

May 13, 2021

Kirin Beverage Researcher Decorated with “Medal with Purple Ribbon” for Green Tea

Development of novel decaffeination technology that maintains taste of tea beverages using natural adsorbent

TOKYO, Thursday May 13, 2021 – Dr. Takashi Shiono of Kirin Beverage Company Limited (Kirin Beverage), received the prestigious [Medal with Purple Ribbon](#), a Japanese [national medal of honor](#) awarded to individuals who have contributed to academic and artistic developments, improvements and accomplishments. This is the first time ever such an award has been received in the Kirin Group's history^{*1}. The award was presented at the Spring 2021 Medals of Honor announced by the [Cabinet Office, Government of Japan](#) on April 28, 2021, in recognition of Dr. Shiono's work in the development of decaffeination technology for tea beverages using natural adsorbent.

^{*1} The first ever for an active employee of the Kirin Group.

Dr. Shiono's work contributed to development of the Kirin Group's patented *Caffeine Clear Process* technology, which led to the world's first^{*2} zero caffeine^{*3} green tea beverage. The award was given in recognition of the company's contribution to curbing excessive caffeine intake among the public and meeting social needs, such as for use by pregnant and nursing women, children and before bedtime.

^{*2} World first for PET-bottled green tea (PET containerized green tea beverage with caffeine content of less than 0.001g per 100ml, surveyed by SVP Japan in February 2014)

^{*3} Less than 0.001g (per 100ml) is indicated as 0g.

● Summary of achievements

The conventional method of decaffeination for teas has been to elute caffeine from the tea leaves. However, the good aroma and taste of tea is also lost along with the caffeine when using this method. Therefore there has been a need for a technology that can both remove caffeine yet maintain the taste of the tea. This led to the development of the *Caffeine Clear Process*, which achieves decaffeination while keeping the tea's inherent taste.

The *Caffeine Clear Process* is used in products such as *Kirin Nama-cha Decaf* (pictured at the right), and continued to contribute to increasing the number of new options for tea beverages that are widely consumed in Japanese daily life. This makes it possible to meet the diverse needs of pregnant and nursing women, children, and bedtime drinking. The award also recognizes the Kirin Group's contribution to reducing excessive caffeine intake among Japanese, with the aim of solving social issues related to health and well-being.

The Medal with Purple Ribbon is awarded to individuals who have made inventions and discoveries in the field of science and technology, and outstanding achievements in the fields of academia, sports, arts and culture. This development has also received the Ando Momofuku Honor Prize in 2015, the Tojuro Iijima Award for Food Technology in 2018, and the Award for Science and Technology of the Minister of Education, Culture, Sports, Science and Technology.

● Comments Dr. Shiono

I am very honored to receive the Medal with Purple Ribbon. I would like to express my heartfelt gratitude to all my senior colleagues at Kirin Beverage and



Kirin Holdings, for their guidance and support, as well as to all my colleagues with whom I have engaged in research and development activities, for the research results for which I received this award. I hope that people around the world will continue to be able to enjoy not only tea but other beverages carefree, regardless of their physical condition or drinking occasions.

● **Dr. Takashi Shiono**

Dr. Shiono was born 42 years ago in Tokyo. He graduated from Waseda University's Graduate School of Science and Engineering in 2003, and he obtained the Ph. D. (Doctor of Agriculture) from University of Tokyo in 2018.

He joined Kirin Brewery in 2003. Since 2008, he has been working on the development and practical application of decaffeination technology at the Laboratory for New Product Development^{*4}, and since 2013 at the Institute for Future Beverages, Research & Development Division of Kirin Holdings Company Limited^{*5}. In April 2021, he was appointed Deputy General Manager of the Laboratory for New Product Development at Kirin Beverage.

^{*4}: "Research and Development Laboratory of Kirin Beverage Company, Limited" at the time

^{*5}: "Research Laboratories for Beverage Technologies, Research & Development Division of Kirin Company Limited" at the time



About Kirin Holdings

Kirin Holdings Company, Limited is an international company that operates in the Food & Beverages domain (Food & Beverages businesses), Pharmaceuticals domain (Pharmaceuticals businesses), and Health Science domain (Health Science business), both in Japan and across the globe.

Kirin Holdings can trace its roots to **Japan Brewery** which was established in 1885. Japan Brewery became **Kirin Brewery** in 1907. Since then, the company expanded its business with fermentation and biotechnology as its core technologies, and entered the pharmaceutical business in the 1980s, all of which continue to be global growth centers. In 2007, Kirin Holdings was established as a pure holding company and is currently focusing on boosting its Health Science domain.

Under the [*Kirin Group Vision 2027*](#) (KV 2027), a long-term management plan launched in 2019, the Kirin Group aims to become A global leader in CSV, creating value across our world of Food & Beverages to Pharmaceuticals. Going forward, the Kirin Group will continue to leverage its strengths to create both social and economic value through its businesses, with the aim of achieving sustainable growth in corporate value.

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