

Investment in and collaboration with H2U Technologies, a company with highly efficient catalyst discovery technology

Tokyo Gas Co., Ltd.

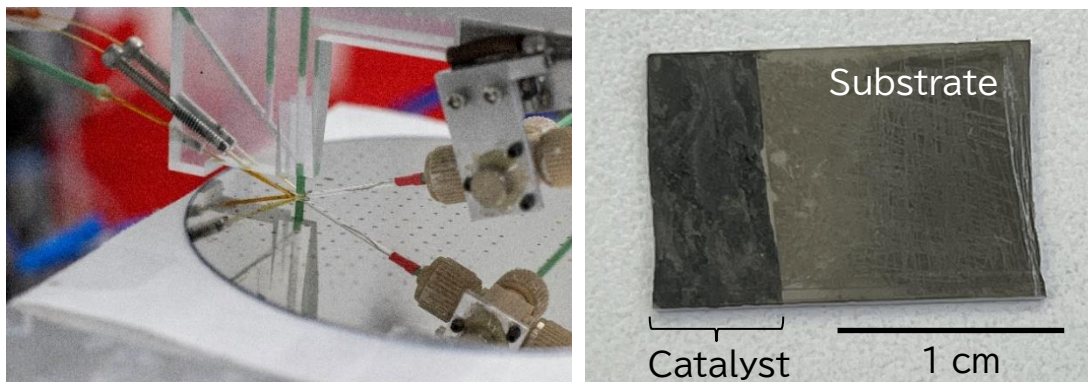
Tokyo Gas Co., Ltd. (President and CEO: SASAYAMA Shinichi, hereinafter referred to as "Tokyo Gas"), through its wholly owned subsidiary Acario Investment One, LLC (President and CEO: MAEDA Kenji), has become the first Japanese energy company to invest in H2U Technologies, Inc. (CEO: Jourdan Urbach, hereinafter referred to as "H2U"), a US startup company that has unique, highly efficient catalyst discovery technology to reduce the cost of PEM^{*1} water electrolysis equipment, and has signed a letter of intent to collaborate with the company.

The development of water electrolysis equipment is progressing around the world in an effort to realize a decarbonized society. One of these methods, the PEM water electrolysis method, uses iridium, a rare metal that is very expensive and has a limited supply, in the electrodes, so in order to reduce costs, there is an urgent need to develop a new catalyst that is inexpensive and does not use rare metals as an alternative.

Tokyo Gas and H2U have been working together on the joint development of low-cost, high-performance non-iridium catalysts since February 2023^{*2}. As part of the two companies' efforts, they have synthesized approximately 20,000 catalyst samples per year and evaluated their performance and durability, while also conducting searches using AI (artificial intelligence) based on the accumulated evaluation database.

Through this investment and collaboration, we will broaden the scope of our search for new catalysts and search for catalysts with higher performance. We will also accelerate the implementation of non-iridium catalysts in water electrolysis equipment, aiming to quickly realize low-cost hydrogen production.

<Catalyst evaluation and the catalyst selected through joint development>



(Provided by H2U)

Comment from Jourdan Urbach, CEO of H2U Technology

Our CDE *³ and AI (artificial intelligence) are ideal for efficiently searching for highly active and durable, low-cost catalysts. We are very pleased to be able to develop both non-rare metal catalysts and water electrolysis equipment to further advance the results of our joint development with Tokyo Gas and provide green hydrogen at an affordable price.

Comment from YAKABE Hisataka, Executive Officer and General Manager of the Hydrogen and Carbon Management Technology Strategy Department, Tokyo Gas Co., Ltd.

We are pleased to be able to continue to advance our search for inexpensive catalysts for water electrolysis equipment and to work together with H2U to advance technological development aimed at application to water electrolysis equipment.

The Tokyo Gas Group will contribute to the realization of the government’s goal of carbon neutrality by 2050 by achieving a responsible transition in accordance with the Carbon Neutral Roadmap 2050, which was formulated to achieve net-zero CO₂ emissions, as set out in the Group’s management vision.

[Overview of H2U]

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| Company name | H2U Technologies , Inc. |
| Representative’s name | Jourdan Urbach |
| Established | July 2020 |
| Office | California, United States |
| Business Contents | Development of water electrolysis catalysts and water electrolysis equipment |

[Overview of Acario Investment One]

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| Company name | Acario Investment One, LLC |
| Representative’s name | President and CEO MAEDA Kenji |

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| Established | December 2017 |
| Office | California, United States |
| Investment ratio | Tokyo Gas Co. , Ltd. 100% owned |
| Business Contents | Investments in energy companies and energy-related venture capital |

* 1 : Proton Exchange Membrane

* 2 : [Tokyo Gas and H2U Technologies Enter Joint Agreement to Develop Low Cost Electrolyzers \(announced on March 9, 2023\)](#)

* 3 : H2U's proprietary catalyst discovery engine