

February 27, 2017

Tanaka Precious Metals
Tanaka Holdings Co., Ltd.

TANAKA to Exhibit at FC EXPO 2017

Tanaka Precious Metals has the world's highest volume of shipments of electrode catalysts for fuel cells. Tanaka will exhibit electrode catalysts for fuel cells and other leading products for the hydrogen and fuel cell markets.

* Source: Current Conditions in and Future Outlook for the Environment and Energy Catalyst Market in 2015; issued by Fuji Keizai

Tanaka Holdings Co., Ltd. (Head office: Chiyoda-ku, Tokyo; Representative Director & CEO: Akira Tanae) today announced that Tanaka Precious Metals, Tanaka Kikinzoku Kogyo K.K. (Head office: Chiyoda-ku, Tokyo; Representative Director & CEO: Akira Tanae), which operates the Tanaka Kikinzoku Group manufacturing business, will exhibit at "FC EXPO 2017—13th 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, March 1 until Friday, March 3, 2017.

The fuel cell market has been performing well in recent years as a result of rising sales to ENE-FARM and the general release of fuel cell vehicles, expansion of the forklift market, particularly in Europe and the United States, the establishment of a market for fuel cell buses and trucks in China. Tanaka Kikinzoku Kogyo manufactures and sells Electrocatalysts for Polymer Electrolyte Membrane Fuel Cells (PEFCs), which are essential for manufacturing fuel cells, and boasts the world's highest volume of shipment volume. Tanaka Kikinzoku Kogyo will exhibit Electrocatalysts for Polymer Electrolyte Membrane Fuel Cells (PEFCs) at the expo and provide detailed explanations along with displays of actual products.

As was the case at last year's expo, electrode catalysts for Polymer Electrolyte Electrolysis Cells (PEECs), which are used in the hydrogen production from renewable energy, will also be on display. Tanaka Kikinzoku Kogyo will also have panel exhibits and personnel will provide explanations regarding reforming catalysts, PROX catalysts, palladium alloy hydrogen permeable films, exhaust gas purifying catalysts, and other precious metals used in fuel cell related technologies that will be necessary for a hydrogen-based society.

As fuel cell markets expand, Tanaka Kikinzoku Kogyo expects to achieve a record high in fuel cell electrode catalyst shipments in the 2016 fiscal year. Demand for clean energy is expected to increase as a result of the introduction of global-scale environmental regulations such as the recent Paris Agreement, and as a leading company for precious metal products, Tanaka Kikinzoku Kogyo remains committed to contributing to the development of a clean energy society.



〈Artist's impression of booth〉



〈A PEFC electrode catalyst, a product for which Tanaka Kikinzoku Kogyo boasts the world's highest shipment volume〉

Overview of FC EXPO 2017—13th International Hydrogen and Fuel Cell Expo booth

- Dates: 10 am-6 pm, Wednesday, March 1 to Friday, March 3, 2017 (closes at 5 pm on final day)
- Venue: Tanaka Kikinzoku Kogyo Booth, Tokyo Big Sight (E65-4)
- Main contents of exhibit:

Electrode catalysts for fuel cells	We combine precious metal catalyst technologies and electrochemical technologies, cultivated over many years, in the development of highly active catalysts for fuel cell cathodes, and catalysts with excellent carbon monoxide (CO) poisoning resistance for fuel cell anodes.
Palladium alloys, hydrogen permeable films	In fuel cell hydrogen production, we utilize palladium, which is the only 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.
Exhaust gas purifying 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.
Precious metal compounds	Precious metal compounds are used in numerous industrial fields as plating chemicals and catalysts. Tanaka Kikinzoku Kogyo can flexibly produce a range of products from general compounds such as gold potassium cyanide and palladium chloride to organic precious metal compounds according to the use under comprehensive quality control systems.
PROX catalysts	These catalysts use oxygen to selectively remove the carbon monoxide from reforming gas used in fuel cells. They feature high activity at a wide range of temperatures, from low to high, and even at a high space velocity, thanks to the high dispersion of precious metals that enables us to reduce precious metal loadings and offer low cost products.
Electrode catalysts for water electrolysis	These electrode catalysts are used as the anodes (oxygen-generation poles) in water electrolysis systems. We have succeeded with catalyst surface control, and are currently mass producing the catalysts.

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

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

Representative: Akira Tanae, Representative Director & CEO

Founded: 1885

Incorporated: 1918

Capital: 500 million yen

Employees in consolidated group: 3,476 (as of March 31, 2016)

Net sales of consolidated group: 1,026.7 billion yen (FY2015)

Main businesses of the group:

Strategic and efficient group management and management guidance to group companies as the holding company at the center of the Tanaka 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, Representative Director & CEO

Founded: 1885

Incorporated: 1918

Capital: 500 million yen

Employees: 2,218 (as of March 31, 2016)

Sales: 1,005.4 billion yen (FY2015)

Main businesses:

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

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

<About the Tanaka Precious Metals>

Since its foundation in 1885, Tanaka Precious Metals has provided products in the industrial, asset, and jewelry fields as a precious metals specialty group. Tanaka is a leader in Asia in terms of the volumes of precious metals handled. In the industrial segment, one of the Group's core businesses, Tanaka develops precious metal materials, products, and technologies essential for a range of industries including semiconductors, energy, automobiles, communications, consumer electronics, and healthcare. The Group has sales offices and production sites around the world. In September 2016, Tanaka Kikinzoku Kogyo acquired all shares of Metalor Technologies International SA. Going forward, Tanaka Precious Metals will continue its efforts to contribute to the development of an enriching and prosperous society made possible by precious metals.

As of November 2016

Holding Company

- Tanaka Holdings Co., Ltd. (pure holding company)

Business Companies

- Tanaka Kikinzoku Kogyo K.K.
- Tanaka Denshi Kogyo K.K.
- Electroplating Engineers of Japan, Limited
- Tanaka Kikinzoku Jewelry K.K.
- Metalor Technologies International SA

<Press inquiries>

Tanaka Holdings Co., Ltd.

<https://www.tanaka.co.jp/en/protanaka/inquiry/index.php>