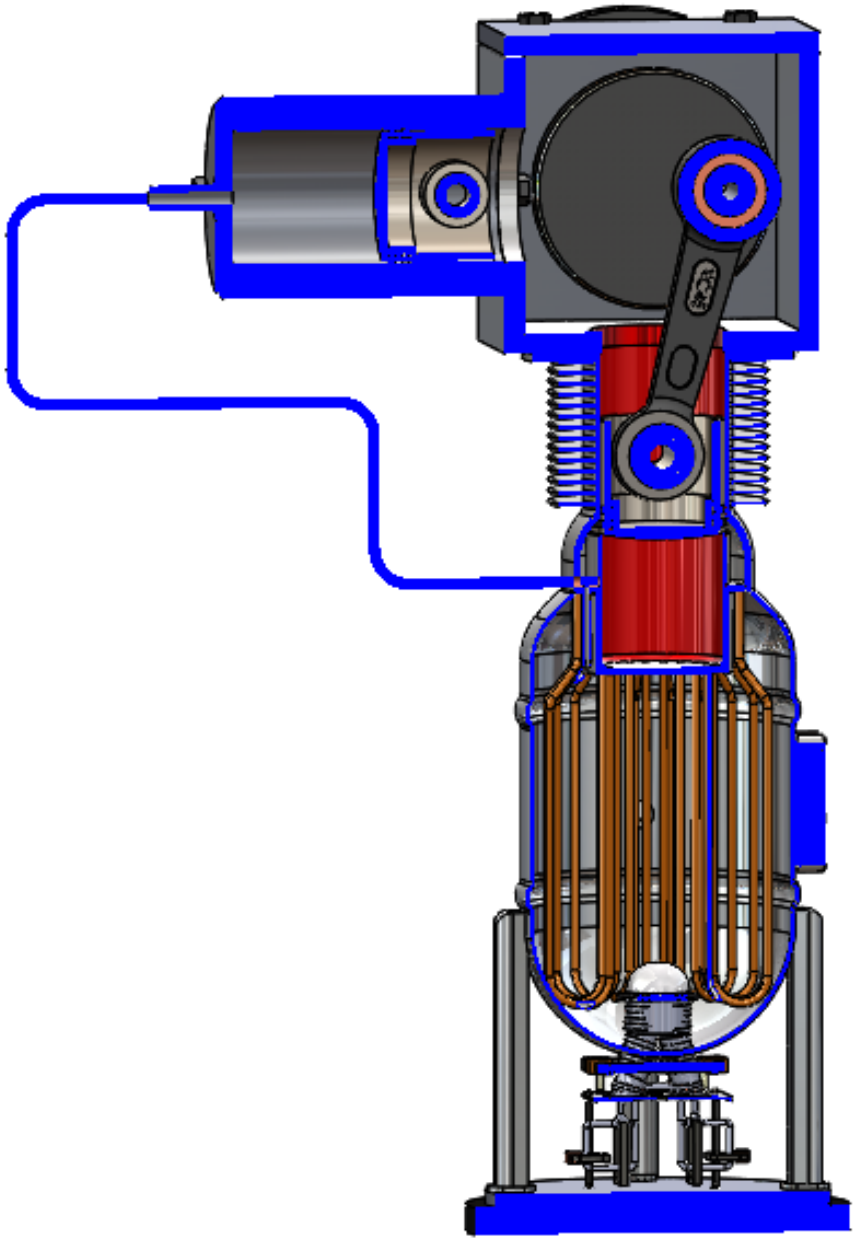


Steam Rankine Power Conversion System

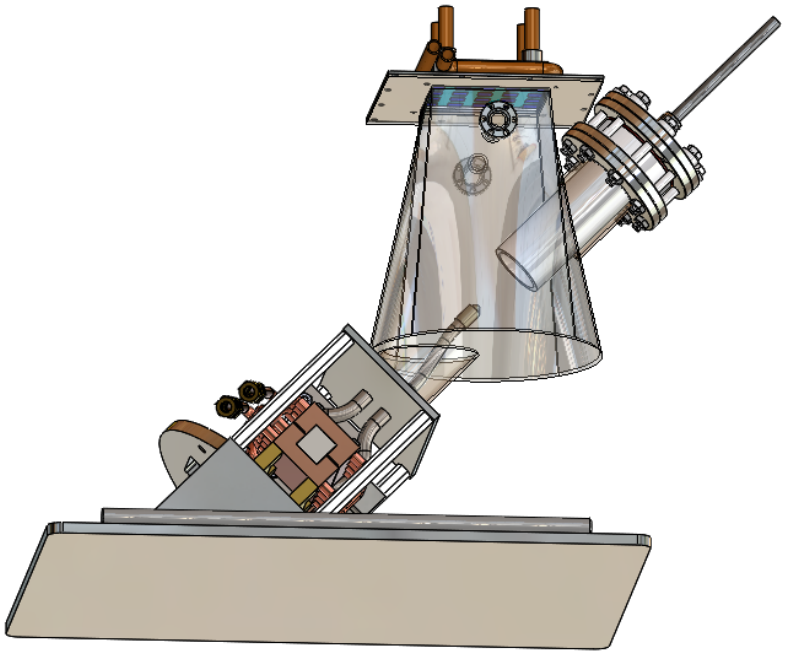


Sterling Power Conversion System





Taper-Slant Cell with Concentrator Photovoltaic Converter



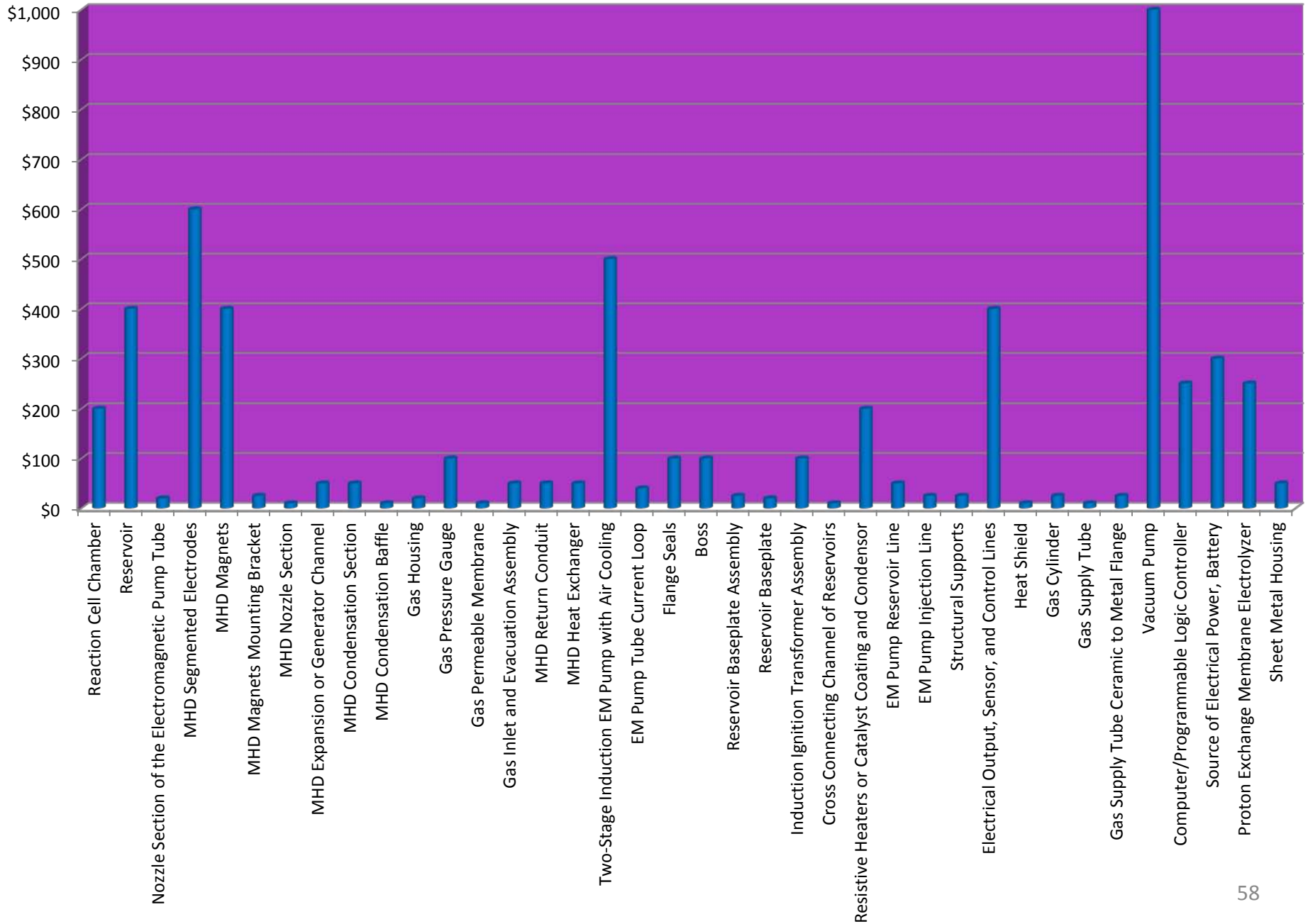
SunCell Economics

- Current Annual Gross Earning Capacity of Any Electrical Generator:
  - o $1/W
- Capital Cost:
  - o $60/kW
- Life Span:
  - o 20 years
- Capital Cost Annually:
  - o $3/kW
- Solar Capital Cost (2013):
  - o $3,463/kW[a]
- Maintenance Cost:
  - o $1.20/kW
- Generation Cost:
  - o $0.001/kWh

[a]http://www.nrel.gov/analysis/tech_lcoe_re_cost_est.html

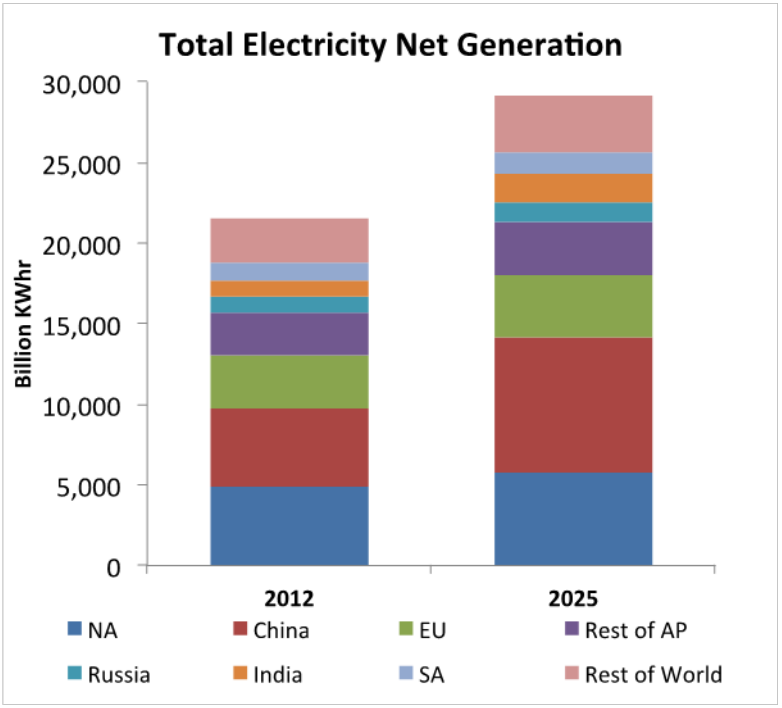
S.NO	MHD COMPONENTS	QTY	COST PER UNIT	TOTAL COST
5b31	Reaction Cell Chamber	1	200	$200
5c	Reservoir	2	200	$400
5k61	Nozzle Section of the Electromagnetic Pump Tube	2	10	$20
304	MHD Segmented Electrodes	2	300	$600
306	MHD Magnets	2	200	$400
306a	MHD Magnets Mounting Bracket	1	25	$25
307	MHD Nozzle Section	1	10	$10
308	MHD Expansion or Generator Channel	1	50	$50
309	MHD Condensation Section	1	50	$50
309a	MHD Condensation Baffle	1	10	$10
309b	Gas Housing	1	20	$20
309c	Gas Pressure Gauge	1	100	$100
309d	Gas Permeable Membrane	1	10	$10
309e	Gas Inlet and Evacuation Assembly	1	50	$50
310	MHD Return Conduit	2	25	$50
316	MHD Heat Exchanger	1	50	$50
400b	Two-Stage Induction EM Pump with Air Cooling	1	500	$500
405	EM Pump Tube Current Loop	2	20	$40
407	Flange Seals	1	100	$100
408	Boss	1	100	$100
409	Reservoir Baseplate Assembly	1	25	$25
409a	Reservoir Baseplate	1	20	$20
410	Induction Ignition Transformer Assembly	1	100	$100
414	Cross Connecting Channel of Reservoirs	1	10	$10
415	Resistive Heaters or Catalyst Coating and Condensor	1	200	$200
416	EM Pump Reservoir Line	2	25	$50
417	EM Pump Injection Line	1	25	$25
418	Structural Supports	1	25	$25
419	Electrical Output, Sensor, and Control Lines	1	400	$400
420	Heat Shield	1	10	$10
421	Gas Cylinder	1	25	$25
422	Gas Supply Tube	1	10	$10
422a	Gas Supply Tube Ceramic to Metal Flange	1	25	$25
13a	Vacuum Pump	1	1000	$1,000
100	Computer/Programmable Logic Controller	1	250	$250
2	Source of Electrical Power, Battery	1	300	$300
1000	Proton Exchange Membrane Electrolyzer	1	250	$250
1001	Sheet Metal Housing	1	50	$50
	TOTAL COST			$5,560

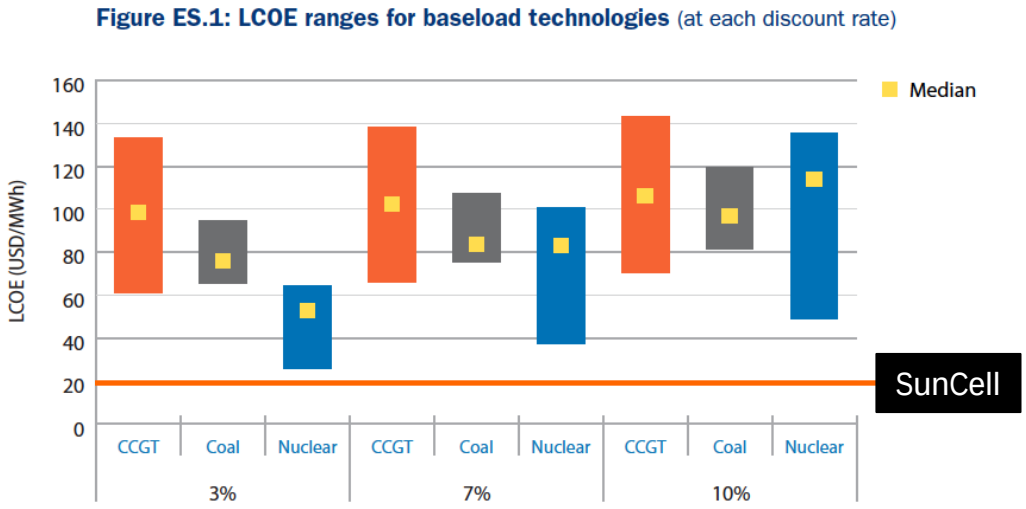
FIRST OF A KIND MHD COMPONENT COST



Global Electricity

- $3.5 trillion~ global market at $0.12 per kWh at site
- $1.5 trillion addressable market for SunCell at breakthrough rate of ~$0.05 per kWh
- 28% demand increase by 2025

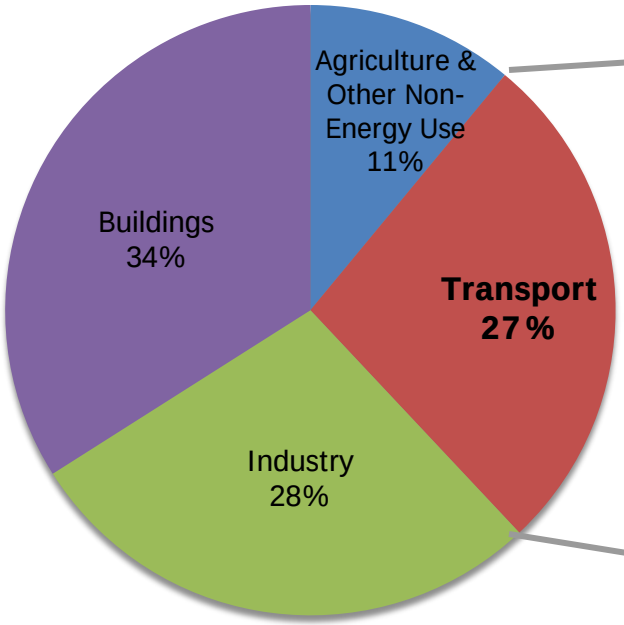




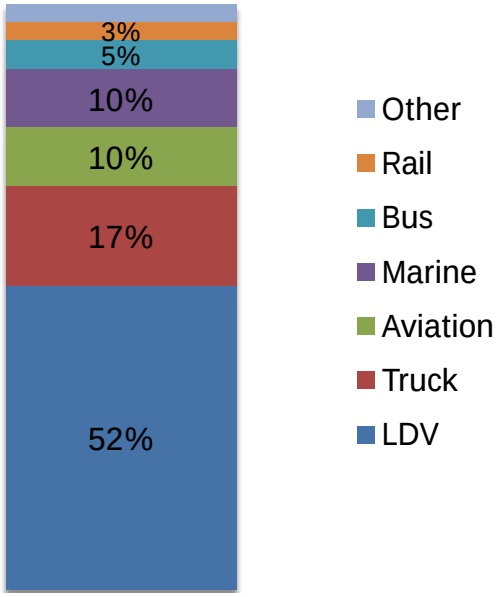
Sources: EIA Total Electricity Net Generation 2012,
IEA Projected Cost of Generating Electricity, 2015 Edition.

Global Motive Energy Use

Global Energy Demand by Sector (2012)



Transport Energy Use by Type



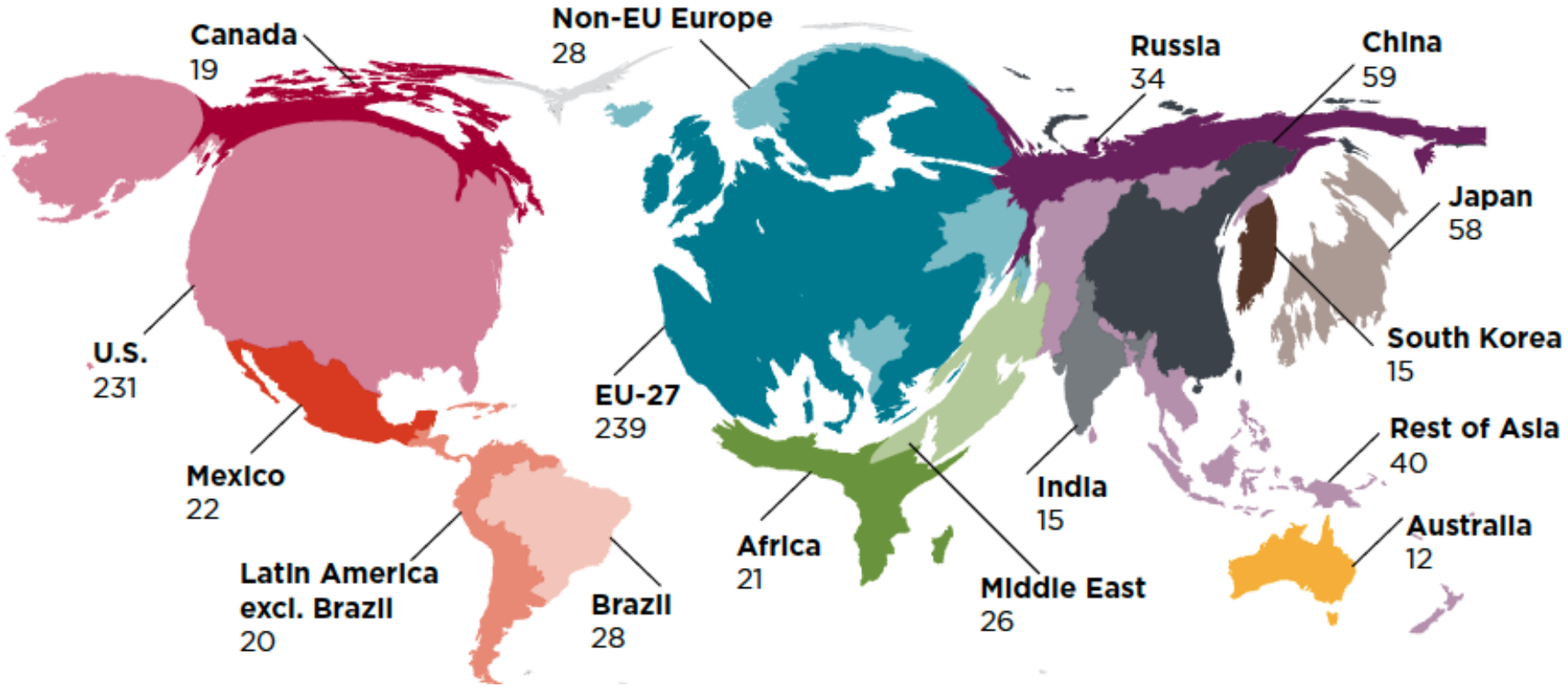
- Transportation consumes ~2,200 million tons of oil equivalent (Mtoe) of energy each year or 25,586 Terawatt hours.
- 700M+ Passenger Car population drives energy use, but hours of operation relatively low (~5% of time)

Light Duty Vehicles includes Passenger Cars and Light Duty Trucks <3.5T

Source: IEA, World Energy Outlook (2012), World Economic Forum, Repowering Transport April 2011
Ward's Automotive Group, Vehicles by Country 2011

Vehicle Population Provides Large Opportunity

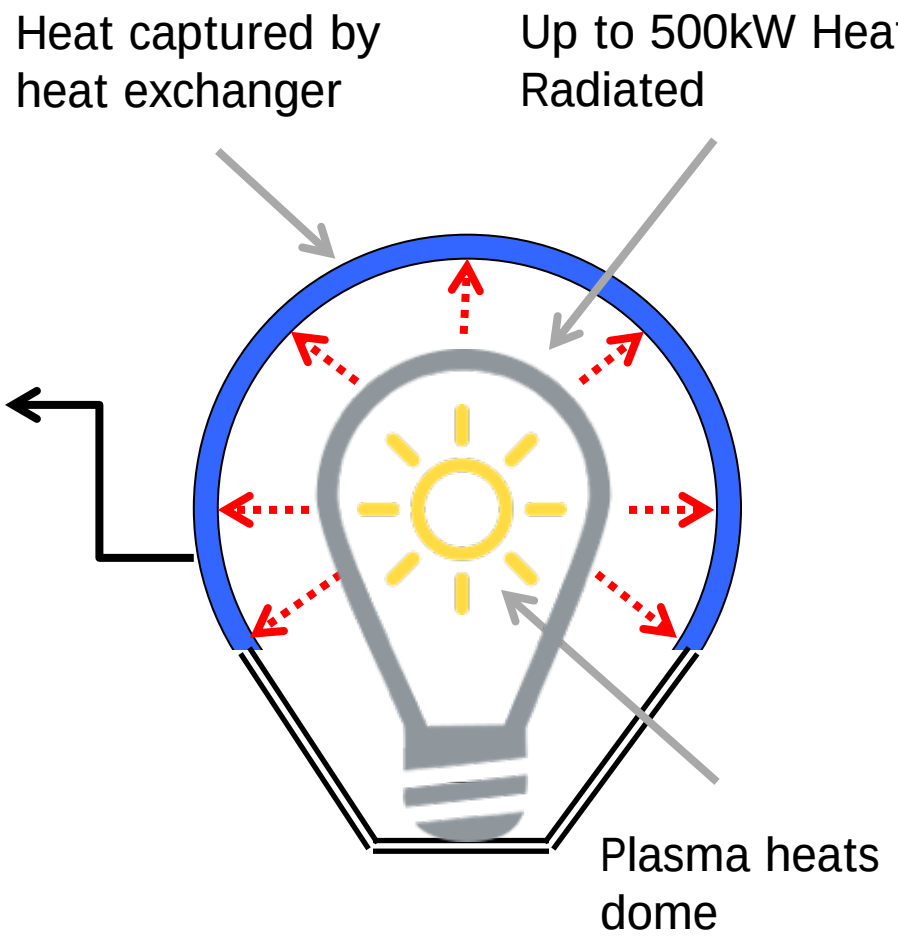
Passenger Car Vehicle Stock 2013 (millions)



2015 Production: 68M Passenger Cars and 18M Light Duty Trucks

Source: European Vehicles Market Statistics, Pocketbook 2013
International Organization of Motor Vehicle Manufacturers 2016

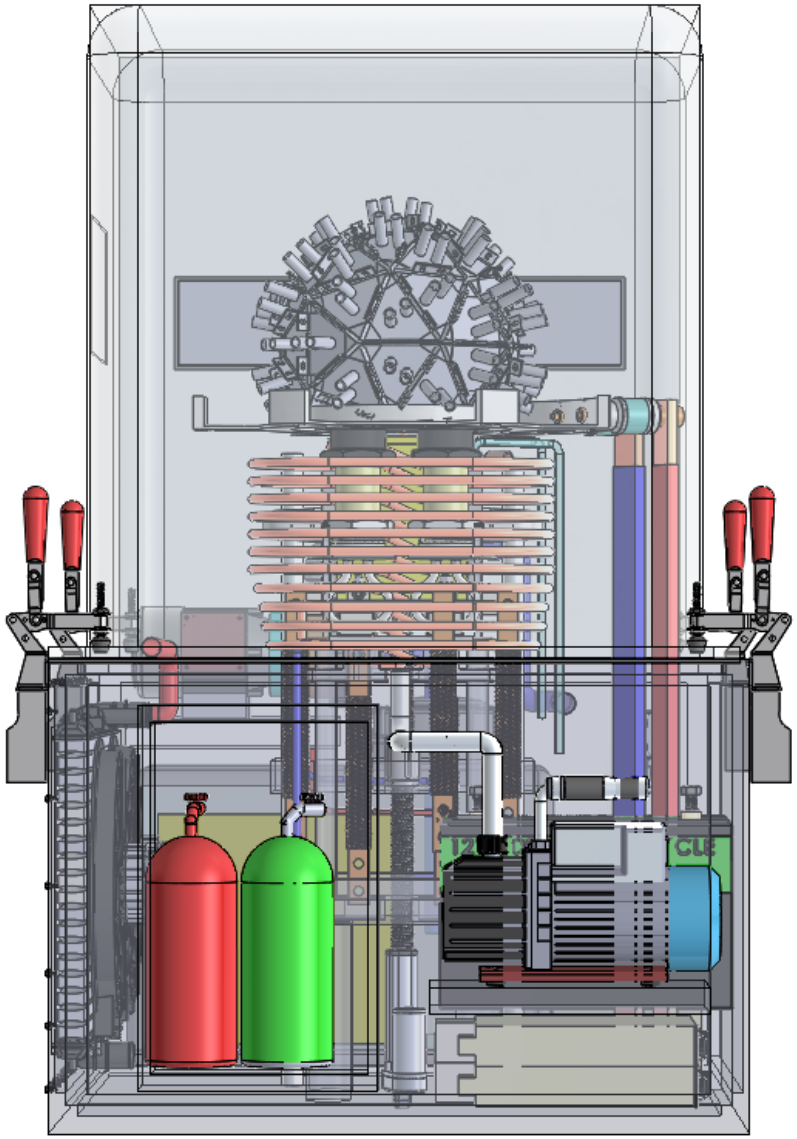
How the Thermal SunCell® Works



The Process… .

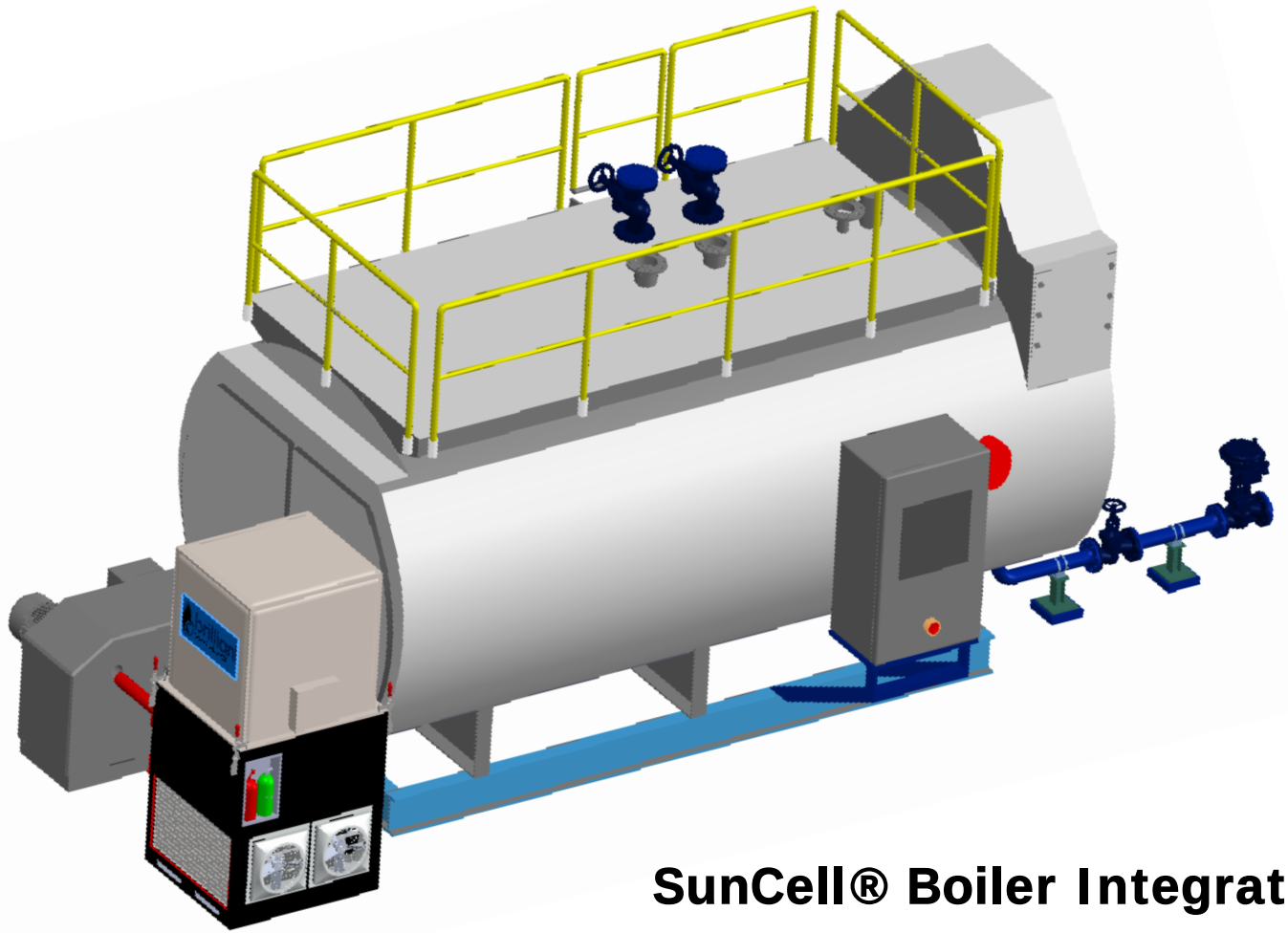
- Plasma is generated through Hydrino® process.
- Plasma heats the blackbody radiator to between 700 and 1700 Kelvin.
- Blackbody radiator emits up to MW's of heat
- Emitted heat is captured by a heat exchanger and heats water, air, or steam to drive a number of thermal applications

Thermal SunCell® specifications



Feature	Est.
Power Output	Up to 500kW THERMAL
Conversion	Heat Exchanger
Thermal Transfer Media	Water, Steam, Air
SunCell dimensions (L,W, H)	0.5x0.5x0.5m
Heat Output	Up to 1700 Degrees K
Blackbody Radiator Power Density	500 kW/m2
Weight	100 kg
Warm-up Time	<1 min
Self-consumption power	<3 kW
Response Time (standby to peak)	~100ms
Service Life	15 years
Noise Emission	Sound Proofed
Degree of protection (per IEC 60529)	
Climatic category (per IEC 60721-3-4)	

Thermal SunCell® application example

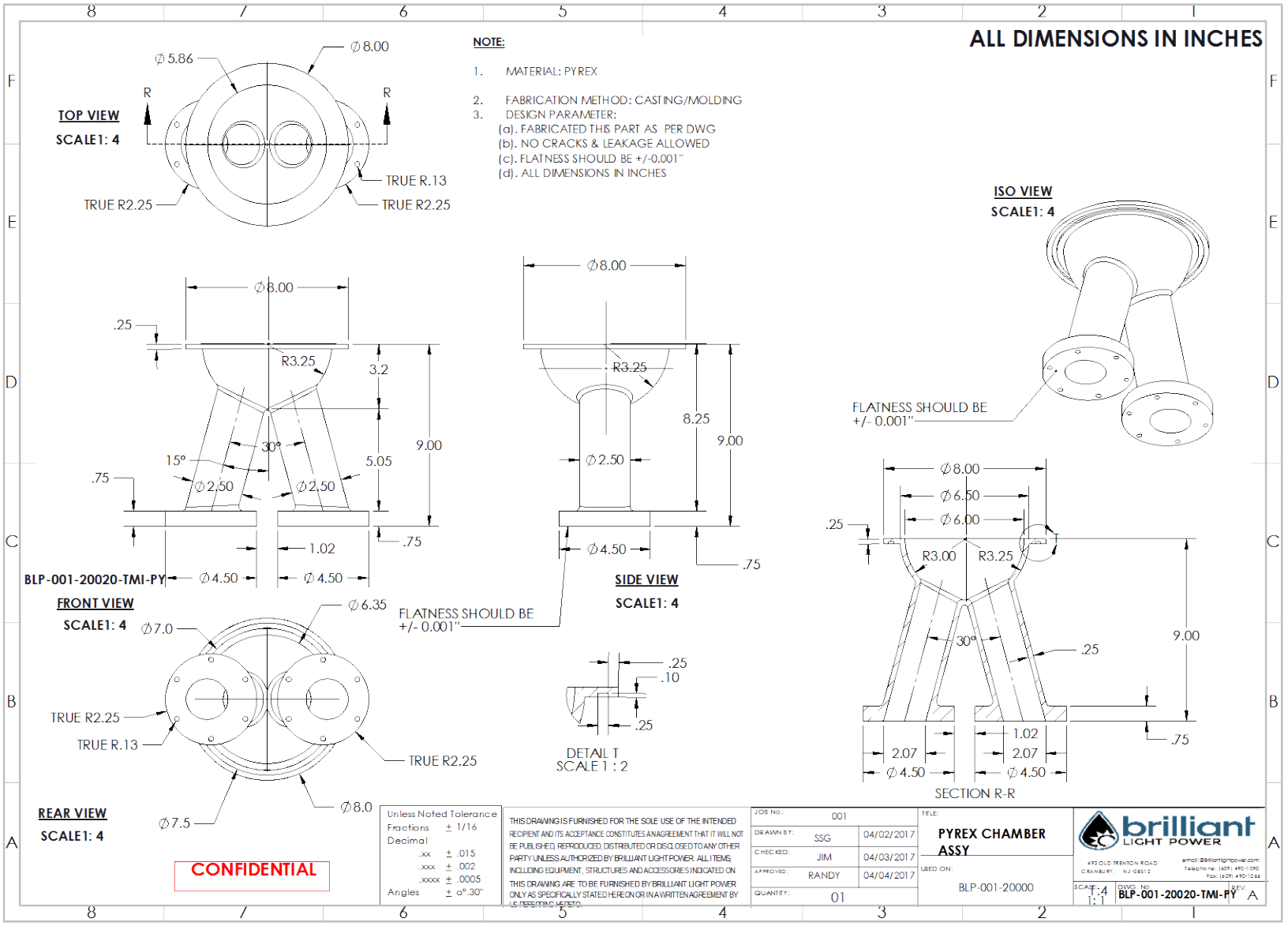


SunCell® Boiler Integration

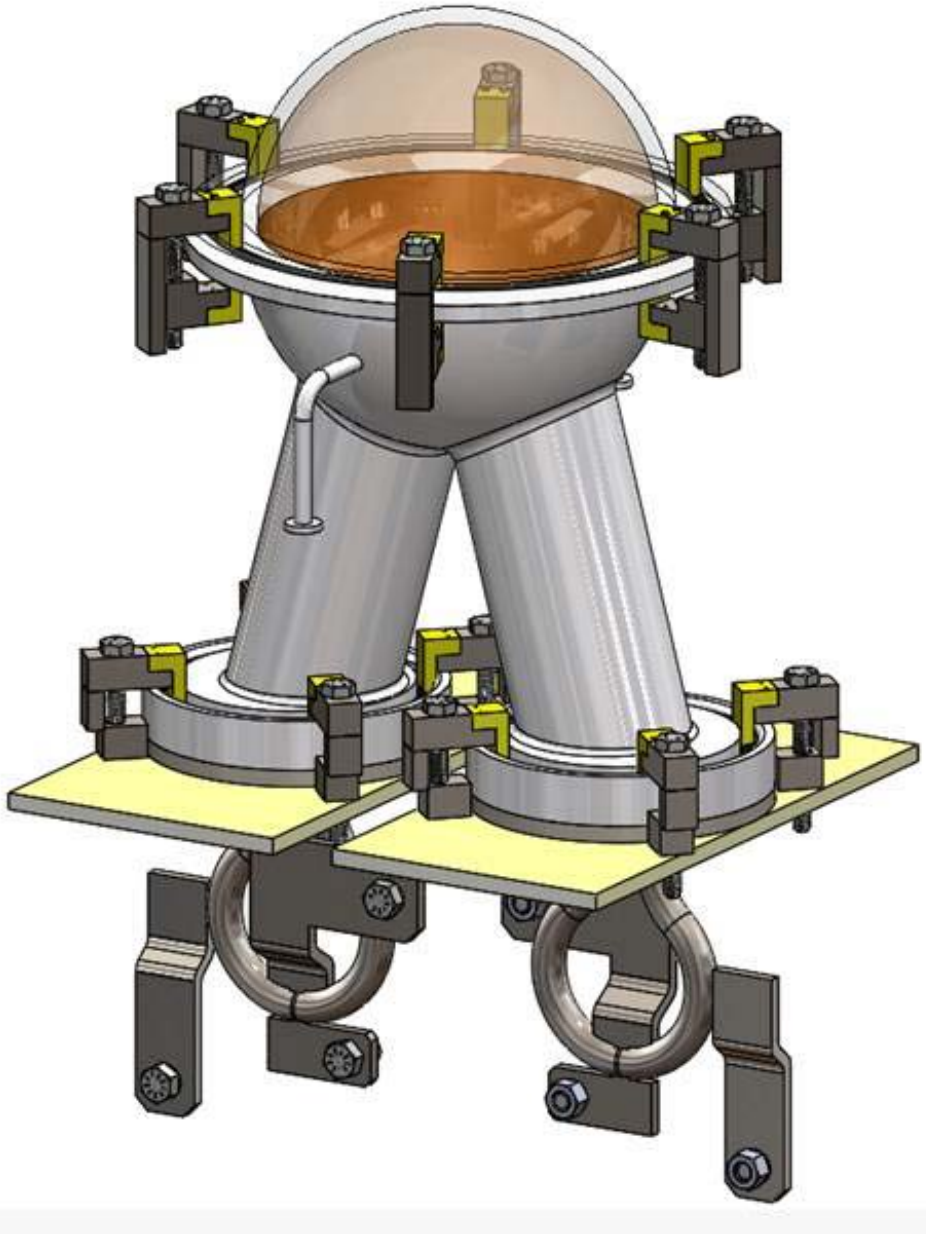
Pyrex-Stainless Steel SunCell for 400 °C Heater

- Outsourced the fabrication of Pyrex reservoirs and reaction cell chamber to vendor.
- Using internally developed electromagnetic pumps, ignition system, and reservoir level controller. Outsourcing commercial design and fabrication.
- Using low-melting-point gallium with a fixed oxygen inventory and hydrogen gas addition.
- Using simple heating tape to melting gallium during startup. Thermal insulation is not required, so no need for reversibility.
- Cell is currently operating.
- Successful version may serve as a 400 °C heater product with TMI heat exchanger that has been fabricated and is being tested.

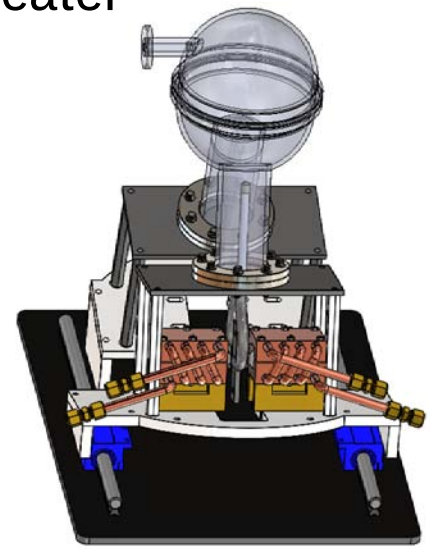
Pyrex Cell for 400 °C Heater

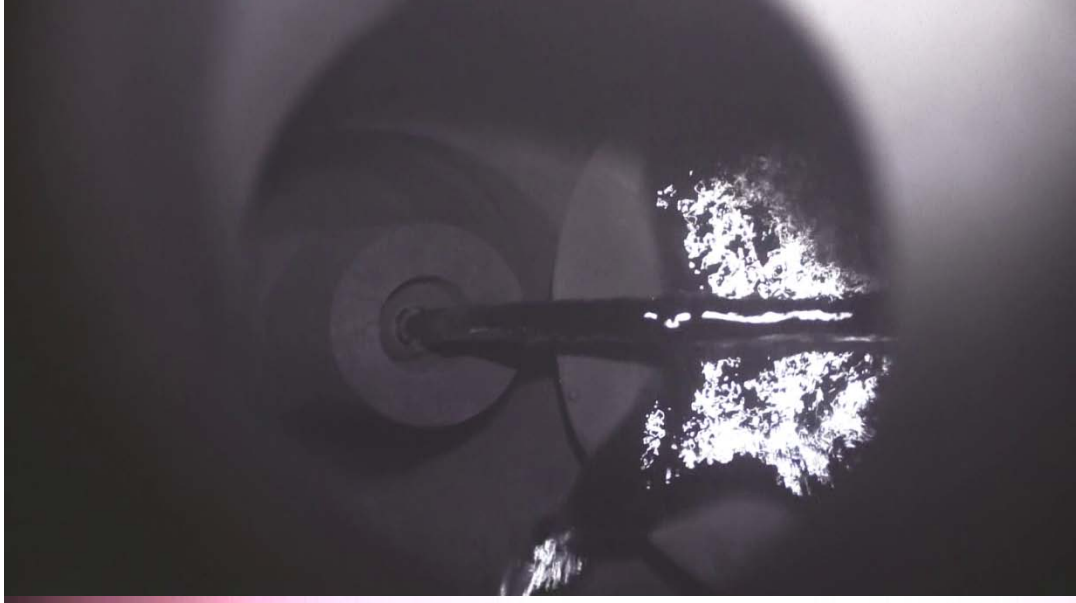


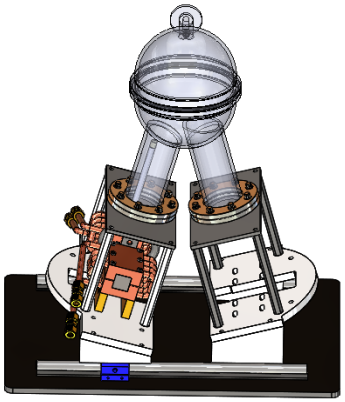
400 °C Heater



Pedestal Cathode Design is Operational as Test Bed for Hydrino Plasma Reaction Chemistry and Heater Development.

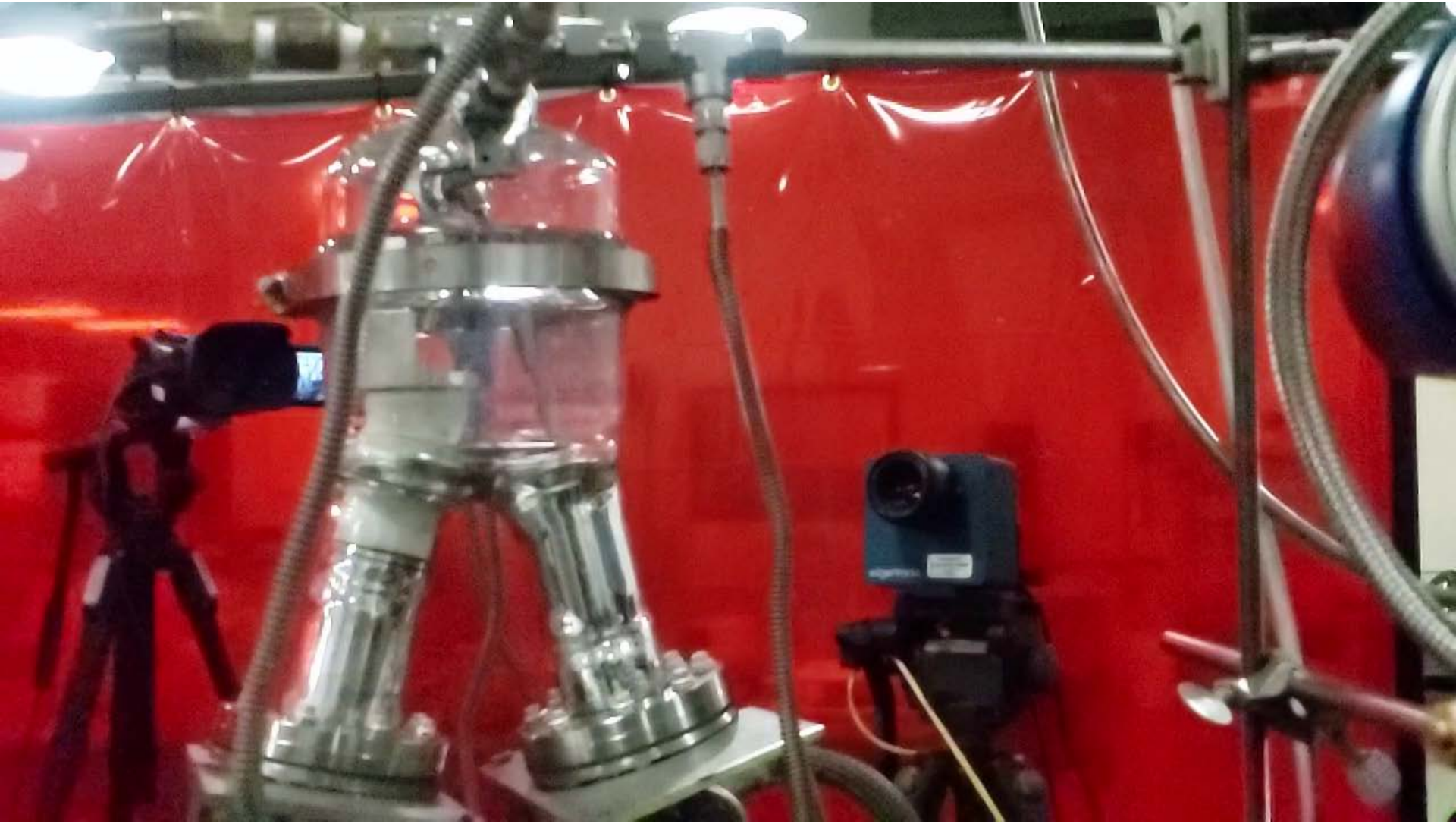






https://brilliantlightpower.com/plasma-video/

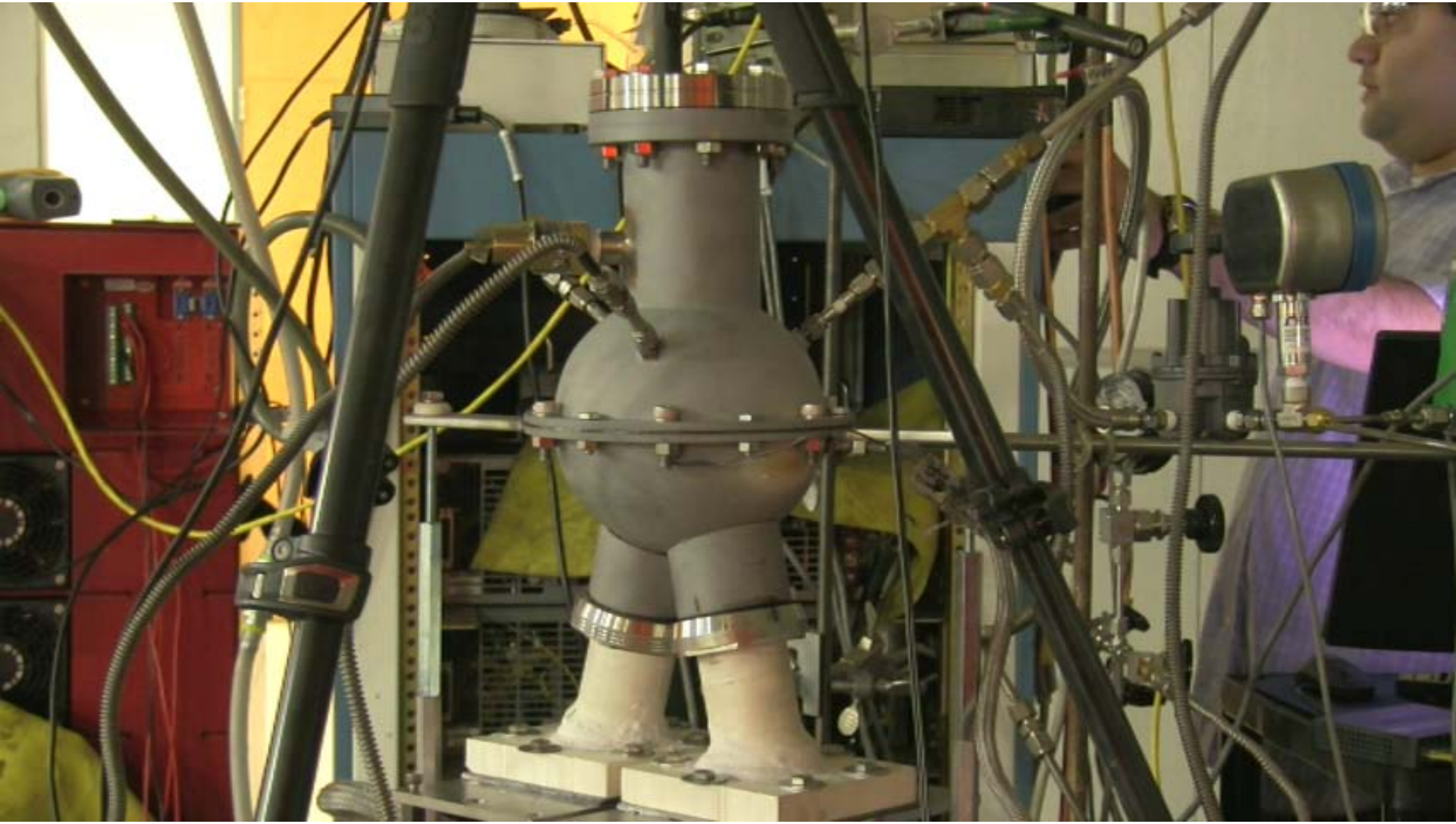
September 17th, 2018 Test



Click the above image to view on YouTube:
https://youtu.be/Mf1am03sOs8

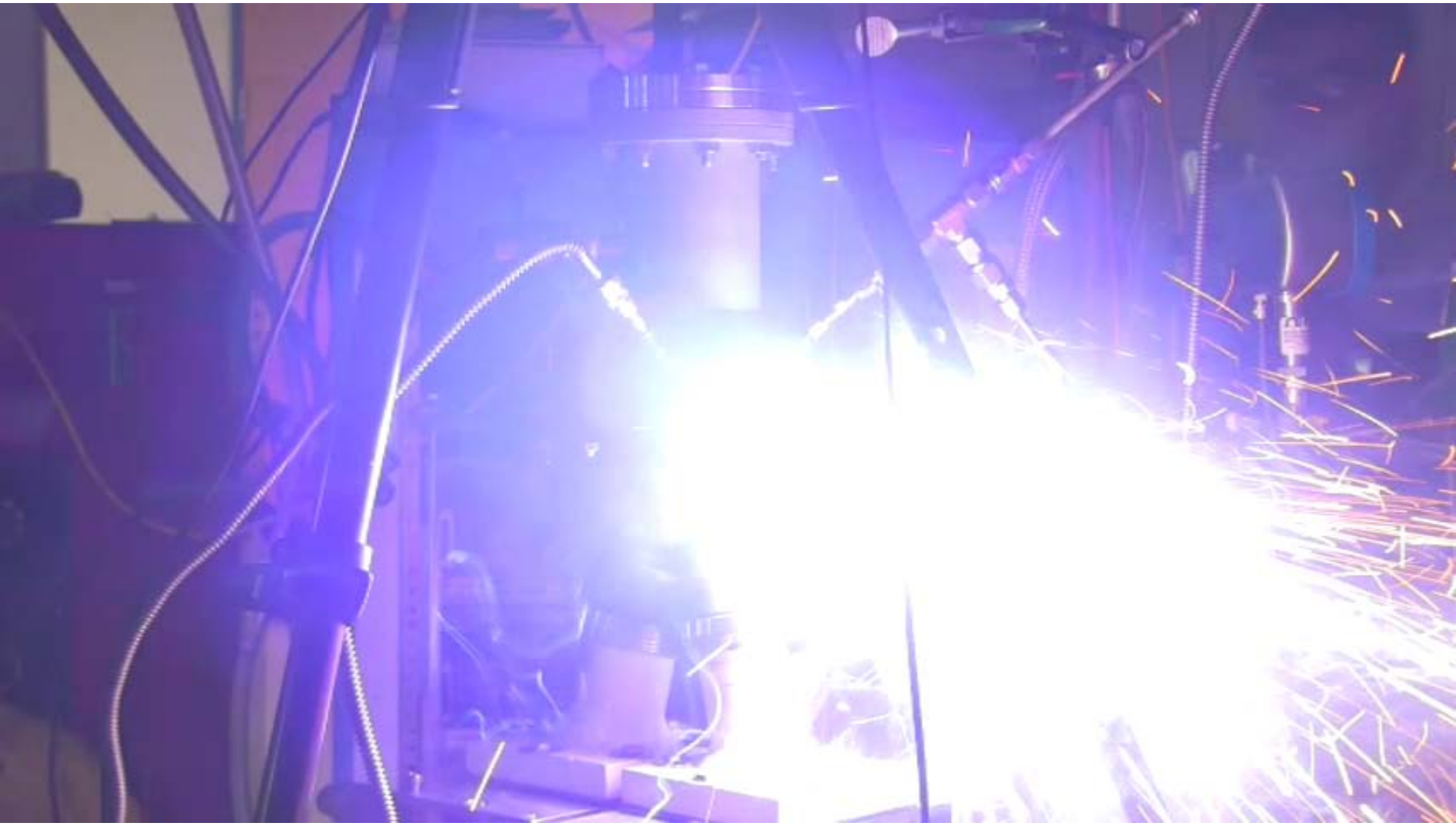
September 17th, 2018 Test

September 19th, 2018 Test

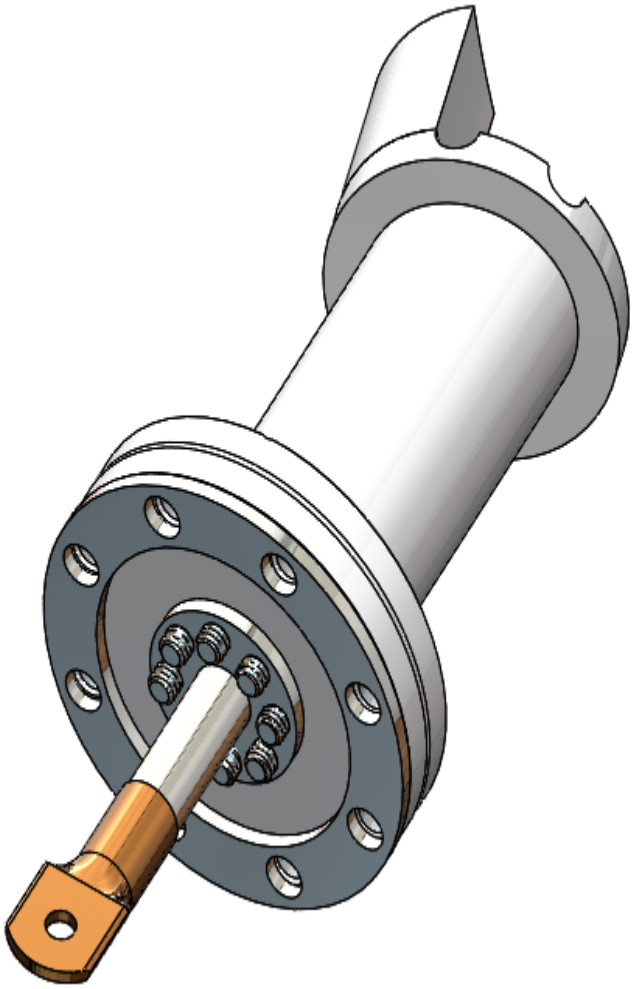


Click the above image to view on YouTube:
https://youtu.be/-wvMmdF8gBM

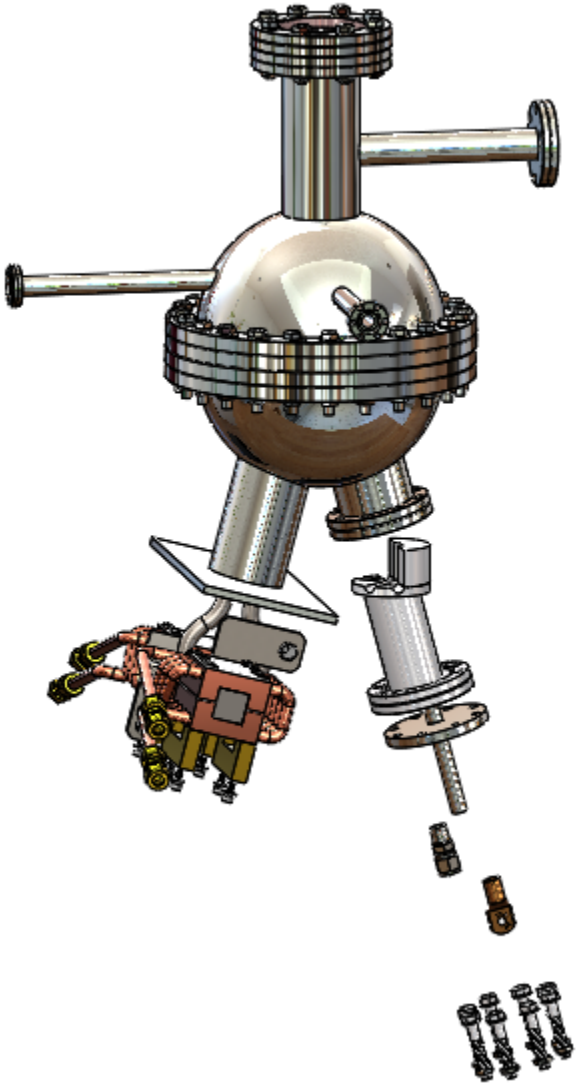
September 19th, 2018 Test



400 °C Heater (Improved Design)



400 °C Heater (Improved Design)

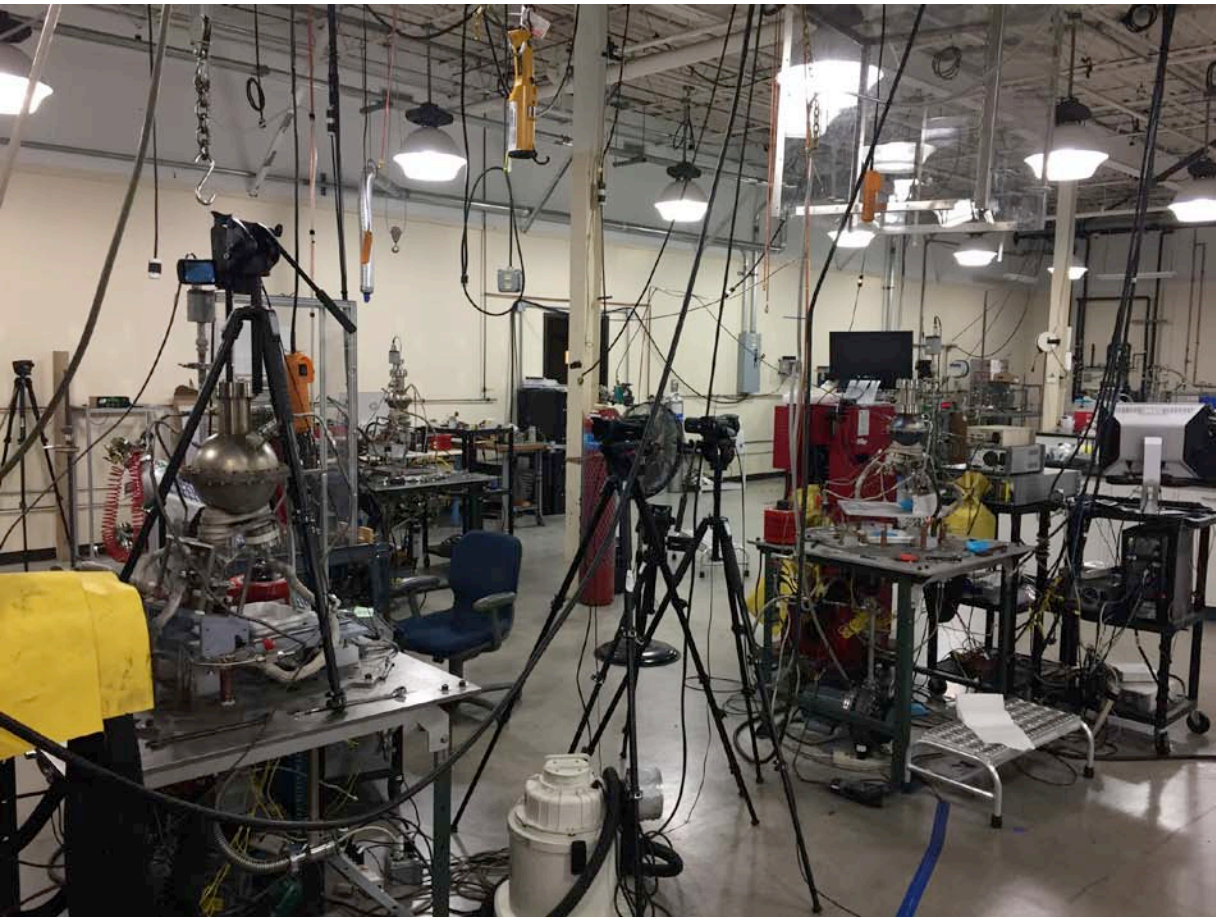


Inverted Cubic Cell

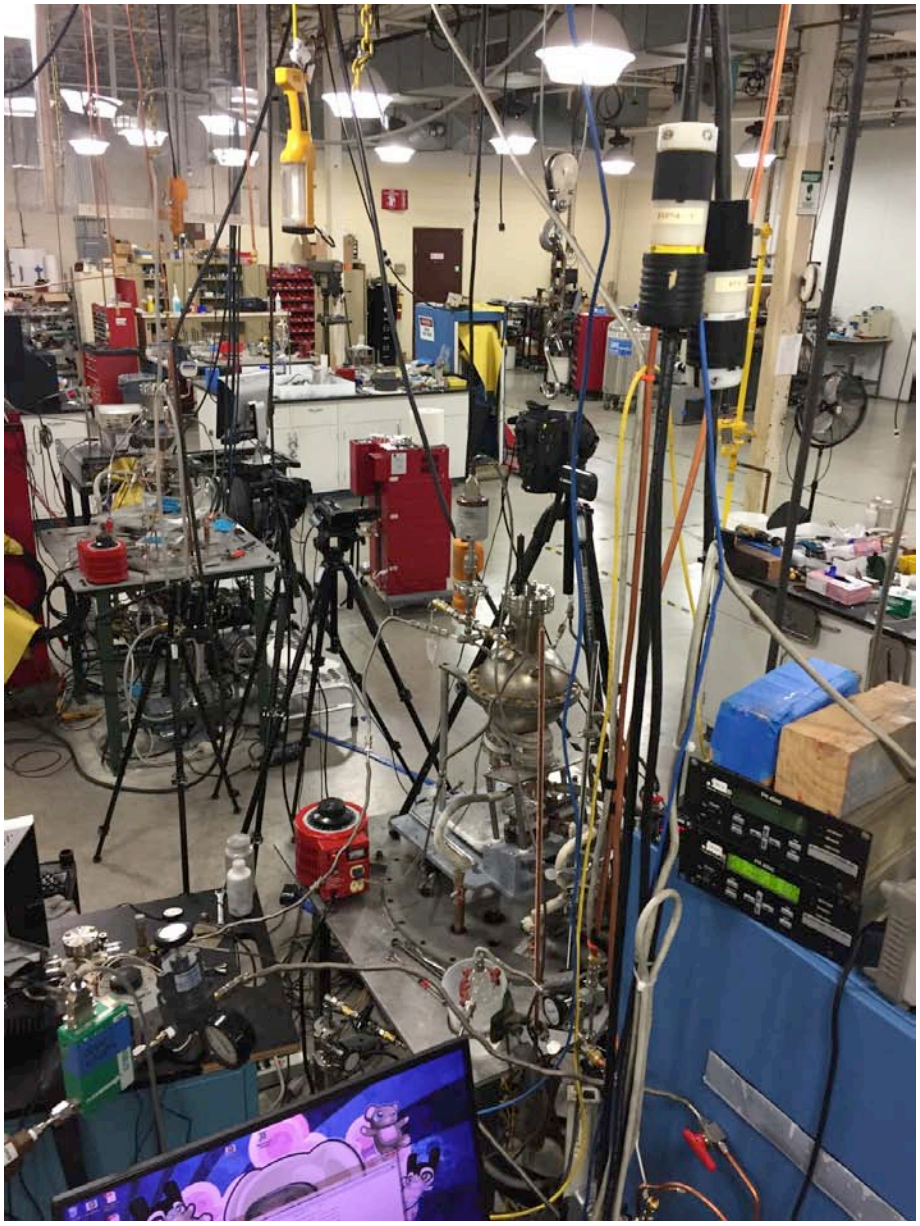
Cubic Cell Test 111419

Continuous plasma: red in seconds, status at 10 minute duration

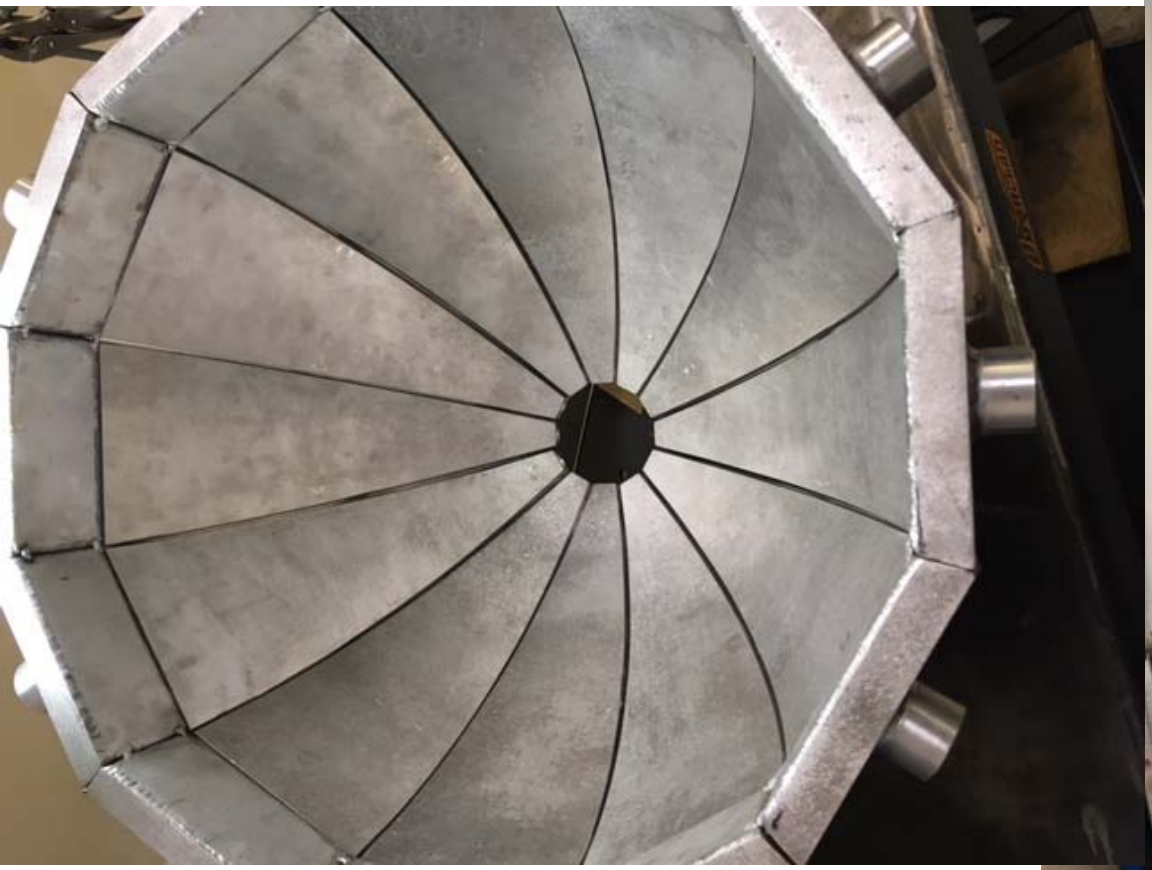
Three Test Stations Operating



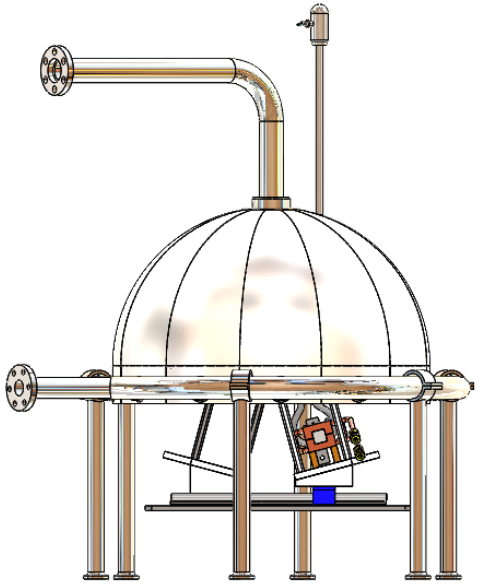
Three Test Stations Operating

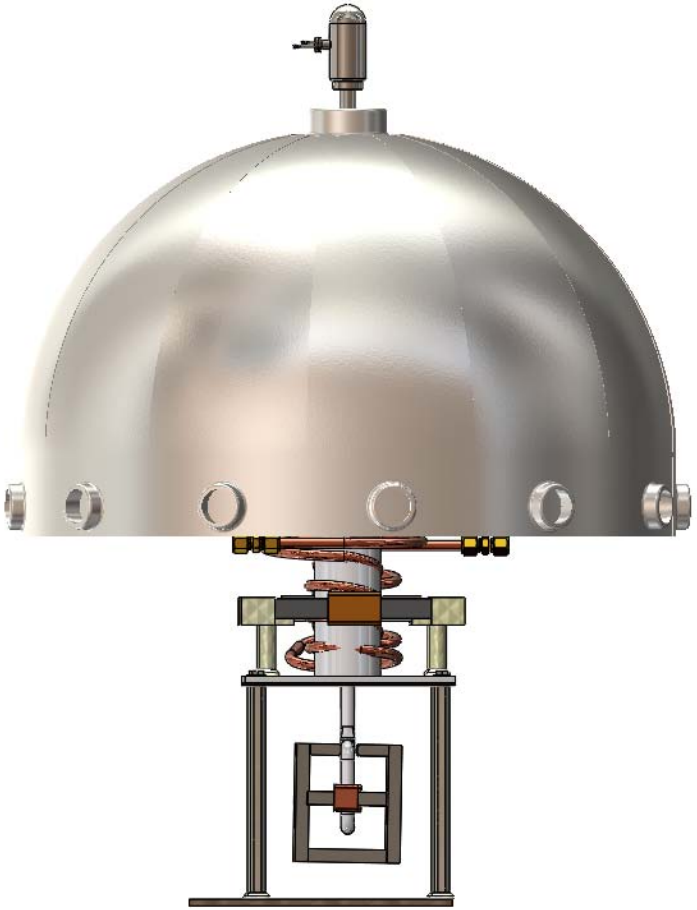


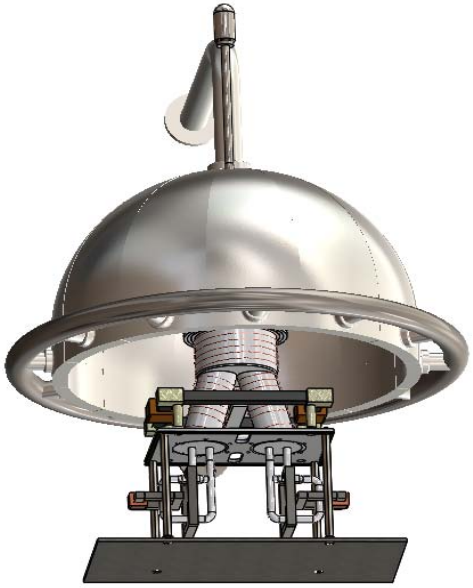
Heat Exchanger

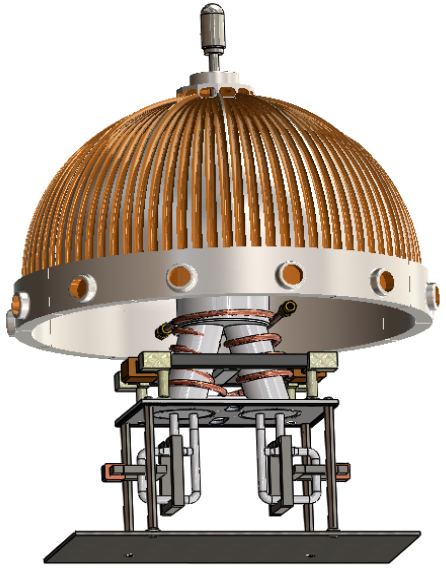


400 °C Heater



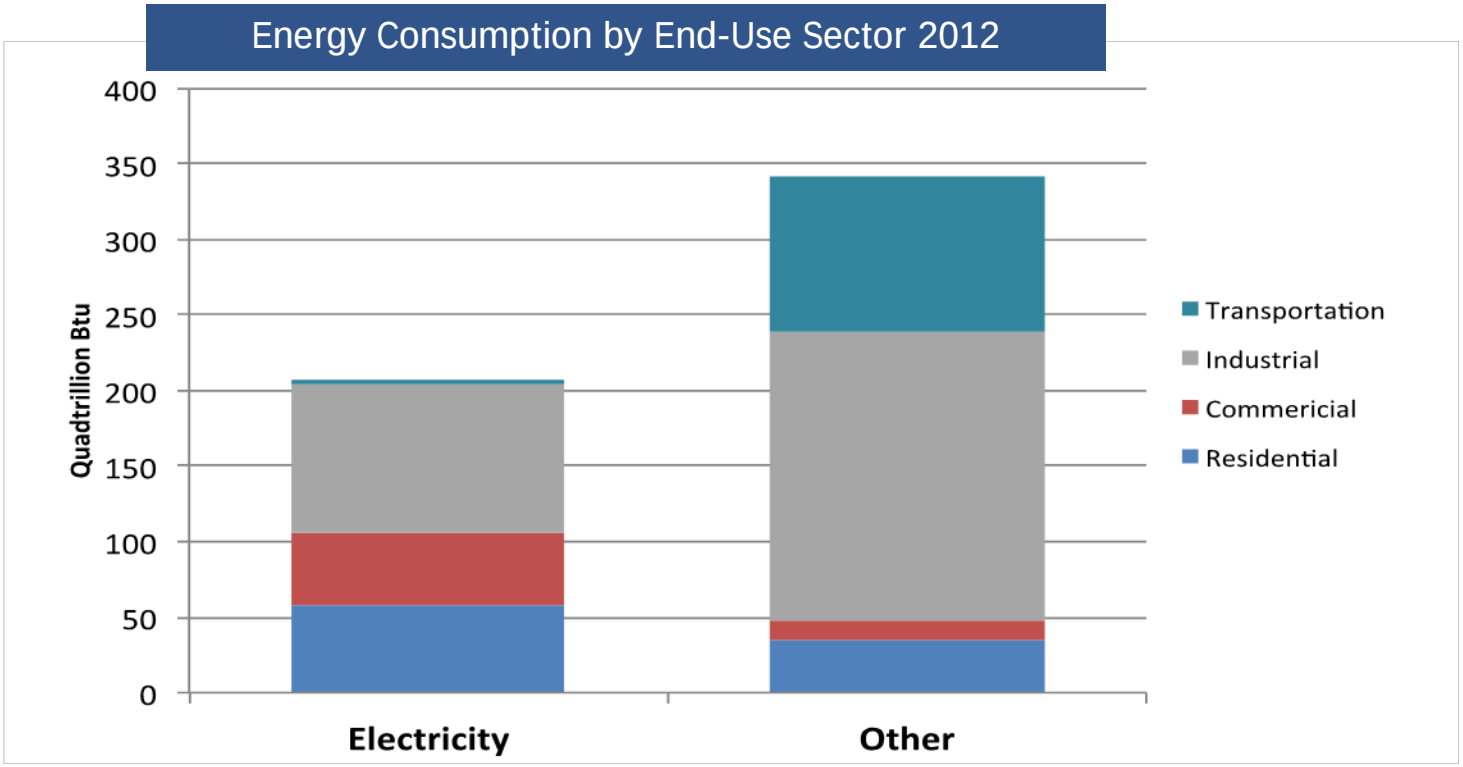






Global Electricity and Other Energy Sources

- Global electricity markets an obvious fit for SunCell – 42% value and 38% of total energy use
- SunCell applications in non-electric markets even bigger potential
- Energy use expected to expand with disruptive technology, as seen in telecommunications

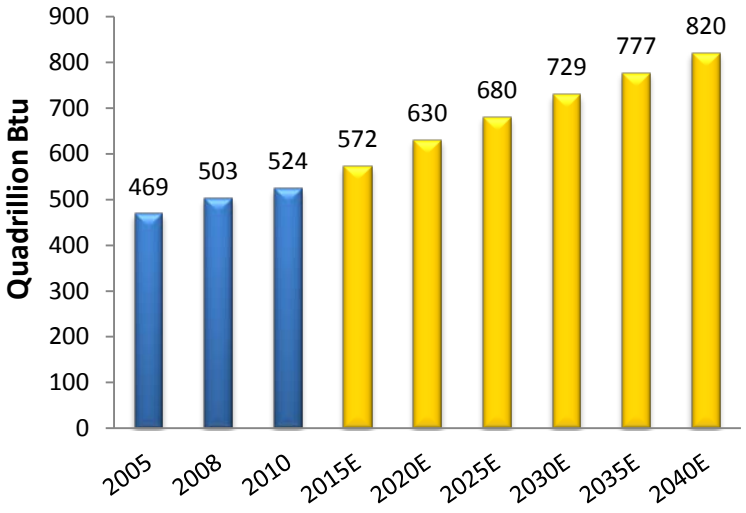


Ref: DOE/EIA International Energy Outlook 2016

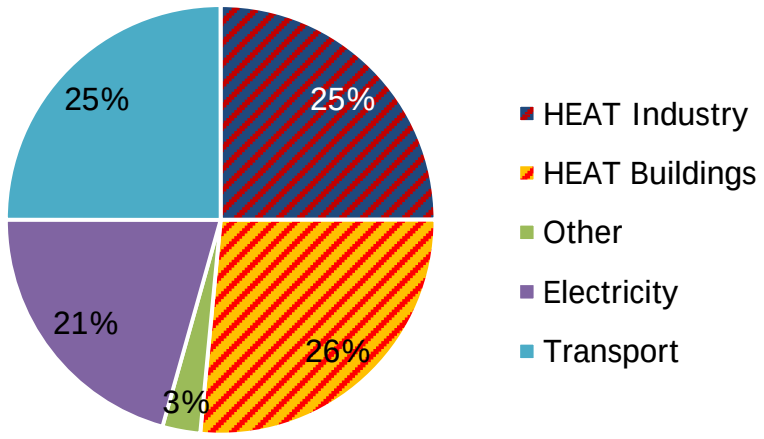
Global ”Heat” Market

- $8 trillion~ expended on total fossil fuels globally in 2013
- 1/2+ of final energy consumption for Heat applications in Industry and Buildings
- 3/4 Heat from fossil fuels
- 1/3 of worldwide CO2 emissions from Heat sources
- Modest average annual growth of 2.6% from 2008-2012

Global Energy Consumption



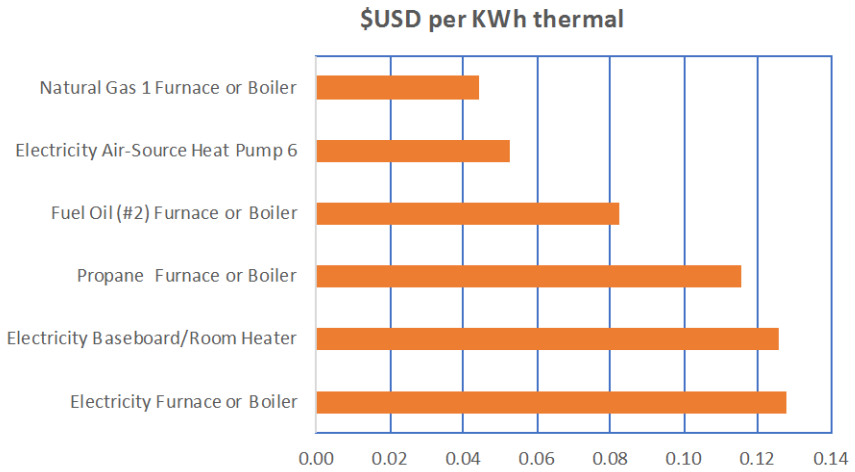
Final Energy Use



Sources: EIA IEO 2013, International Energy Agency and management estimates, Heating Without Global Warming – International Energy Agency 2014
172 EJ for Heat = 163 Quadrillion Btu
Carbon emissions from burning biomass for energy, Partnership for Policy Integrity

Heat Costs & Equipment Vary Widely

- Existing heat fuel sources are diverse
- Equipment offerings range from primitive to massively complex:
  - Biomass stoves & furnaces
  - Natural gas furnaces
  - Electrical heat pumps
  - Low-grade solar heat for air and water
  - Landfill gas for boilers,
  - Resistive electrical heaters
  - Direct geothermal
  - Co-gen power plant district heat
- US residential heating example
  - Costs vary almost 3X depending on the fuel and equipment combination
  - Small unit power for a SunCell®, but consider Buildings and Industry

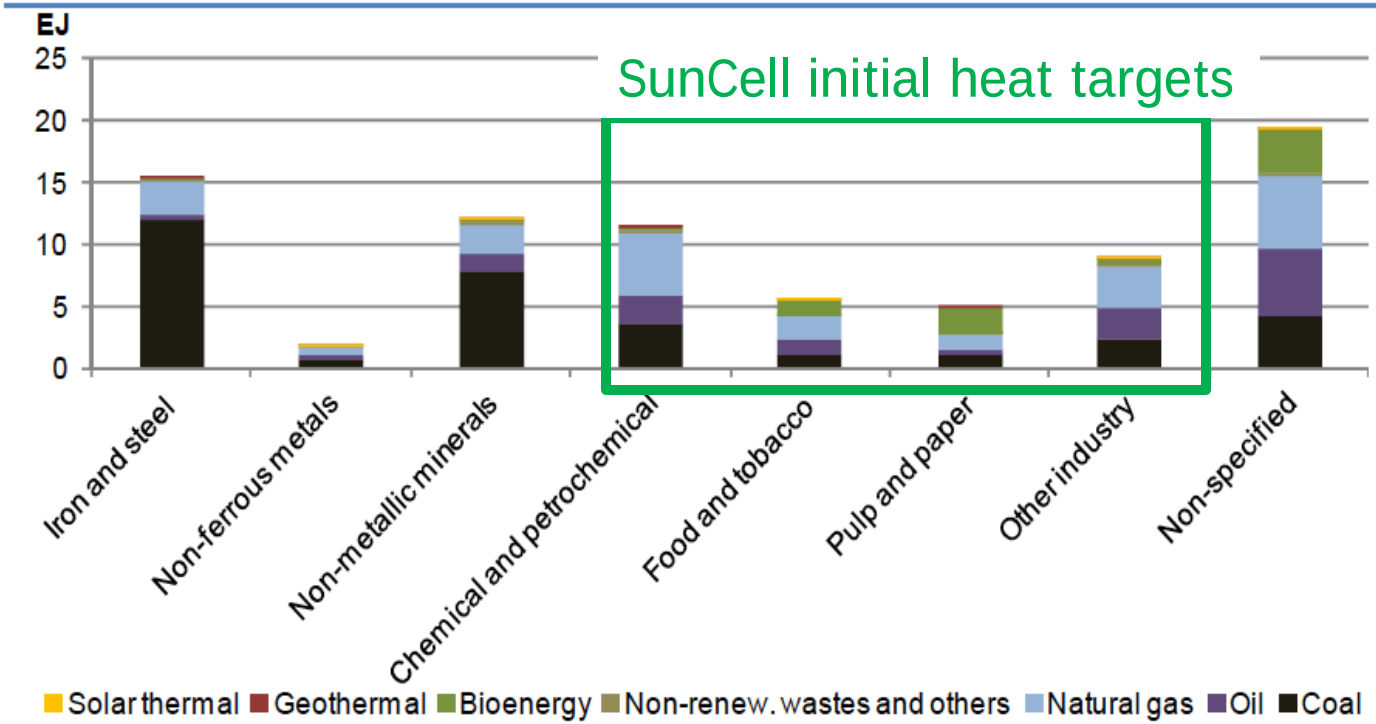


- Target high fuel cost segments & customers that match SunCell thermal output (200KW to 1MW)
- Target high-value industrial partners for applying SunCell to "standardized" segments

Sources: modeled cost using Heating Cost Calculator Auburn University https://ag.purdue.edu/extension/renewable-energy/Documents/ON.../heatcalc.xls

Industrial Heat Market Segments

Figure 5 • Global energy use for heat in industry by sector and fuel type, 2011



- Total 79 exajoules (EJ)
- SunCell targets 27 EJ or 34%
- **$225B target market @ $0.03 / Kwh**

- More Attractive:
  - General heating systems for boilers & process, chemical, food, and paper industries.
  - Simpler systems
  - Range of systems partners
- Less Attractive:
  - Iron & Steel foundries have unique requirements and long development cycles
  - Non-metallic minerals products are very diverse; cement, bricks, tiles, sanitary ware, glass, tableware, and decorative goods.

Sources: EIA IEO 2013, International Energy Agency and management estimates, Heating Without Global Warming – International Energy Agency 2014
1 Ej = 2.78E+11 Kwh or 174M barrels of oil


Safe, economic, accessible, clean power……

Key Objectives

years of research, success and invention that is reaching inflection point for value

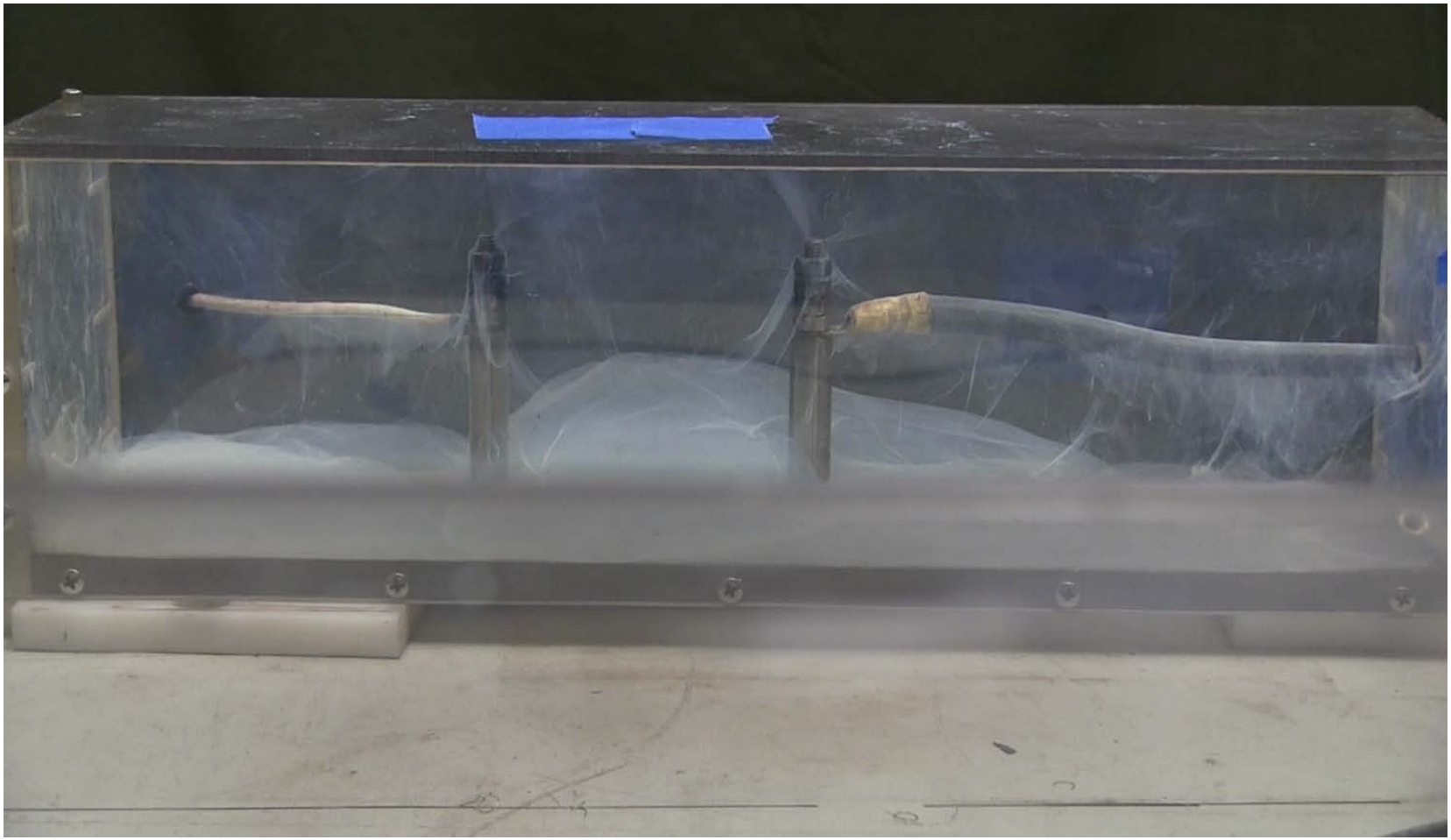
1. Continue development through to being commercializable.
2. Develop the Hydrino® theory and technology across multiple markets:
   - novel compounds,
   - energetic materials,
   - thermal energy and,
   - power generation.
3. Engineer SunCell® prototypes for thermal energy and power generation with novel magnetohydrodynamics (MHD) thermodynamic cycle.
4. Pursue corporate partners to succeed at developing a commercial SunCell® product. Desired original equipment manufactures (OEM) identified.
5. Plan to outsource development of components of the new advanced SunCell® power source and MHD converter when beneficial.
6. Increase public, academic, and industry awareness.

Levers to Achieve Commercial Success

Prove our power source to the world in the near term through power measurements, identification of the Hydrino® products of the reaction, and engineered power systems.

- **Theory:** Techniques and unique characteristic signatures to identify Hydrino® are predicted from exact closed-form solutions of atoms and molecules.
- **Hydrino® Identification:** Multiple methods demonstrated for measuring Hydrino® product. Over100 peer reviewed publications, and an important new paper published regarding the confirmation of the fundamental Hydrino® reaction.
  - **Power Releasing Hydrino® Reaction:** 20 MW in microliters, highest controlled power density known.
  - **Power Engineering:**
    - Focused on a advanced design that has the capacity to generate high power with less complex systems.
    - Newly invented MHD thermodynamic cycle seems well suited for SunCell®.
    - Pioneering innovations and blocking intellectual property regarding the SunCell® power source and electrical conversion.
  - **Applications Businesses:** Expand the reach on Hydrino® opportunities to derivative markets such as novel compounds, energetic materials, molecular modeling software business, etc.

Novel Hydrino Compounds



Hydrino Analytical

- Advanced electron beam generation and emission of rotation-vibration band of molecular hydrino gas in argon.
- Characterized the reaction conditions to form polymeric molecular hydrino compound.
- Achieved reproducibility of the polymeric molecular hydrino compound analytical results:
  - Fourier Transform Infrared (FTIR)
  - X-ray Photoelectron Spectroscopy (XPS)
  - Electron Paramagnetic Resonance Spectroscopy (EPR)
  - Time of Flight Secondary Ion Mass Spectroscopy (ToF-SIMs)
  - Inverse Raman Effect (IRE)
  - E-beam excitation emission spectroscopy
  - Vibrating sample magnetometry
- Confirmed the formation and collection of molecular hydrino in the KOH-KCl system:
  - E-beam excitation emission spectroscopy
  - Thermally cycled e-beam excitation emission spectroscopy to prove band is due to hydrino ro-vibration
  - Photoluminescence band (PL band)
  - Inverse Raman Effect (IRE)
  - Electron Paramagnetic Resonance Spectroscopy (EPR)
  - Time of Flight Secondary Ion Mass Spectroscopy (ToF-SIMs)
  - Solid Nuclear magnetic Resonance (NMR)
- Intense Raman $H_2(1/4)$ rotational peak from ignition electrodes, post blast.
- Developed a gas chromatography system that is analyzing hydrino gas with initial results showing a unique and characteristic inverse thermal conductivity peak relative to H_2 carrier gas.
- Solved the H_2 and $H_2(1/p)$ dimers, electron paramagnetic resonance spectrum of H2(1/4) dimers, the origin of hydrino product magnetism, the van der Waals and magnetic macro-aggregation bonding of hydrino polymeric compounds, and H_2 and $H_2(1/p)$ quadrupole moments.
- Continue to work with the differential scanning calorimeter (DSC) to measure heat on a solid fuels chemistry that is regenerative with the addition of at least one of hydrogen and water.

Expanding Reach of Hydrino® Opportunities

Novel Compounds

- **Market: $TBD**
- Analytical identification 70% completed for several Hydrino® compounds
- Exhibit unknown magnetic properties
- Samples can be fabricated today
- *Exploring applications with specialty firms*

Energetic Materials

- **Market $ 4.6B**
- Initial data shows superiority to TNT: 10X blast, safer
- Completing test reports
- Partnerships model for material
- *Early stage market opportunity*

Thermal

- **$8 T market, BrLP focused on $225B Industrial Heat**
- Leverages SunCell plasma development to date, common subsystems for MHD
- Platform for earlier revenue and testing
- *Outside expert for heat exchanger systems and design*

Power Generation

- **$3.5 T electricity market**
- SunCell plasma prototype with vendors to refine subsystems, retire risks
- MHD SunCell design nearing completion; commonality with Thermal
- *Outside experts on board*
- *Adding engineering resources*

Increase Public Awareness to Attract Business Partners

2016-2017 Demonstrations and Roadshows

- January 28th BrLP
- June 28th BrLP
- July 20th Columbia Tech, Boston
- October 28th BrLP Industry Day
- December 6th DC
- December 16th London
- February 27th Fresno CA
- February 28th ABM, Irving CA
- March 1st Phoenix AZ

Increase Public Awareness

Press

- CNN National and International
- CBS and NBC affiliates
- Trends Magazine
- Scientific American
- Chemical & Engineering News

Brilliant Light Power's SunCell Announced on CNN

HUFFPOST

Rebekah Iliff, Contributor
Contributing Writer

Futurist Dr. Randell Mills Talks SunCell, Off-Grid Power, And The Future Of Job Creation

05/31/2017 09:42 am ET | Updated Jun 01, 2017

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The Great Transition: Update on Brilliant Light Power

FEBRUARY 19, 2018 3:42 PM 0 COMMENTS

SCIENTIFIC AMERICAN

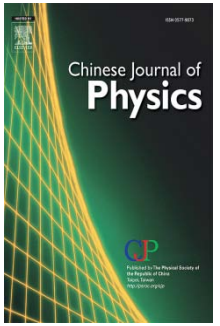
Trends

Increase Scientific Awareness

Latest Publications (105 in total)

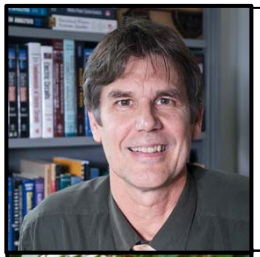
R. Mills, J. Lotoski, Y. Lu, “Mechanism of soft X-ray continuum radiation from low-energy pinch discharges of hydrogen and ultra-low field ignition of solid fuels”, Plasma Science and Technology, Vol. 19, (2017), pp. 1-28.

R. Mills, Y. Lu, R. Frazer, “Power Determination and Hydrino Product Characterization of Ultra-low Field Ignition of Hydrated Silver Shots”, Chinese Journal of Physics, (2018), doi: 10.1016/j.cjph.2018.04.015.



Validation of Energy Gain by leading experts

http://brilliantlightpower.com/validation-reports/



Dr. Peter Jansson, Associate Professor Department of Electrical and Computer Engineering, Bucknell University, PhD from University of Cambridge, BA from MIT. Dr. Jansson has expertise in the research and development of electric power system fundamentals, sustainability, new energy technology systems, renewable and advanced electric power systems, smart grid technology, electronics, and hybrid/electric transportation and grid storage.

Dr. Randy Booker, Professor of Physics, University North Carolina Ashville, PhD and MA from Duke University, BA from Rice University. Dr. Booker has served as Physics Department Chair at UNCA. Dr. Booker reviewed the theoretical work of Dr. Mills in addition to validating spectroscopy and calorimetry experiments.

Dr. K. V. Ramanujachary (Chary), Professor Department of Chemistry and Biochemistry, Rowan University. Chary has extensive expertise in materials science and collaborates with world renowned battery and materials science groups. Chary participated in prior independent validation studies measuring energy from solid fuels and validating Hydrino® containing chemical samples.

Mr. Joe Renick, former Chief Scientist for a Defense Contractor. Over 20 years experience at all levels of Research and Development in including managing test and evaluation programs for tier one defense contractors, DTRA and other agencies. Mr. Renick conducted BrLP solid fuel validation programs at third party sites for a prior employer in addition to Solid Fuel and SunCell® tests at BrLP.

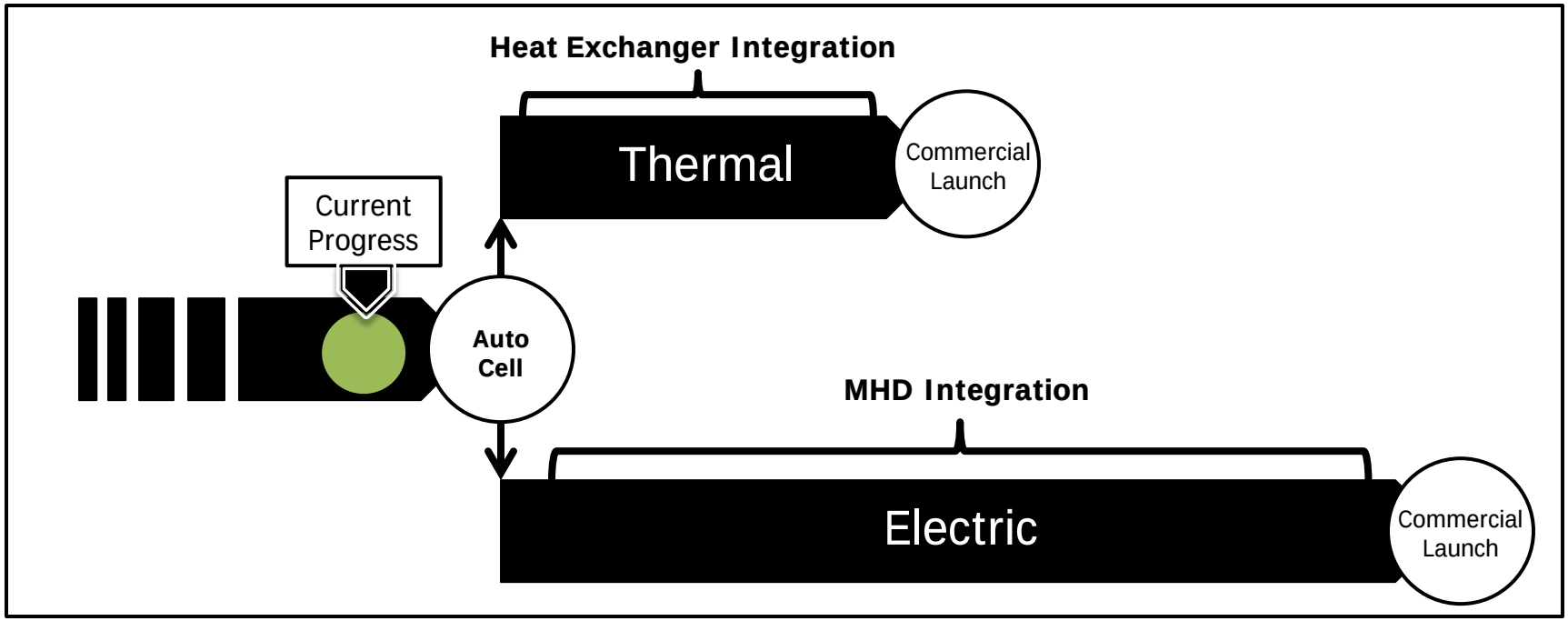
BlackLight Innovations, Inc.

- Water as high power density, fast kinetics fuel to develop high pressure
- Program:
  - Support validation and public announcement of hydrino-based power source
  - Pursue commercial partners- strategic partner license to perform government contracts
  - The power produces extraordinary and unique signatures such as extreme ultraviolet continuum emission, an essentially fully ionized, high-pressure plasma based on Stark effect measurement by Balmer alpha line broadening, and a shock wave that has recently been determined to be about 10 times more powerful than that produced by the same weight of TNT.

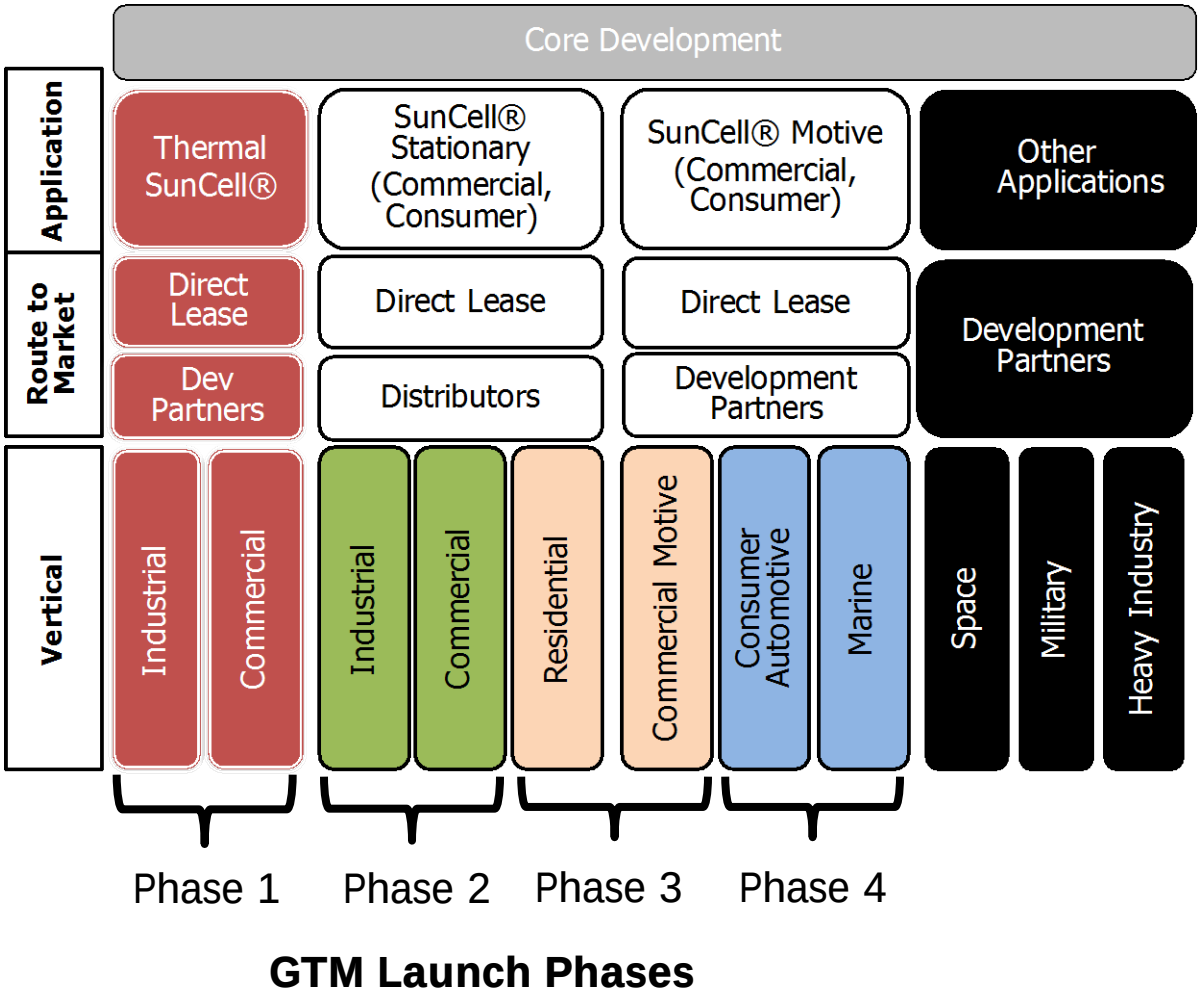
SunCell® development program

The SunCell® development program is broken into commercial pathways following the “Automated Cell” engineering milestone:

- **Thermal** – The integration of the SunCell® with heat exchanger technology to create a commercial heater capable of delivering 500kW for boiler, hot air, or hot water thermal systems
- **Electric** – The integration of the SunCell® MHD technology to create an electrical generator delivering 150kW of DC power



Brilliant Light Power Go-To-Market Model



GTM Launch Phases

Phase 1 – Thermal Unit-Launch to Industrial, Commercial and Multi-tenant residential markets

Phase 2 – 150kW Unit - Launch to Industrial, Commercial and Multi-tenant residential markets

Phase 3 – launch to Residential through Direct Lease and Commercial Automotive with Development Partner

Phase 4 – Improved/Modified Units – launch to Consumer Automotive and Marine through Direct Lease and Development Partner models

***Development Partners** – Engaged at any phase under Development Partner agreement*

Partner relationships

Strategic Partners

- A partner that is an early adopter of SunCell® technology.
- The Strategic Partner works with BrLP throughout the field trial and production proof of concept phase of the Commercial Launch of a the SunCell®.
- Are offered strategic investment opportunity in BrLP and receive discounted power for their own commercial use.

Distributor

- A partner that has the capability to distribute and maintain the SunCell technology in a given territory or field of use.
- A reputable firm with the necessary connections to overcome certification and regulatory challenges within their territory or field of use.
- BrLP will grant a license as per Distributor pricing terms & conditions

Development Partners

- A commercial interest in the core development of the Hydrino® derived energy source and its derivatives
- Has the engineering and production capability to be able to produce products other than SunCells®.
- License the intellectual know-how of generating Hydrino® based energy to solve for heat, light or electrical power requirements in their own applications.


OPEN

Validations

- Theory validation by physics professor.
- Developed a method to measure the calorimetric input energy despite the presence of a powerful electromagnetic pulse form the hydrino detonation.
- Solved the means to match the EMP eliminated voltage measurement to the one measured with a voltmeter in the absence of the EMP.
- In the process of finishing validation of the optical and thermal power.
- Solved molecular hydrogen and hydrino dimer parameters.
- Solved molecular hydrogen and hydrino van der Waals bonding.
- Solved magnetism of hydrino products and magnetic aggregation bonding.
- Solved molecular hydrino dimer EPR spectrum.
- Solved molecular hydrogen and hydrino quadrupole moments.

Thank you!

For more information please visit us at www.brilliantlightpower.com