

POLA CHEMICAL INDUSTRIES wins the Best Basic Research Award at IFSCC Congress
“Antimicrobial peptide human beta defensin-3 (hBD-3) as a key factor for acne flare-up during the premenstrual stage” received the Best Basic Research Award for oral presentation

POLA CHEMICAL INDUSTRIES, INC. (Headquarter: Yokohama, Kanagawa prefecture, President: Yasuo Iwazaki), at POLA ORBIS Group, won the Best Basic Research Award at the 28th International Federation of Societies of Cosmetic Chemists (hereafter referred to as “IFSCC”) Congress held in Paris from October 27th to 30th.

IFSCC is the most prestigious worldwide federation dedicated to international cooperation in cosmetic science with members from 47 countries. IFSCC holds a congress every 2 years. At the 28th Congress, there were 78 entries for oral presentation, introducing the latest technologies in cosmetics. Among these entries, the research introduced by POLA CHEMICAL INDUSTRIES was chosen as the Best Basic Research. This is the 7th award that POLA CHEMICAL INDUSTRIES received at the Congress. The Company also received an award at the previous congress held in 2012 in Johannesburg.



Haruka Goto received the Best Basic Research Award for oral presentation at the 28th IFSCC Congress

Outline of the Awarded Paper

- Theme: “Antimicrobial peptide human beta defensin-3 (hBD-3) as a key factor for acne flare-up during the premenstrual stage”
 Presented by: Haruka Goto, POLA CHEMICAL INDUSTRIES, INC. Skin Research Department, Applied Skin Analysis
- Research Summary:
 There are many women who experience acne flare-up before menstruation. However, the mechanism behind the symptom has not been revealed and there are no proper treatment offered.
 By focusing on female hormone called progesterone, which increases before menstruation and bactericidal peptide produced from epidermis, this research discovered the following:
 1. Human beta-defensin-3 (hBD-3), one of the cutaneous bactericidal peptides, show antibacterial activity against *Propionibacterium acne (P. acnes)*s, the causative pathogen of acnes..
 2. A female hormone called progesterone which increases before menstruation, reduce expression of hBD-3 in human epidermal cells.
 Therefore, progesterone reduce expression of hBD-3 which has antibacterial activity against *P. acnes*, and this may be one of the causes for acne flare-up before menstruation. By applying this finding, more effective skincare products for acne treatment can be offered.

About IFSCC

IFSCC is the most prestigious worldwide federation dedicated to international cooperation in cosmetic science with members from 47 countries. It holds a congress every 2 years where leading researchers in cosmetic science present their latest technologies. Submitted paper is carefully reviewed by IFSCC and only a handful of researchers are given the chance to present their paper at the congress. At the 28th Congress, there were 78 entries for oral presentation and 464 entries for poster presentation.

Awards received by POLA CHEMICAL INDUSTRIES

2014	Paris Congress	Best Basic Research Award (Oral presentation)
2012	Johannesburg Congress	Best Poster Award
2008	Barcelona Congress	Best Basic Research Award (Oral presentation)
1998	Cannes Congress	Best Award
1996	Sydney Congress	Second Best Award
1994	Venice Congress	Best Award
1986	Barcelona Congress	Second Best Award

Appendix: Other Best Awards at the 28th IFSCC Congress

- Applied Research AWARD
 New strategy for the protection of consumers: a functional film limiting exposition to fragrance allergens
 A. Léopoldès de Vendômois¹, J. Paris², A. Cabin-Flaman³, J. Seigneuret¹, J. Etienne⁴
¹ Alban Muller International, ² Payan Bertrand, ³ Science Faculty, Rouen University, ⁴ ATN Conseil – France
- Poster AWARD
 Novel approach to anti-aging facial skin care through reconstruction of “dermal anchoring structures” to improve facial morphology
 T. Ezure⁽¹⁾, N. Kosaka⁽²⁾, E. Yagi⁽¹⁾, J. Hosoi⁽¹⁾, S. Amano⁽¹⁾, K. Matsuzaki⁽³⁾, T. Ochiya⁽²⁾
⁽¹⁾ SHISEIDO Co., LTD., Yokohama, Japan
⁽²⁾ National Cancer Center Research Institute, Tokyo, Japan
⁽³⁾ St Marianna University School of Medicine, Kanagawa, Japan