

Hydrogen + Fuel Cells at HANNOVER FAIR 2002

Energy for the future: mobile and self-sufficient

Arno A. Evers (56), FAIR-PR from Starnberg, Germany, organizer of the Group Exhibit Hydrogen + Fuel Cells on the Hannover Fair 2002, Hall13, Booth F68, for questions about Hydrogen and Fuel Cells

You inform on your website www.fair-pr.com about organizing the worlds largest Hydrogen- and Fuel Cells exhibition on the Hannover Fair. How did you reach this target?

Arno A. Evers: We began on the Hannover Fair '95 with ten exhibitors on an exhibition area of 300 square metres. This year this is ten times as much, about 3000 square metres. Beneath our 96 exhibitors there are almost all Fuel Cells system producers, automobile manufacturer and there suppliers, Chemical Concerns like DuPont or W.L. Gore as well as manufacturer of education- and testing-devices. Some of these firms increased their exhibition area by factor four. In Europe, even in the USA there is no fair, with such a success.

Most visitors are coming to the fair because of the content. How did the structure of the exhibitors change?

Arno A. Evers: What started eight years ago with small presentations, mostly by universities, but also global players like Airbus or BMW, developed to the world's biggest "fair in the fair". One of the first was Ludwig-Boelkow-Systemtechnik, who are exhibitors ever since. The researcher are of course still present today. Institutes like the German Aerospace Centre DLR, or the Research Centre Juelich, who now also pursue an economical aim. This year our exhibitors are coming from ten industry nations, which see Hydrogen and Fuel Cells as innovative, from Canada to Japan.

Who leads with what?

Arno A. Evers: North America is in the lead. One of our exhibitors, the Canadian Exhibitor Ballard Power Systems, with shareholders like DaimlerChrysler and Ford, is the worldwide largest developer and manufacturer of Fuel Cell systems. Almost all automobile producers joined together in California to help the Fuel Cell to make the final breakthrough. The Far East is setting on the future, too. For the first time our exhibitor, The Japan Steel Works, presents their new small portable Hydrogen tanks, which are built in cars.

Clean air out of clean exhaust?

Which exhibitors present the automobile field with which appliances?

Arno A. Evers: General Motors / Adam Opel AG are for the first time present in Hannover, BMW for the second time and DaimlerChrysler participates since the Hannover Fair 2000. I think it is great when a today still small American firm like H Power from Belleville New Jersey, presents totally self-confident a prototype of a Peugeot taxi type "Partner PAC", with a H Power Fuel Cell system built in.

We can also see the one or the other Hydrogen car for the future all over the world. When do you see the breakthrough for the mass production?

Arno A. Evers: You probably have to wait for another couple of years, but if you take the Otto Motor as an example, it took a few decades until it was as economical as it is today. At this time no car manufacturer in the world, is not working on Hydrogen vehicles or Fuel Cell technology.

On your exhibit competitors like DaimlerChrysler, GeneralMotors/Adam Opel and BMW present themselves side by side. How did you achieve this?

Arno A. Evers: Through the synergy effect at our Group Exhibit. Everybody profits by the other. At our exhibit the whole value-added-chain is present, from the development to the customer service. Especially in the evening after the official end of the fair at our daily "Networking Evenings", we invite all exhibitors to attend. There are experiences informally exchanged, you do not find yet in the Internet. The product manager speaks with the research scientist, the supplier with the developer, in English, in German, in French. It is here, where you can find the nucleus for new

ideas and new partnerships.

Mobility in everyday life

Keyword new: Which applications are presented by your exhibitors, so that even the everyday person can be convinced by the clean, quiet, and environmental friendly technology?

Arno A. Evers: One of our exhibitors, Millenium Cell, from the USA, for example creates an office, with all energy consumers getting their energy by Fuel Cell technology. The Fraunhofer Initiative Micro Fuel Cell is installing a webcam and photographs permanently impressions from the Group Exhibit. We present the pictures online. The main point is, this camera receives its energy from a Hydrogen powered Fuel Cell, but is not bigger than a usual webcam. In the near future you will not need a battery for your notebook any more, Fuel Cells are going to provide the energy. Just think about all those countries, where there is not a power point at every corner - the possibilities are uncountable, the market is huge.

Why do you care so much for your documentation in the Internet?

Arno A. Evers: Since the Hannover Fair 2000 we document all activities of our exhibitors at their booths and in the Forum with photos and subtitles in the Internet. This year it is our aim to present our Group Exhibit in real time with new contents, which we are going to update every ten minutes. So everybody in the world is able to get information about the event at the Hannover Fair, for the whole time of the fair and of course afterwards, too. We have thousands of surfers from 40 countries on our website.

Keyword costs: technology gets cheap when it is produced in masses. When will be products, shown at Hannover, be payable?

Arno A. Evers: You should have asked Thomas A. Edison this question, when he invented his first light bulb for the steamer "Columbia" in 1879. The development lasted over years. Today everybody can buy a light bulb in the supermarket for a few cents.

Energy and heat for house and farm

Instead of transporting energy over long distances, energy and heat is supposed to be produced at home, with the help of Fuel Cells. Every house-owner his own energy-technician? How susceptible to faults are the systems?

Arno A. Evers: The transport of electrical energy over a distance of hundreds of kilometres or miles is the current status quo, but it is by no means economical. It is much more effective, from a physical point of view, to produce electricity and heat close to the consumer. In the age of Internet and global networks, it should be no problem to handle the controlling with power electronics by using a decentralized energy management system. In the end you save money: less material, less environmental pollution, less noise, less global warming of the atmosphere, less CO₂. Our exhibitor MTU already provided a system for a hospital, working with a hot module also presented in Hannover. All experiences made here by everyday usage help to increase the profitability.

What does the future look like in Hydrogen appliances?

Arno A. Evers: In my opinion the breakthrough of Hydrogen and Fuel Cells will not be made by replacing existing products, but with completely new applications. I am thinking of fields like education, social care, or entertainment. Possibilities and chances we do not know today or we cannot even imagine, which will be powered by Fuel Cells coincidentally.

Information through communication

All in all there are about 800 exhibitors on the Energy Fair in Hannover. How do you capture the visitors attention?

Arno A. Evers: Our exhibitors provide absolutely competent employees at their booths. In addition they present exhibits, which were specially designed and constructed for the Hannover Fair and that are presented to the world's public for the first time. Examples for instance are stationary systems that run for real at our

Group Exhibit and producing energy and heat through Hydrogen. We see it every year, that our Forum is a magnet for visitors. Perhaps because there are no Powerpoint-presentations. Instead our young and motivated presenters are interviewing experts from the Hydrogen and Fuel Cells field. Here even the "normal" visitor of the fair can ask questions.

The interview was led by Gerda v. Radetzky, journalist in Munich.
<http://www.vonradetzky.de/presse-kontor.html>