

February 24, 2015

Tanaka Precious Metals Tanaka Holdings Co., Ltd.

TANAKA to Have Exhibit at FC EXPO 2015

Exhibition of materials related to fuel cell and hydrogen production, such as platinum-group electrode catalysts and hydrogen permeable films Introducing Tanaka Kikinzoku Kogyo initiatives for the full-scale adoption of fuel cells

Tanaka Holdings Co., Ltd. (Head office: Chioyoda-ku, Tokyo; President & CEO: Akira Tanae) today announced that Tanaka Kikinzoku Kogyo K.K. (Head office: Chioyoda-ku, Tokyo; President & CEO: Akira Tanae), which operates the Tanaka Kikinzoku Group manufacturing business, will have an exhibit at "FC EXPO 2015—11th International Hydrogen and Fuel Cell Expo," one of the world's largest fuel cell exhibitions, which will be held at Tokyo Big Sight from Wednesday, February 25 to Friday, February 27, 2015.

The booth will feature a panel display and explanations by staff representatives regarding every kind of precious metal material that is required by fuel cells, such as electrode catalysts for polymer electrolyte membrane fuel cells (PEFC), palladium alloy hydrogen permeable films and combustion catalysts. Also, at the technical conference (sixth floor of Conference Tower) starting at 9:30am on Thursday, February 26, a speech will be given on the theme of fuel cell catalyst development and recovery/recycling.

The precious metals technology acquired over many years by Tanaka Kikinzoku Kogyo since its establishment in 1885 is utilized in the development of fuel cell electrode catalysts, which began in 1985. In 2013, about one billion yen was invested in the construction of a plant dedicated to developing and manufacturing fuel cell catalysts in the Shonan area in order to prepare stable supply systems for the increasing demand for fuel cell electrode catalysts expected in the future.

Fuel cells have now spread far and wide, with cumulative sales of ENE-FARM surpassing 100,000 units, and fuel-cell vehicles being made available for general release last year. As a result, at this year's exhibition (the 11th of its kind), Tanaka Kikinzoku Kogyo will introduce the electrode catalysts, reforming catalysts, PROX catalysts and hydrogen permeable films developed and manufactured by the company over many years. As a leading company in the field of fuel cell electrode catalysts and a specialist manufacturer of precious metals required for fuel cell technology, Tanaka Kikinzoku Kogyo will present its technological capabilities alongside a stable supply of diverse products.

Details of the exhibit and the speech from Tanaka Kikinzoku Kogyo are shown below.

Over view of FC EXPO 2015—11th International Hydrogen and Fuel Cell Expo booth

- ■Dates: 10:00-18:00, Wednesday, February 25 to Friday, February 27, 2015 (closes at 17:00 on final day)
- ■Venue: Tanaka Kikinzoku Kogyo Booth, Tokyo Big Sight (W11-37, West Hall Entrance, Device/Material Zone)

■Main contents of exhibit:

Platinum or Platinum alloy	We combine precious metal catalyst technology and electrochemical
catalysts for PEFC (platinum	technology cultivated over many years in the development of highly
catalysts, platinum ruthenium	active platinum catalysts used in PEFC cathodes and catalysts with
catalysts, platinum cobalt	excellent resistance to the poisoning characteristics of carbon
catalysts)	monoxide (CO) in PEFC anodes.
Palladium alloys, hydrogen	In fuel cell hydrogen production, we utilize palladium, which is the only
permeable films	metal that solely allows the permeation of hydrogen gas so that
	impure gases are removed from hydrogen gas materials. With Tanaka
	Kikinzoku Kogyo's ultra-thin film processing technology and high
	purification technology, we are able to offer purified hydrogen gas that
	is highly reliable with maximum hydrogen permeability.
Combustion catalysts	Catalysts for the purification and deodorization of impure gases
	resulting from the hydrogen purification process. Metal honeycomb
	catalysts that support precious metal catalysts are used in order to
	enable low-temperature combustion.

Conference

■Date: 9:30-12:00, Thursday, February 26, 2015

■Session name: FC EXPO Technical Conference

"FC-3" Development trend of PEFC Materials for FCV Commercialization and ENE-FARM Penetration

- ■Title: Fuel Cell Catalyst Development and Prospects of Refining Business in TKK
- ■Speaker: Koichi Matsutani, Section Chief, FC Catalyst Development Center, Chemical and Refining Division, Tanaka Kikinzoku Kogyo K.K.

■Application:

 $https://www.r-exhibit.jp/exhibit201503/SeminarNavi201503/seminarTop.aspx?htVal=\{\%22l\%22:1,\%22m\%22:\%22FC\%22,\%22k\%22:\%222\%22\}$

■Tanaka Holdings Co., Ltd. (Holding company of Tanaka Precious Metals)

Headquarters: 22F, Tokyo Building, 2-7-3 Marunouchi, Chiyoda-ku, Tokyo

Representative: Akira Tanae, President & CEO

Founded: 1885 Incorporated: 1918 Capital: 500 million yen

Employees in consolidated group: 3,562 (FY2013)

Net sales of consolidated group: 967.6 billion yen (FY2013)

Main businesses of the group:

Manufacture, sales, import and export of precious metals (platinum, gold, silver, and others) and various types of industrial precious metals products. Recycling and refining of precious metals.

Website:

http://www.tanaka.co.jp/english (Tanaka Precious Metals),

http://pro.tanaka.co.jp/en (Industrial products)

■Tanaka Kikinzoku Kogyo K.K.

Headquarters: 22F, Tokyo Building, 2-7-3 Marunouchi, Chiyoda-ku, Tokyo

Representative: Akira Tanae, President & CEO

Founded: 1885 Incorporated: 1918 Capital: 500 million yen

Employees: 1,430 (FY2013)

Sales: 929 billion 60 million yen (FY2013)

Main businesses:

Manufacture, sales, import and export of precious metals (platinum, gold, silver, and others) and various types of industrial precious metals products. Recycling and refining of precious metals.

Website: http://pro.tanaka.co.jp/en

<About the Tanaka Precious Metals>

Established in 1885, the Tanaka Precious Metals has built a diversified range of business activities focused on the use of precious metals. On April 1, 2010, the group was reorganized with Tanaka Holdings Co., Ltd. as the holding company (parent company) of the Tanaka Precious Metals. In addition to strengthening corporate governance, the company aims to improve overall service to customers by ensuring efficient management and dynamic execution of operations. Tanaka Precious Metals is committed, as a specialist corporate entity, to providing a diverse range of products through cooperation among group companies.

Tanaka Precious Metals is in the top class in Japan in terms of the volume of precious metal handled, and for many years the group has developed and stably supplied industrial precious metals, in addition to providing accessories and savings commodities utilizing precious metals. As precious metal professionals, the Group will continue to contribute to enriching people's lives in the future.

The eight core companies in the Tanaka Precious Metals are as follows.

- Tanaka Holdings Co., Ltd. (pure holding company)
- Tanaka Kikinzoku Hanbai K.K.
- Tanaka Denshi Kogyo K.K.
- Tanaka Kikinzoku Jewelry K.K.

- Tanaka Kikinzoku Kogyo K.K.
- Tanaka Kikinzoku International K.K.
- Electroplating Engineers of Japan, Limited
- Tanaka Kikinzoku Business Service K.K.