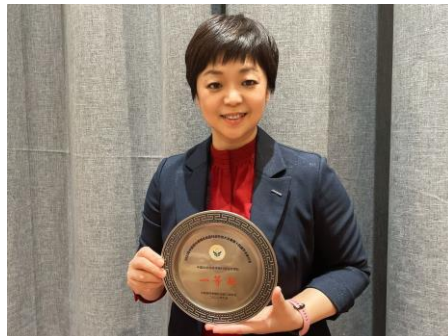


Shiseido Wins First Prize at the 14th China Cosmetics Academic Research Conference for Innovative Technology that Converts Ultraviolet Light into Light to bring about Beneficial Effects on the Skin

- 3 other papers also win second prizes -

Shiseido Company, Limited (“Shiseido”) won the first (1 paper) and second (3 papers) prizes at the 14th China Cosmetics Academic Research Conference hosted by the China Association of Fragrance Flavour and Cosmetic Industries (CAFFCI) held between February 28 and March 1, 2023 in Taian City, Shandong Province, China*¹. To date, Shiseido has received a total of eight first prizes at the conference, an award given to the most outstanding research. Going forward, Shiseido will continue to provide new customer value through a variety of products and services including our global brands *SHISEIDO* and *Clé de Peau Beauté* by utilizing the outcomes of our cutting-edge research and advanced technologies.

*¹ A total of 98 papers were submitted to this conference, and a total of 1 first prize, 9 second prizes, and 14 third prizes were awarded after rigorous review by researchers belonging to research institutes such as universities, corporate executives, and prominent industry experts.



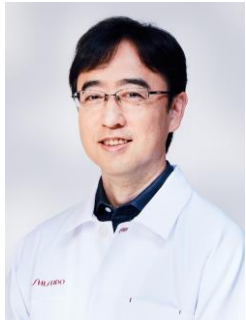
China Innovation Center researcher receiving the first prize at the award ceremony
(on behalf of Senior Chief Researcher Kazuyuki Miyazawa)

China Association of Fragrance Flavour and Cosmetic Industries, CAFFCI


CAFFCI is a nonprofit organization consisting of business entities, institutions, and individuals specializing in activities for cosmetics manufacturing such as essence/fragrance and cosmetics ingredients, as well as equipment/devices, packaging, related R&D activities, design, education, and others. The China Cosmetics Academic Research Conference is held once every two years and is regarded as one of the largest conferences on cosmetics in terms of the number of research presentations and academic debates involved. The participants include many companies, universities, and research institutes in China and overseas, and the best research papers are selected based on outstanding results that will contribute to advancing technologies in the Chinese cosmetics industry.

Overview of prize-winning research papers


[First Prize]

Title	Biomimetic Skincare System Using Sunlight Energy	
Presenter	Shiseido MIRAI Technology Institute, Senior Chief Researcher Kazuyuki Miyazawa	
Overview	<p>Inspired by the mechanism of photosynthesis in plants, which converts sunlight into energy, we have succeeded in developing a new technology that not only protects the skin from UV rays which damages the skin, but also converts UV rays into visible light that has a positive effect on the skin. With this technology, it becomes possible to draw out the natural beauty of the skin in harmonious coexistence with the environment. After searching for active ingredients, we found that the light converted from UV rays by fluorescent zinc oxide activates the epidermal cells and dermal fibroblasts damaged by UV rays. In addition, we confirmed that such light suppresses inflammatory factors that trigger the production of enzymes that decompose skin-rejuvenating collagen, and it reduces erythema (skin redness caused by sunburn) leading to photoaging.</p>	

[Second Prize]

Title	Next generation wearable skin -A Topical Formulation for Face Shaping-	
Presenter	Shiseido MIRAI Technology Institute, Chief Researcher Tomoko Sekine	
Overview	<p>We have developed a formulation that directly corrects the shape of undereye bags, which greatly affects the overall impression of the face. By applying a formulation containing reactive polymers to the skin and layering a formulation containing an ingredient promoting cross-linking reaction on top, the polymers cross-link to form a film as an invisible new layer of artificial skin and the tension created by the polymer network shrinkage suppresses the puffiness of the undereye bags. While the shrinkage of the film has a corrective effect on the undereye bags, it also causes peeling. Thus, we designed a formulation by which the inner surface of the film in contact with the skin provides soft yet strong adhesion while the outer surface of the film, which is not in contact with the skin, increases its contraction, to create a film with internal and external structures of different properties. With this technology, we have succeeded in balancing peeling resistance and excellent corrective effect on the undereye bags.</p>	

[Second Prize]

Title	Novel Approach to Anti-Aging Skin Care -Great discovery that the combination of complex extracts and multiple energy is the most effective way to improve sagging skin-
Presenter	Shiseido MIRAI Technology Institute, Researcher Minami Yamada
Overview	<p>We have revealed that complex physical stimulation including high and low frequencies increases the expression of integrin $\alpha 6$, a cell adhesion factor playing an important role in stabilizing dermal stem cells as well as that of dermal matrix components, Collagen type V and fibrillin 1. In addition, through our cell experiments, we confirmed that the combined use of complex physical stimuli and complex extracts increased the expression of collagen, elastin, and hyaluronic acid-related genes, while our human studies showed that the combined use improved skin elasticity, tightening the skin around the eyes and face lines. These effects are greater than those of when using complex extracts alone, indicating that the combination of complex physical stimulation and complex extracts may make a significant contribution to improving skin sagging and elasticity.</p> 

[Second Prize]

Title	Novel discovery of photo-aging related gene through out from re-analysis of public database
Presenter	Shiseido MIRAI Technology Institute, Researcher Taiki Tsutsui (as of the paper submission date)
Overview	<p>By analyzing big data that combines our independently acquired gene expression data and DNA methylation^{*2} information data in external public databases, we have elucidated the mechanism by which the skin epigenetically^{*3} causes dullness. As a result, we found that the TIPARP gene is methylated and acquired to regulate by photoaging and thus hinders the normal transmission of information to prevent dull skin. We also revealed that an extract derived from deep-sea microorganisms promotes the expression of the TIPARP gene and has the effect of suppressing skin dullness.</p> <p>^{*2} One of epigenetic gene control systems. By being methylated, genetic information is locked and unable to be read properly.</p> <p>^{*3} An acquired genetics phenomenon of altered gene expression that does not involve changes in DNA sequence.</p>

Related press releases

Shiseido Wins First, Second and Third Prizes at 13th China Cosmetics Academic Research Conference (2020)

<https://corp.shiseido.com/en/news/detail.html?n=0000000002957>

Shiseido Wins First Prize and Two Second Prizes for Excellent Research Papers at the 12th China Cosmetics Academic Research Conference (2018)

<https://corp.shiseido.com/en/news/detail.html?n=0000000002478>