



Messe Trade fair

Der Treffpunkt
für Spezialisten

The meeting
point for experts

Die Brennstoffzelle
11. Forum für Produzenten und Anwender
The Fuel Cell
11th Forum for producers and users



DAIMLER AG

26.–27.9.2011
Stuttgart

Messekatalog

Trade fair
catalogue

Haus der
Wirtschaft

www.f-cell.de

DAIMLER



Baden-Württemberg

MINISTERIUM FÜR UMWELT, KLIMA UND ENERGIEWIRTSCHAFT



Wirtschaftsförderung
Region Stuttgart



PETER SAUBER
AGENTUR

Messen und Kongresse GmbH



Inhaltsverzeichnis / Index

Allgemeine Informationen General Information	Seite 3 Page 3
Ausstellerverzeichnis List of exhibitors	Seite 11 Page 11

Sonderschau

Forschungs- und Entwicklungsstand BMWi (51)

Auf der **f-cell** Messe wird es 2011 einen Forschungs- und Entwicklungsstand des Bundesministeriums für Wirtschaft und Technologie (BMWi) und des Projektträgers Jülich (PTJ) geben. Hochschulen und Universitäten bekommen hier die Möglichkeit, ihre innovativen Ideen und Entwicklungen zu präsentieren.

Special area

Special booth of the Federal Ministry of Economics and Technology (51)

At the **f-cell** trade fair there will be a special booth of the Federal Ministry of Economics and Technology (BMWi) and the Projektträger Jülich (PTJ). Universities and colleges get the possibility to present their innovative ideas and developments.



Allgemeine Informationen

Öffnungszeiten

Montag: 9.00 – 18.00 Uhr, Dienstag: 9.00 – 17.30 Uhr
Kostenloser Eintritt für registrierte Besucher

Veranstalter

Peter Sauber Agentur Messen und Kongresse GmbH
Wankelstraße 1, 70563 Stuttgart
GERMANY
Tel: +49 711 656960-55
Fax: +49 711 656960-99
silke.maiwald@messe-sauber.de
www.messe-sauber.de
Projektleitung f-cell Symposium: Lena Jauernig
Projektleitung f-cell Messe und Messekatalog: Silke Maiwald

Veranstaltungsort

Haus der Wirtschaft, 2. OG, List-Saal, Eyth-Saal
Willi-Bleicher-Straße 19, 70563 Stuttgart

Parkmöglichkeiten

Parkhaus Hofdienergarage, Zufahrt über Schellingstraße,
durchgehend geöffnet

Herausgeber

Der Katalog wurde herausgegeben von: Peter Sauber Agentur Messen und Kongresse GmbH, Wankelstraße 1, 70563 Stuttgart. Der Katalog wurde nach den von den Ausstellern eingereichten Unterlagen zusammengestellt. Für fehlerhafte, unvollständige oder nicht erfolgte Eintragungen besteht kein Schadensersatzanspruch. Für die Inhalte von Eintragungen und Anzeigen sind die Auftraggeber verantwortlich. Ein Nachdruck, ganz oder auszugsweise, ist nicht gestattet.



General Information

Opening hours

Monday: 9 a.m. – 6 p.m., Tuesday: 9 a.m. – 5.30 p.m.
Free entrance for registered visitors

Host

Peter Sauber Agentur Messen und Kongresse GmbH
Wankelstraße 1, 70563 Stuttgart
GERMANY

Tel: +49 711 656960-55

Fax: +49 711 656960-99

silke.maiwald@messe-sauber.de

www.messe-sauber.de

Project manager conference: Lena Jauernig

Project manager trade fair and catalogue: Silke Maiwald

Venue

Haus der Wirtschaft, 2nd floor, List-Saal, Eyth-Saal
Willi-Bleicher-Straße 19, 70563 Stuttgart
GERMANY

Parking

Parking garage "Hofdienergarage", access over
"Schellingstraße", open around the clock

Editor

The trade fair catalogue is published by the Peter Sauber
Agentur Messen und Kongresse GmbH, Wankelstrasse 1,
70563 Stuttgart.

f-cell 2011 trade fair catalogue is based on the information
given by the exhibitors. There is no claim for compensation
for any incorrect, uncompleted or missing registry.



Die f-cell Messe

Mit über 400 qm Ausstellungsfläche ist die **f-cell** Messe eine wichtige Netzwerkplattform und elementarer Baustein des **f-cell** Symposiums. Rund 50 Aussteller stellen die neuesten Entwicklungen und Branchenhighlights vor.

Sie sind neu in diesem Bereich?

Entdecken Sie die vielfältigen Möglichkeiten, die Ihnen dieser dynamische Markt bietet. Bahnen Sie neue Geschäftsbeziehungen an.

Sie sind Brancheninsider? Nutzen Sie die **f-cell** Messe, um Ihr Netzwerk zu intensivieren und zu erweitern.

Die Themen

- Infrastruktur
- Komponenten, Module
- Produktionstechnik, Teststände

Systeme

- Stationär
- Mobil
- Spezielle Anwendungen

Dienstleistung

- Forschung und Entwicklung
- Beratung, Normung
- Aus- und Weiterbildung
- Sonstige

Ride & Drive

Nutzen Sie die Gelegenheit auf der **f-cell** die neuesten Brennstoffzellenfahrzeuge zu testen. Fahren Sie selbst und erleben das neue Fahrgefühl in einem Null-Emissionen-Automobil.

Daimler AG: B-Klasse F-CELL

EnBW AG: E-Bike

Honda R&D Europe (Deutschland) GmbH: Honda FCX Clarity

Adam Opel AG: Opel Ampera und HydroGen4



The f-cell trade fair

With over 400 sqm exhibition space the **f-cell** trade fair is an important networking platform and fundamental part of the f-cell conference. About 50 exhibitors show the newest developments and sector highlights.

Are you new in this sector?

Explore the various possibilities this dynamic market is offering you. Initiate new business relationships.

Are you an industry insider? Use the **f-cell** trade fair to intensify your network and expand it.

The portfolio

- Infrastructure
- Components, Moduls
- Production engineering, Test facilities

Systems

- Stationary
- Mobile
- Special Applications

Services

- Research and Development
- Consulting, standardization
- further education
- Other

Ride & Drive

Use the opportunity at **f-cell** to test the latest fuel cell vehicles. Drive on your own and explore the new driving experience in a zero-emission-vehicle.

Daimler AG: B-Klasse F-CELL

EnBW AG: E-Bike

Honda R&D Europe (Deutschland) GmbH: Honda FCX Clarity

Adam Opel AG: Opel Ampera and HydroGen4



Begleitveranstaltungen

Abendveranstaltung mit f-cell award-Verleihung

Im Anschluss an den ersten Symposiumstag lädt die **f-cell** Abendveranstaltung an einen von Stuttgarts außergewöhnlicheren Veranstaltungsorten ein: Die „Wagenhallen“ am Nordbahnhof sind spätestens seit dem letzten Stuttgarter „Tatort“-Krimi auch über die Stadtgrenzen hinaus ein Begriff. **f-cell awards** in Gold, Silber und Bronze werden für herausragende anwendungsnahe Entwicklungen aus allen Einsatzgebieten der Brennstoffzelle verliehen.

Die Preisgelder sind mit 30.000 € dotiert.

Seminare

Mit dem bewährten Seminar für Lehrer (27. September 2011) trägt die **f-cell** das zukunftssträchtige Thema Brennstoffzelle und Wasserstoff seit Jahren auch in die Schulen. Erstmals wird in diesem Jahr auch ein Seminar für kommunale Vertreter (26. September 2011) veranstaltet.

Expertengespräche der Wirtschaftsförderung Region Stuttgart (26. September 2011)

Die Wirtschaftsförderung Region Stuttgart GmbH bietet wieder interessierten Unternehmen die Möglichkeit zum individuellen Gespräch mit hochrangigen Experten des Brennstoffzellenstandortes Region Stuttgart an. Im Fokus stehen in diesem Jahr baden-württembergische Forschungs- und Entwicklungseinrichtungen.



Begleitveranstaltungen

Exkursion

Auf unserer Exkursion am 28. September 2011 haben die Teilnehmer die Gelegenheit, einige der interessantesten und innovativsten H2-Standorte in der Region Stuttgart kennen zu lernen:

- **Zentrum E-Mobilität**

Anschauen – Anfassen – Ausprobieren: Der Showroom Elektromobilität bietet Informationen über die Arbeit der wichtigsten Akteure im Bereich Elektromobilität, spannende Exponate und E-Mobile zum Ausprobieren.

Firmenvertreter von Bosch, Porsche, EnbW und IPDD stehen während des Besuchs als Ansprechpartner zur Verfügung.

- **Daimler AG**

Die Daimler AG betreibt in Kirchheim/Teck – Nabern ein Entwicklungszentrum für die automobilen Anwendung von Brennstoffzellen. Ein Informationszentrum informiert über die Geschichte der Brennstoffzellen-Fahrzeuge bei Daimler.

- **Max-Planck-Institut**

Die Max-Planck-Gesellschaft steht für erkenntnisorientierte Grundlagenforschung. Im Rahmen der Exkursion wird der Bereich Wasserstoff / Brennstoffzelle vorgestellt.



Accompanying events

Evening event with f-cell award-presentation, September 26

Following the first day of the symposium, we invite you to attend the **f-cell** evening event at one of Stuttgart's most unusual venues: The "Wagenhallen", an old industry building. After the official presentation of the **f-cell awards**, you will have an opportunity to talk with speakers and other participants in a pleasant, casual atmosphere. Let the day's activities come to an end with culinary highlights in a truly enjoyable setting. **f-cell awards** in gold, silver and bronze will be presented for outstanding practice-oriented advances in all fields of fuel cell application. Prizes include grants amounting to a total of EUR 30,000.

Seminars (in German only), September 26 and 27

Through the popular seminar for teachers, **f-cell** has been offering schools access to the crucial future issues of fuel cell and hydrogen technology for years.

A seminar for local government representatives will also be offered for the first time this year. Participants will learn about concrete approaches to electric mobility and sustainable development at the local community level.



Accompanying events

Excursion, September 28

As a participant in our excursion on September 28, 2011, you will have an opportunity to visit several of the most interesting and innovative H2 facilities in the Stuttgart region:

- **Showroom Electromobility Stuttgart**

The showroom offers information on key actors in the field of electric mobility, exciting exhibits and electric vehicles. Representatives of Bosch, Porsche, EnBW and IPDD will give input on their activities in the field of electromobility.

- **Daimler AG**

In Kirchheim Teck, Daimler operates a fuel cell vehicle development center. An information center provides backgrounds on the history of Daimler fuel cell vehicles.

- **Max-Planck-Institute Stuttgart**

Max-Planck-Institute will present their basic research activities in the field of hydrogen and fuel cells.

A seminar for local government representatives will also be offered for the first time this year. Participants will learn about concrete approaches to electric mobility and sustainable development at the local community level.



Die Aussteller

List of exhibitors

* = Mitaussteller

* = co-exhibitor

advanced clean production

Information Technology AG [44]

Handwerkstraße 29, DE-70565 Stuttgart

acp-IT is a leading highly specialized software company that offers professional IT solutions for planning and operation of advanced production lines. These solutions make a substantial contribution to the optimization of our clients' production processes, help to increase quality and reduce cost significantly. At f-cell we show Manufacturing Execution System (MES) for high-tech fabrication sites and simulation for production sites.

www.acp-it.com

balticFuelCells GmbH [32]

Hagenower Straße 73, DE-19061 Schwerin

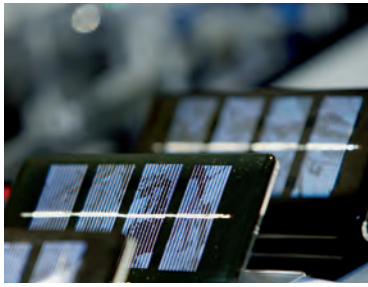
balticFuelCells GmbH is building on a long-time experience in developing and testing of Fuel Cell components. Since founding in 2006 „quickCONNECTfixture“ qCf, as a unique and patented testing device for Fuel Cell internal components, will be our main product. qCf is especially designed for labs and strong demands of quality assurance in the application of PEM-Fuel Cells.

www.balticfuelcells.de

Baxi Innotech GmbH [*6]

Ausschläger Elbdeich 127, DE-20539 Hamburg

Baxi Innotech is a fuel cell heating unit development company. Founded in 1999, the company took up its position as a subsidiary of the Baxi Group in 2002. Here it advanced to become the brain pool of the Group for innovative product developments based on combined heat and power



technology. In partnership and in close cooperation with international suppliers, energy supply companies and the specialist trade, Baxi Innotech has developed the fuel cell heating unit for single-family homes. This Hamburg-based company has been participating in the Callux project since 2008. This project is a practice test carried out by the German government and the industry to prepare stationary fuel cell heating units for the market that are especially developed for singlefamily homes. Since the beginning of November 2009, the Baxi Group – along with Baxi Innotech – has belonged to the new BDR Thermea constellation. This new Group – formed out of a merger of BAXI with De Dietrich Remeha – will be active in even greater measure in traditional and international growth markets with its innovative and top quality products and services.

www.baxi-innotech.de

Bio-Logic SAS [23]

1 rue de L'Europe, FR-38640 Claix

BIO-LOGIC SAS designs and manufactures high performance, research laboratory instruments for electrochemistry and fuel cell testing. At the „f-cell“ we exhibit: Fuel cell test stations, controlled load boxes and a wide range of potentiostats.

www.bio-logic.info

Brennstoffzellen- und Batterie-Allianz Baden-Württemberg [TP 2]

Gymnasiumstraße 43, DE-70174 Stuttgart

The Fuel Cell and Battery Alliance Baden-Wuerttemberg is the largest interdisciplinary network for fuel cell, battery and hydrogen technology in Baden-Wuerttemberg.

The Fuel Cell and Battery Alliance Baden-Wuerttemberg (BBA-BW) is representing the interests of their 70 members from industry, sciences and public authorities towards national politics



and associations and supports them in successfully developing products, conducting demonstration projects and creating common market entry strategies.

www.bba-bw.de

Bundesministerium für Wirtschaft und Technologie/ Federal Ministry of Economics and Technology [51]

Dr. Georg Menzen, Villemombler Straße 76, 53123 Bonn,
georg.menzen@bmwi.bund.de

At the f-cell trade fair there will be a special booth of the Federal Ministry of Economics and Technology (BMWi) and the Projektträger Jülich (PTJ). Universities and colleges get the possibility to present their innovative ideas and developments.

www.bmwi.bund.de

Bürkert Werke GmbH & Co. KG [1]

Am Flugplatz 27, DE-63329 Egelsbach

Bürkert with its headquarters in Ingelfingen/ Germany produces and sells valves with different actuators, sensors and controllers. With 2000 employees and offices worldwide Bürkert provides components to a wide range of industrial applications. Further the Bürkert Systemhaus serves the development of application or customer specific components and modules.

www.buerkert.com

bw-i Gesellschaft für internationale wirtschaftliche und wissenschaftliche Zusammenarbeit mbH [TP 5]

Willy-Bleicher-Str. 19, DE-70174 Stuttgart

Baden-Württemberg International – Agency for International Economic and Scientific Cooperation – is the federal state's competence centre for the internationalisation, marketing and development of Baden-Wuerttemberg's industry, science and research sectors. Our objective is to position Baden-Wuerttemberg as a business location and present its potential to

maximum effect. Through inward investment, business setups and joint ventures as well as the recruitment of specialists, we aim to strengthen Baden-Wuerttemberg's position as a location over the long term.

www.bw-i.de

Daimler AG [30]

Neue Straße 95, DE-73230 Kirchheim-Teck/Nabern

Mercedes-Benz is a pioneer of fuel-cell technology and is able to draw on extensive experience in this field. We have been pursuing research into the deployment of the fuel-cell drive in motor vehicles since 1994, providing us with an outstanding level of expertise on this subject. Recently Mercedes-Benz has proven the practicality and technical readiness of electric vehicles with fuel cell technology in the F-CELL World Drive. Three Mercedes B-Class F-CELL have circled the world in late January to early June - more than 30,000 kilometres over four continents and 14 countries. The B-Class F-CELL is the first fuel-cell vehicle worldwide that is fully suitable for daily motoring and family use. Its high performance is on a par with or superior to that of a 2.0 l petrol-engined vehicle. With the B-Class F-CELL, Mercedes-Benz is the first car manufacturer in the world to venture into the series production of a fuel-cell vehicle – beginning with a small production batch. The high volume series production of the fuel cell technology begins in 2014.

www.daimler.com

DWV Deutscher Wasserstoff- und Brennstoffzellenverband e.V. [TP 1]

Tietzenweg 85/87, DE-12203 Berlin

The German Hydrogen and Fuel Cell Association (DWV) promotes the introduction of hydrogen as an energy carrier and of fuel cells as efficient energy conversion technology.

DWV brings the interested parties together, keeps them informed and informs the public and the deciders in politics and economy. DWV cooperates with the European Hydrogen Association and other national partner organisations.

www.dwv-info.de



**Deutsches Zentrum
DLR für Luft- und Raumfahrt e.V.**
in der Helmholtz-Gemeinschaft

German Aerospace Center [4]

Institut für Technische Thermodynamik

Pfaffenwaldring 38-40, DE -70569 Stuttgart

The Institute of Technical Thermodynamics is one of 33 institutes at the German Aerospace Center and its' Department of Electrochemical Energy Technology develops efficient electrochemical energy converters, mainly batteries, fuel cells and electrolyzers. Future power systems, in particular stationary power supply, energy storage and electromobility concepts, rely strongly on these electrochemical energy technologies. Our highlight this year shows the application of an airworthy modular fuel cell system for the DLR Airbus A320 ATRA.

www.dlr.de/tt/ec

Wilhelm Eisenhuth GmbH KG [42]

Friedrich-Ebert-Straße 203, DE-37520 Osterode am Harz

We produce fuel cell components especially graphite bipolar plates and gaskets. At f-cell we show new materials for bipolar plates. Highlight: High electrical conductivity and good electrical performance for high temperature PEM and low temperature PEM.

www.eisenhuth.com

e-mobil BW GmbH [TP 3]

Leuschnerstraße 45, DE-70176 Stuttgart

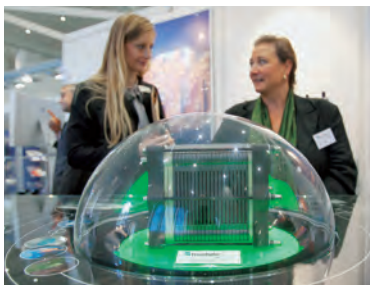
The regional agency for electric mobility and fuel cell technology in Baden-Wuerttemberg is a central contact and information center of Baden-Wuerttemberg for all matters relating to the topic of electric vehicles. Its main task is to support the emerging technology shift and pave the way to the industrialization of electric vehicles.

www.e-mobilbw.de

EnBW AG [6]

Durchlacher Allee 93, DE-76131 Karlsruhe

EnBW has been committed to the field of static fuel cell since 2001. In the context of Callux, nationwide the largest field test of fuel cell heating appliances, EnBW installed and tested 222 constructions for pioneer customers in Baden-Wuerttemberg. During the f-cell exhibition interested parties have the possibility to inform themselves about the recent status of the project as well as have a look at the latest FCHA- models of



the producers Baxi Innotech, Hexis and Vaillant. Furthermore EnBW informs about their current hydrogen fueling station project in Karlsruhe and Stuttgart and shows the conjunction of energy and automotive industry based on samples and exhibits. EnBW makes their research projects come alive by giving examples of everyday practical implementations and provides an opportunity for upfront conversation to the visitors.

www.enbw.com

enymotion GmbH [21]

Wannenäckerstraße 71, DE-74078 Heilbronn

enymotion develops and produces resource-effective and low-emission power sources for unrestricted mobile or stationary deployment of electrical consumer devices in industry and the leisure sector.

www.enymotion.com

FC EXPO 2012 – 8th Int’l Hydrogen & Fuel Cell Expo [31]

18F Shinjuku-Nomura Bldg.

1-26-2 Nishishinjuku, Shinjuku-ku, JP- Tokyo 163-0570

FC EXPO is the world’s largest international exhibition and conference specialised in hydrogen and fuel cell technologies. Fuel cell manufacturers, automobile companies, and other fuel cell related companies all gather from worldwide to source the cutting edge technologies and ideas for their products development. Gather at FC EXPO and grab the business in future promising hydrogen and fuel cell industry.

www.fcexpo.jp/en/

FIX Maschinenbau GmbH [8]

Daimlerstraße 23, DE-71404 Korb

For more than 50 years, FIX Maschinenbau has become a constant in the field of production and automation technology and has specialized in the sector of fuel cell production. With



more than 130 employees at our factory at Korb and embedded in the UTZ group, FIX is in the position to offer based on predesigned and executed designs solutions from simple manual station to operator guidance with pick-to-light up to full automation.

www.fix-utz.de

ICT Fraunhofer-Institut für Chemische Technologie [46]

Joseph-von-Fraunhofer-Straße 7, DE-76327 Pfinztal

In the field of fuel cell research the Fraunhofer Institute for Chemical Technology ICT works on material and component development, the construction of stacks and systems and the development of energy systems for military and security applications. At the f-cell we will display direct alcohol fuel cells and fuel cells for military applications. What is special about our developments is the use of alternative alcohols such as ethanol and ethylene glycol in direct alcohol fuel cells.

www.ict.fraunhofer.de

ISE Fraunhofer-Institut für Solare Energiesysteme [11+31]

Heidenhofstr. 2, DE-79110 Freiburg

The research from the Fraunhofer Institute for Solar Energy Systems ISE creates technological foundations for supplying energy efficiently and on an environmentally sound basis in industrialised, threshold and developing countries. To this purpose, the Institute develops materials, components, systems, and processes for the following business areas: energy-efficient buildings, applied optics and functional surfaces, silicon photovoltaics, alternative photovoltaic technology, renewable power generation, hydrogen technology and solar thermal technology.

www.ise.fraunhofer.de, www.h2-ise.de

Gräbener Maschinentechnik GmbH & Co. KG [2]

Am Heller 1, DE-57250 Netphen-Werthenbach

At f-cell we show metal separator plates and separator plate modules of the supply chain from substrate to system. Highlights are metal separator plate modules for PEM, DMFC and SOFC technology with cost efficient and customized development. Technology for prototyping and series production.

www.graebener-group.com

John Guest GmbH [20]

Ludwig-Erhard-Allee 30, DE-33719 Bielefeld

PEM- + PM-Fittings and Pipe

www.johnguest.com

HA Hessen Agentur GmbH/H2BZ-Initiative Hessen e.V. [43]

Abraham-Lincoln-Straße 38-42, DE-65189 Wiesbaden

Networking, contact for Hydrogen and Fuel Cells, interface between politics, economy, science and society, technology transfer and -marketing, company promotion. Contact for Hessian projects.

www.brennstoffzelle-hessen.de

Hexis GmbH [*6]

Schulthaißstraße 15, DE-78462 Konstanz

Hexis is a company focussed on the development and production of SOFC-based heating appliances intending to market this systems in future. Currently a 22 person team works on Galileo 1000 N, a cogenerating fuel cell heating appliance designed to meet complete heating requirements including domestic hot water typical for single-family or small multi-family homes whilst also covering their basic electrical power demand. Hexis AG is the parent company located in Winterthur (CH) and Hexis GmbH is the German subsidiary located in Constance (D).

www.hexis.com

HNP Mikrosysteme GmbH [47]

Juri-Gagarin-Ring 4, DE -19370 Parchim

Micro annular gear pumps - five series guarantee a flow rate from 1 µl/h to 1152 ml/min and a pressure up to 150 bar.

The new magnetic hermetic series of micro annular gear pumps is used for demanding metering tasks for water, etha-



**PETER SAUBER
AGENTUR**
Messen und Kongresse GmbH

**Our building and energy trade fairs
for end consumers in Germany**



**Rottweil,
October 7–9, 2011**

**Donaueschingen,
January 13–15, 2012**

**Radolfzell,
January 27–29, 2012**

**Darmstadt,
February 10–12, 2012**

**Tuttlingen,
February 24–26, 2012**

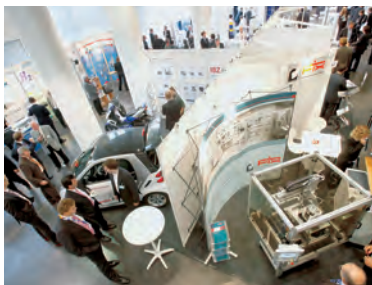
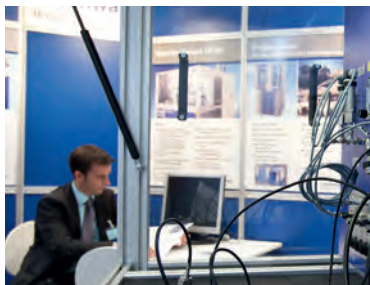
**Rottweil,
October 5–7, 2012**

**Crailsheim,
November 2–4, 2012**

**Friedrichshafen,
November 11–13, 2011**

**Stuttgart,
April 13–15, 2012**

www.messe-sauber.de



nol, methanol and other fuels in fuel cells operations. Micro annular gear pumps are characterised by low pulse delivery, minimal dead volume, long service life, small dimensions, powerful materials and ease of maintenance.

www.hnp-mikrosysteme.de

Harro Höfliger Verpackungsmaschinen GmbH [40]

Helmholtzstraße 4, DE-71573 Allmersbach im Tal

Harro Höfliger offers outstanding technologies as well as customer-orientated project and turn-key solutions. As a medium-sized company we can rely on a big development centre with more than 200 employees working in the construction and development. Höfliger is a specialist in system solutions for the production of Li-Ion batteries. From reel to the cell, to the packed, degassed, and form-optimized battery.

www.hoeffliger.de

h-tec Wasserstoff-Energie-Systeme GmbH [25]

Lindenstr. 48A, DE-23558 Lübeck

h-tec Hydrogen Energy Systems was founded in 1997 in Lübeck and today is one of the leading suppliers of educational fuel cell systems for educational purposes and demonstrations at trade fairs and science shows. In 1999, h-tec started a second division to develop and produce electrolyser systems for industrial use. h-tec is the OEM, and supplies these systems to companies who want to integrate hydrogen technology into their own products. The first target markets are for back-up power and telecommunications – particularly in combination with renewable solar- and wind energy sources.

www.h-tec.com



HyCologne – Wasserstoff Region Rheinland e.V. [52]

Goldenbergstraße 2, DE-50354 Hürth

HyCologne is a hydrogen-technology-cluster located in the west of Germany and covers the areas of Cologne, Düsseldorf, Aachen and Bonn. HyCologne is organized as a public private partnership (PPP) and consists of more than 20 organizations looking to integrate, educate and motivate new companies or organizations that are willing to use hydrogen as an energy carrier for transport and other fields of applications.

www.hycologne.de

**Innovative Kreiselpumpen
für Brennstoffzellen...**

schmalenberger
strömungstechnologie

EFFICIENCY
PERFORMANCE & ENERGY

Energieeffizient – intelligent – individuell

Von der Idee bis zur Serie entwickeln und produzieren wir anspruchsvolle, zukunftsorientierte Förderlösungen für Forschung und Industrie. Unsere Ideen und Know-how sind wichtige Impulse auch für den Erfolg Ihrer Produkte am Markt.

www.schmalenberger.de

Linde AG Hydrogen Solutions [33]

Seitnerstraße 70, DE-82049 Pullach

Linde's position as a world-leading hydrogen plant engineering company has enabled us to play a major role in the advancement of innovative hydrogen production processes, storage systems and distribution pathways. With our special solutions, we are thus optimally equipped to ensure a safe, reliable and efficient hydrogen supply.

www.linde.com

Miba Coating Group, High Tech Coatings GmbH [13]

Dr.-Mitterbauer-Straße 3, AT-4655 Vorchdorf

High Tech Coatings GmbH (HTC) specializes in polymer coatings, electroplated and PVD coatings. Products and solutions are customized to the application in question. HTC partners with the international automotive industry in development activities. It is the coatings competence center for the Miba Group as a whole with more than 3500 employees in 5 divisions and global production and distribution sites.

www.miba.com

NOW Nationale Organisation Wasserstoff- und Brennstoffzellentechnologie GmbH [50]

Fasanenstraße 5, DE-10623 Berlin

NOW GmbH National Organization Hydrogen and Fuel Cell Technology was founded in 2008 to coordinate the preparation of the market for future technologies like hydrogen, fuel cell and battery electric engines. In detail, NOW is responsible for the management of the National Innovation Program Hydrogen and Fuel Cell Technology (NIP) and the Model Regions Electric Mobility Program. NOW is a federal association. Owner is the government, represented by the Federal Ministry of Transport, Building and Urban Development (BMVBS).

www.now-gmbh.de

PaxiTech SAS [30]

32 rue de Comboire, FR-3810 Echirolles

PAXITECH develops and commercializes Membrane/Electrodes Assemblies (standard or custom made products), portable PEM fuel cells ranging from 1 to 100W and fuel cells and water electrolyzer kits for any level of education.

www.paxitech.com

PLANSEE SE [28]

Metallwerk Plansee-Straße 71, AT-6600 Reutte / Tirol

The PLANSEE High Performance Materials (HPM) division is the world's leading manufacturer of refractory metal and composite products. PLANSEE HPM products set standards in several high-tech industries. Our claim "A step ahead in technology" conveys our 90 years of innovation in the powder metallurgy sector and demonstrates our commitment to developing new solutions, providing in-depth expert advice, and delivering premium-quality products and components.

www.plansee.com

Pragma Industries [27]

We will demonstrate the full range of our fuel cell kits for education, from mid-level teaching to complete engineering courses. Our highlights are new product lines for research, education and training.

www.pragma-industries.com

Projektträger Jülich (PTJ), Forschungszentrum Jülich GmbH [51]

Dr. Jochen Seier, 52425 Jülich, j.seier@fz-juelich.de

At the f-cell trade fair there will be a special booth of the Federal Ministry of Economics and Technology (BMWFi) and the Projektträger Jülich (PTJ). Universities and colleges get the possibility to present their innovative ideas and developments.

www.fz-juelich.de

Schmalenberger GmbH & Co. KG [22]

Im Schelmen 9-11, DE-72072 Tübingen-Weilheim

Schmalenberger has been performing advanced pump technology development since 1954 and building on its successful products from standard pumps to electronically monitored pumping systems. Today this family-owned company has become established as one of the leading suppliers of centrifugal pumps for the entire process of cutting fluid supply and disposal in the machining industry. Schmalenberger supplies innovative pump equipment for use in a wide range of mechanical engineering as well as for process and environmental engineering applications.

www.schmalenberger.de

Schunk Bahn- und Industrietechnik GmbH [*43]

Hauptstraße 97, DE-35435 Wettenberg

Schunk Bahn- und Industrietechnik GmbH is part of the Schunk Group, an internationally operating technology company with more than 60 operative companies in 28 countries. Specializing in system and material technology, the group of companies offers a broad spectrum of products and services in the fields of carbon technology and ceramics, environment simulation and air conditioning technology, sintered metal technology and ultrasonic welding technology. In 2010 the Schunk Group, which has around 8,200 employees, generated a consolidated turnover of approx. 880 million euros.

www.schunk-fuelcells.com

Siemens AG, Niederlassung Stuttgart [3]

Weissacher Straße 11, DE-70499 Stuttgart

Solutions for battery and fuel cell manufacturing:

Quick time to market with digital simulation software Tecnomatix and high efficient engineering tool TIA Portal. Easy line integration with totally integrated Hardware and Software based on PROFINET.

High productivity and transparency with SIMATIC IT and WinCC SCADA systems.

www.siemens.de/industry

SMART Electronic Development GmbH [24]

Rötestraße 17, DE-70197 Stuttgart

The SMART Electronics Development GmbH is a leading supplier of test solutions for automotive electronics. SMART offers more than 20 years, products and services that support the reproducible testing of control devices. In addition, SMART offers solutions for testing and operation of advanced energy storage devices such as fuel cells and lithium-ion batteries.

www.smart-gmbh.de

SMC Pneumatik GmbH [29]

Boschring 13-15, DE-63329 Egelsbach

SMC is the leading pneumatics expert which helps its customers beat the competition through top performance in the field of industrial automation. With production, research, development, sales and customer support facilities in 70 countries, customers can draw on the experience and resources of SMC

at local, and (inter)national level, giving access to the latest developments in pneumatics technology.

www.smc-pneumatik.de

Universität Stuttgart, Institut für Physikalische Chemie [51]

Pfaffenwaldring 55, DE-70569 Stuttgart

We are a University Institute with fundamental research activities on nanometer-resolved proton conductivity measurements of polymer electrolyte membranes and on their degradation. Furthermore, we have activities on electro-reforming of methanol.

www.ipc.uni-stuttgart.de/AGRoduner/

Vaillant GmbH [*6]

Berghauser Straße 40, DE-42859 Remscheid

Vaillant Group is counted among the pioneers in the design of fuel cell heating appliances. For more than a decade, Vaillant Group has been successfully advanced the development in this field. In 1998 already, it started activities in R&D. Three years later the company presented its first prototype of a fuel cell heating unit. In 2005 the Group enhanced the field tests which had been started in 2002 executing these tests then with a total of 60 installations all over Europe. Since 2008, Vaillant Group has intensified its development activities focusing on the Solid Oxide Fuel Cells (SOFC) which are considered the most promising technology.

www.vaillant.de

Wasserstoff- und Brennstoffzellen Initiative Hessen e.V. (H2BZ-Initiative Hessen e.V.) [*43]

c/o HA Hessen Agentur GmbH

Abraham-Lincoln-Straße 38-42, DE-65189 Wiesbaden

Please see HA Hessen Agentur

weil engineering GmbH [26]

Neuenburger Straße 23, DE-79379 Müllheim

weil engineering is the premier turn-key supplier for customized production technology. As a specialist for the automation of production processes including forming and welding, weil engineering is the right partner for your applications in automotive, HVAC, household appliances, containers or other

high quality products. The combination of high flexibility, modular line concepts and highest process stability offers our customers the best conditions to exceed their production requirements. At f-cell we show: Production examples as heat exchanger housings, inner tubes (for catalytic converters), cooling fins, „welding in press“.

www.weil-engineering.de

Wirtschaftsförderung Region Stuttgart GmbH [TP 4]

Friedrichstraße10, DE-70174 Stuttgart

The Stuttgart Region Economic Development Corporation is the central contact for investors and companies in the City of Stuttgart and the five neighbouring counties. With its dedicated long-term programme, the WRS is helping to establish the region as a major centre of fuel-cell and electric mobility development and production – and increasing the area’s attractiveness for all relevant players. Collaborative projects and partnerships with organizations across the globe support these activities, and benefit everyone involved.

www.region-stuttgart.de

World Hydrogen Energy Conference 2012 [41]

900-1188 West Georgia Street

CA-V6E 4A2 Vancouver, BC

Canada hosts the world’s hydrogen and fuel cell community in Toronto, June 3-7, 2012, continuing the tradition of high quality, topical and timely conference programming.

www.whec2012.com

ZBT Zentrum für BrennstoffzellenTechnik GmbH [*1+51]

Carl-Benz-Straße 201, DE-47057 Duisburg

The ZBT is an industry-oriented R&D Institute for fuel cell technologies and hydrogen; Service – and research partner, first Accredited Testing Laboratory for Fuel Cell Technology (PBT). Together with Bürkert Werke GmbH & Co. KG is a mobile test system presented. It’s for testing and certifying according to standards.

www.zbt-duisburg.de

In Cooperation with

DAIMLER



Baden-Württemberg

MINISTERIUM FÜR UMWELT, KLIMA UND ENERGIEWIRTSCHAFT



Baden-Württemberg

MINISTERIUM FÜR FINANZEN UND WIRTSCHAFT



Supported by:



Coordination:



Host



**Wirtschaftsförderung
Region Stuttgart**

www.f-cell.de

Organized by



Messen und Kongresse GmbH

f-cell@messe-sauber.de
www.messe-sauber.de

Partner



Fuel Cell and Battery Alliance
Baden-Wuerttemberg
(BBA-BW)

DLR German Aerospace
Center

Fraunhofer Institute for
Solar Energy Systems (ISE)

Fraunhofer Institute for
Systems and Innovation
Research (ISI)

Fuel Cell Training Center
Ulm (WBzU)

Center for Solar Energy and
Hydrogen Research (ZSW)

Media partner

energie.de

Forum Nachhaltig
Wirtschaften

Fuel Cell Markets

Fuel Cells 2000

HZwei

Hydrogen and Fuel Cell Letter

VDI Nachrichten

German Pavilions 2012

Our international competence in the hydrogen and fuel cell sector: In 2012 we will coordinate German Pavilions at the trade fairs and conferences "FC Expo Tokyo" and "WHEC 2012 Toronto"



FC Expo, Tokyo, Japan, February 29 – March 2, 2012

**World Hydrogen Energy Conference, Toronto, Canada,
June 3 – 7, 2012**

Our qualification:

- international network all over the world
- flexibility
- knowledge in organisation in foreign countries (especially Japan and Canada)

Your benefit:

- attract interest with a large common booth
- personal and individual service
- good value

Please contact: Ms. Silke Maiwald
+49 711 656960-55
silke.maiwald@messe-sauber.de