Connecticut History in Fuel Cells and Hydrogen

1950's

- On-going supply of Hydrogen for industry by Praxair, Inc. (www.praxair.com)
- Fuel cell development begins at United Technologies Corporation (www.utcfuelcells.com)
- Treadwell Corporation electrolysis unit installed on USS Nautilus (www.treadwellcorp.com)

1960's

- Alkaline fuel cell (AFC) power plants provide electrical power for Apollo mission
- Natural gas fueled AFC power plant provides power to a home
- FuelCell Energy, Inc. activity initiated (www.fuelcellenergy.com)
- Treadwell installs hundredth electrolysis unit in U. S. submarine fleet

1970's

- Field test of 65 phosphoric acid fuel cell (PAFC) power plants
- 1 megawatt PAFC fuel cell power plant connected to the Northeast Utilities Grid

1980's

- Space shuttle operation with AFC power plants for electric power initiated
- 4.5 megawatt PAFC power plant operated
- 50 power plant field test of PAFC fuel cells in combined heat and power
- Proton Exchange Membrane (PEM) electrolysis and fuel cell activity acquired by UTC
- Connecticut Innovations Inc. established (www.ctinnovations.com)

1990's

- 11 megawatt PAFC power plant operated—largest to date
- Serial production of 200 kW PAFC power plant begins
- Phosphoric acid power plant provides motive power for transit bus
- PEM power plant provides auxiliary power for automobile
- 2 MW molten carbonate fuel cell (MCFC) power plant operates
- First 250 kW MCFC test unit begins operation
- GenCell Corporation established to develop MCFC and other cell stacks (www.gencellcorp.com)
- Proton Energy Systems founded to pursue PEM electrolysis systems (www.protonenergy.com)
- Aerogel Composite, LLC established to develop electrode catalysts www.aerogelcomposite.com)
- Connecticut Clean Energy Fund established (www.ctcleanenergy.com)
- US Nanocorp, Inc. established to develop solid oxide fuel cells (www.usnanocorp.com)

2000's

- Electrolysis systems for oxygen generation operating on U. S. and British submarines
- Connecticut Global Fuel Cell Center established (www.ctfuelcell.uconn.edu)
- Avalence LLC formed to pursue electrolysis systems (www.avalence.com)
- HydrogenSource LLC established to produce hydrogen from natural gas and petroleum products (www.hydrogensource.com)
- PEM fuel cell power plants provide motive power for autos and buses.
- A number of 250 kW MCFC power plants delivered and operating
- Fuel Cell Energy acquires solid oxide fuel cell (SOFC) business
- Infinity Fuel Cell and Hydrogen, LLC established to develop PEM fuel cells (www.infinityfuel.com)
- The Institute for Sustainable Energy formed (www.sustainenergy.org)

- Connecticut Center for Advanced Technology established to support regional technology led economic growth.
- Connecticut Hydrogen-Fuel Cell Coalition established to advance the development, manufacture, and deployment of fuel cell and hydrogen technologies and associated fueling systems in Connecticut.