

May 31, 2011

Tanaka Precious Metals
Tanaka Holdings Co., Ltd.

Tanaka Precious Metals Announces Recipients of “Precious Metals Research Grants”

Professor Tatsumi Ishihara of Kyushu University granted “Platinum Award” providing the maximum amount of 5 million yen

High recognition given to the use of precious metals for future energy problems

Tokyo, Japan — May 31, 2011 — Tanaka Holdings Co., Ltd. (Holding company of Tanaka Precious Metals, Head office: Marunouchi, Chiyoda-ku, Tokyo; President & CEO: Hideya Okamoto) today announced the recipients of the Tanaka Precious Metals' 2010 “Precious Metals Research Grants”. 14.3 million yen in grants were awarded to 28 research projects, including the Platinum Award providing the maximum grant of 5 million yen awarded to Professor Tatsumi Ishihara (Applied Chemistry) of Kyushu University, and the Gold Award providing a grant of 2 million yen awarded to Assistant Professor Masayuki Kanehara (Pure and Applied Science) of Okayama University.

This research grant program has been implemented every year since 1999 to support the various challenges faced in the “new world opened up by precious metals” by providing grants to Japanese educational institutions and public research institutes conducting research and development using precious metals. In the 12th year of the program, there were 158 applications to a call for research in the electric/electronic, automotive, environmental, energy, medical, bio and nano fields based on the theme of “research and development aimed at the practical application of new technologies and products to which precious metals can make a contribution.”

As a result of an impartial examination of the applications, the Platinum Award granting the maximum amount of 5 million yen was awarded to Professor Tatsumi Ishihara of Kyushu University for “Nanoscale morphological oxides supporting precious metals as the air electrode in lithium-air secondary cells.” Secondary cells^{*1} play an important role as devices able to store energy as one of the solutions to future energy problems. Metal-air cells^{*2} are currently being developed as the ultimate high-capacity cells, and high recognition was given to the use of precious metals in such development.

The Gold Award granting 2 million yen was awarded to Assistant Professor Masayuki Kanehara of Okayama University for “Creation of a printable organic semiconductor device using conductive precious metal nano-particle ink.” In the field of printed electronics forming electrical circuits using conductive ink and printing technology, he was given high recognition for the use of precious metal nano-particles as functional ink and the application of the technology in devices such as solar cells that will be essential in our lives in the future.

In addition, 7 Silver Awards and 19 MMS Awards were given, as shown below along with the overview of the research grants. Applications for the 2011 research grants are scheduled to open in autumn.

List of Recipients of the 2010 Precious Metals Research Grants

Platinum Award (1 award, 5 million yen)	
Tatsumi Ishihara, Professor, Kyushu University	Nanoscale morphological oxides supporting precious metals as the air electrode in lithium-air secondary cells
Gold Award (1 award, 2 million yen)	
Masayuki Kanehara, Assistant Professor, Okayama University	Creation of a printable organic semiconductor device using conductive precious metal nano-particle ink
Silver Awards (7 awards, 500,000 yen each)	
Kenichi Hamada, Associate Professor, Tokushima University	Improved processing of MRI-artifact free Au-Pt-Nb (gold-platinum-niobium) alloy for biomedical application
Shozo Shinguhara, Professor, Kansai University	Application of electroless plating technology using precious metal nano-particles in 3D LSIs
Hiroki Takanashi, Professor, Tohoku University	Creation of spin electronic devices using precious metal materials
Junichi Taketani, Professor, Osaka University	Electrode formation techniques using precious metal plating and development of highly functional organic transistors
Toshiyuki Samejima, Professor, Tokyo University of Agriculture and Technology	New-concept solar cells using gold electrodes
Yoshiki Katayama, Professor, Kyushu University	Development of rapid cancer diagnostic methods using gold nano-particles
Fumio Mizutani, Professor, University of Hyogo	Development of an ultra-sensitive electrochemical DNA sensor using platinum complexes
MMS Awards (19 awards, 200,000 yen each)	
Kiyoshi Uchiyama, Professor, Tsuruoka National College of Technology	Tatsuya Murakami, Assistant Professor, Kyoto University
Norio Miyoshi, Assistant Professor, Fukui University	Takeaki Koizumi, Associate Professor, Tokyo Institute of Technology
Takeyasu Saito, Associate Professor, Osaka Prefecture University	Yui Yokota, Assistant Professor, Tohoku University
Hiroshi Naganuma, Assistant Professor, Tohoku University	Naotatsu Shikazono, Professor, Keio University
Katsuyoshi Ikeda, Associate Professor, Hokkaido University	Toshiki Miyazaki, Associate Professor, Kyushu Institute of Technology
Shigeru Watanabe, Associate Professor, Kochi University	Toshimitsu Ito, Manager, Research Group, National Institute of Advanced Industrial Technology
Shunichiro Omi, Associate Professor, Tokyo Institute of Technology	Toshiyuki Shima, Professor, Tohoku Gakuin University
Wakana Kubo, Fellow, RIKEN	Kazuya Sasaki, Special Associate Professor, University of Tokyo
Susumu Nii, Associate Professor, Nagoya University	Takashi Ogihara, Professor, Fukui University
Mitsuhiro Arisawa, Associate Professor, Hokkaido University	

Overview of the 2010 Precious Metals Research Grants

[Fields]

Electric/electronic, automotive, environmental, energy, medical, bio, nano, etc.

- * Precious metals must play an important role in commercialization and practical application of the research.
- * Development related to precious metals must provide a breakthrough in the progress of the commercialization or practical application.

[Theme]

Research and development aimed at the practical application of new technologies and products to which precious metals can make a contribution

[Grant amounts]

- Platinum Award: 5 million yen (1 award)
- Gold Award: 2 million yen (1 award)
- Silver Awards: 500,000 yen (multiple awards)

* In principle, the grant covers one year of research. Each award is given to research deemed to make a particularly large contribution to practical implementation, and awards may not be granted in some cases.

[Eligible candidates]

Personnel who belong to educational research institutions or public research institutes in Japan

[Application period]

September 1, 2010 (Wed) - 5pm, November 30, 2010 (Tue)

[Applications]

158

[Conditions]

- Able to exchange information with Tanaka Precious Metals about product development, technology development and guidance through the research.
- Clearly state if any joint research is being performed with other precious metal producers (including planned).
 - * Excludes research that has already been commercialized or for which there are such plans.
 - * Excludes fundamental research such as analysis, evaluation and production technology.

[Inquiries concerning the research grant program]

Precious Metals Research Grants Office

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*1 [Secondary cell]: A cell (chemical cell) that can be reused repeatedly by recharging after use.

*2 [Metal-air cell]: A rechargeable cell that uses metal as the negative-electrode active material and oxygen in air as the positive-electrode active material.

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

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

Representative: Hideya Okamoto, President & CEO

Founded: 1885

Incorporated: 1918

Capital: 500 million yen

Employees in consolidated group: 3,441 (FY2009)

Net sales of consolidated group: 710.2 billion yen (FY2009)

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> (Tanaka Precious Metals),

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

<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.