



# Your Hydrogen and Fuel Cells Partner

**Company profile**



„The efficient storage of regenerative energy is key to increasing its share in the energy mix of the future. Hydrogen and fuel cells can make a decisive difference here.“

Quote from Dr. Henrik Colell, CEO Heliocentris Fuel Cells AG



## Hydrogen and fuel cell technology

### Real alternatives are within reach

#### There are limits to using renewable energy

Solar and wind energy are not always readily available. Due to a lack of storage capacity, it is common today to use them immediately, either locally or by feeding into municipal networks. Supply will continue to be ensured by fossil fuel or nuclear energy sources.

This means that renewable energies will continue to be a supporting part in the energy mix. The dependence on traditional energy, even if reduced, will continue. But that can change.

#### Breaking the limits – with hydrogen and fuel cell technology

Hydrogen and fuel cell technology already offer opportunities today for developing products for the fully regenerative energy supply of tomorrow. The energy is stored as hydrogen and converted into electricity by a fuel cell as needed.

This technology can be used in a variety of ways. Whether for an autonomous photovoltaic system, an emergency power generator or a range extender for mobile applications, the fuel cell can play a decisive role for a sustainable future. Ask us how.



## Heliocentris – your reliable partner for hydrogen and fuel cell technology

Heliocentris supports instructors, developers and industrial partners worldwide in establishing hydrogen-based fuel cell technology as an integral part of modern energy systems. To do this, we provide them with solutions specifically tailored to their needs.

For over 10 years we have been focusing on the doable to advance the commercial use of fuel cell technology. We stay true to this motto. With our training products we successfully managed to co-develop one of the first-ever markets for fuel cell systems. We are considered by many a market leader in this segment today.

Having delivered thousands of systems worldwide, Heliocentris possesses extensive expertise in the integration, series production and sale of fuel cell systems.

Our strong team of development engineers and our strategic partnerships with top industry players, such as Ballard Power Systems, Hydrogenics or Schunk, allow us to continually advance this technological development.



### Milestones

- 1995** Company founded
  - 1996** Production of the first demonstration-model
  - 2000** Introduction of fuel cell training systems for technical training
  - 2002** Canadian subsidiary founded
  - 2004** Distribution partnership with Ballard Power Systems
  - 2006** IPO
  - 2007** Fuel cell back-up system for SMA Technologie AG
  - 2008** Successful launch of project business up to 32 kW
- Launch of two fuel cell system platforms

# We are advancing the commercial use of fuel cells

## Areas of application

### Classroom

Heliocentris' training products enable universities and training centers to easily integrate the topics of solar-hydrogen and fuel cell technology into their curriculum. The trend in renewable energy requires such innovations in curriculum to meet the demand of today's labor market.

### Lab

Heliocentris' fuel cell systems programs and technical training systems form the ideal basis for experiments and test set-ups in the lab. With our products, universities, institutes and industrial developers can get to know the technology, develop their own solutions and move toward practical applications.

### Application

Standardized systems programs and project services from Heliocentris make it easy to get started with fuel cell technology. We facilitate the cost-effective realization of demonstration systems and prototypes for universities, institutes and industry.

It is especially important for industrial users to be able to easily and efficiently integrate the technology into the development of new products. Production-ready fuel cell solutions are essential for commercialization. As a system integrator Heliocentris provides you with expert solutions from design through to product launch.



#### **NAIT, Canada**

Use of the Instructor training system in the faculty of energy technology



#### **National Metal and Materials Technology Center, Thailand**

Use of a 1.2 kW fuel cell system in a lab set-up



#### **Offenburg University of Applied Sciences**

Winner of the 2008 Shell Eco-Marathon in the hydrogen fuel cell class

## Our business segments

Are you an instructor, researcher or developer in an industrial company? Would you like to learn about the fundamentals of fuel cell technology or apply them in a specific application? Whatever your goal, Heliocentris has the ideal fuel cell solution for professionals.

### Education

For teaching solar hydrogen and fuel cell technology as part of a science and technology curriculum, Heliocentris offers innovative training and experimental systems designed to impart basic principles and application knowledge.



- » Nexa® Training System
- » 1.2 kW output

### Systems

For the application of fuel cell technology in the lab, when building prototypes and in industrial development, Heliocentris offers extensive systems programs, as well as solutions for generating and storing hydrogen. This helps you get started with the technology.



- » Application kit for building prototypes
- » 1.2 kW output

### Projects

Heliocentris offers one-stop shopping for turnkey implementation of hydrogen- and fuel cell-based energy solutions according to your requirements. All elements are optimized – from system design to component qualification and system integration.



- » Complete system integration
- » 32 kW output

Heliocentris supports instructors, developers and industrial partners worldwide in establishing hydrogen-based fuel cell technology as an integral part of modern energy systems. To do this, we provide them with solutions specifically tailored to their needs.

With a subsidiary in Vancouver, Canada, and customers in more than 60 countries, Heliocentris is a truly global player in the fuel cell industry.



Heliocentris Energiesysteme GmbH  
Rudower Chaussee 29  
12489 Berlin  
Germany

Tel. + 49 (0) 30 63 92 63 26  
Fax + 49 (0) 30 63 92 63 29  
info@heliocentris.com

[www.heliocentris.com](http://www.heliocentris.com)

Heliocentris Energy Systems Inc.  
902 – 610 Granville St.,  
Vancouver, BC  
V6C 3T3 Canada

Tel. 604 684 3546  
Fax 604 648 9406  
info@heliocentris.com