

SOFW JOURNAL BEST PAPER AWARD 2024

BERLIN, GERMANY, OCTOBER 16, 2024

The secret is revealed! The SOFW Award winners for 2024 have been announced.

An independent jury of seven members evaluated a total of 63 articles published in SOFW Journal from September 2023 to June 2024.

On October 16th the winners of the three best articles were presented their award at a ceremony held at SEPAWA CONGRESS. The authors briefly summarized their latest product developments and technologies and received the SOFW Award together with a certificate. To celebrate, we all raised a glass of sparkling wine.

We congratulate the winners! Thank you for your contribution and research to SOFW Journal!

Here are the winners:



1

Deep-cleaning and Freshness for Sustainable Laundry with Dispersin

Authors: R. Munk Vejborg, M. Kandzia, L. J. Nielsen, T. Wilke, T. Rechenbach, K. E. Thuesen, M. Weide

Companies: Novonesis, Henkel AG & Co. KGaA

Abstract: The continuously improved energy efficiency and reduced water usage of domestic laundry appliances has improved the environmental footprint of washing considerably. But the sustainability-driven shift towards lower washing temperatures, and the increasing use of bleach-free detergents, may unfortunately negatively impact laundry freshness and hygiene. This calls for new innovation for the sustainable detergents of tomorrow. Here we show that with the use of a nature-based dispersin enzyme technology, deep-cleaning and malodor prevention is possible, on textiles and in the washing machine, even at low temperature washing with liquid and single-dose detergents. This shows that it is possible to formulate detergents that can enable the consumers to wash their clothes sustainably without compromising washing performance.



Mirko Weide (Henkel) and Rebecca Munk Vejborg (Novonesis)

2

Sustainable Packaging Solutions from Paludicultures: Potential and Challenges

Authors: F. Kayatz, M. Kott, L. Tomei, M. Föllmer, A. Springer

Company: Fraunhofer IVV

Abstract: Paper packaging is considered a sustainable solution and is already used as outer packaging (secondary packaging) or in direct product contact (primary packaging), for example as folding boxes and jars for hair and body care products or pallets for decorative cosmetics. They are biodegradable, recyclable and have a lower environmental impact than plastic packaging. However, the increasing demand for paper is leading to traditional raw material sources such as wood being called into question. Alternative raw material sources are therefore needed. Our research project “Paludiverpackung” is successfully investigating the use of paludicultures as an alternative raw material source for the production of sustainable paper packaging, developing efficient processes for pulp production and improvements in paper production.



Grethel Iturralde (Fraunhofer IVV), Arielle Springer (Fraunhofer IVV) and Robert Fischer (SOFW)

3

Dermohacking Senescence with a New AI-proven & Biotech Ingredient

Authors: C. Vigo Xancó, S. Bouhrir E. Escudero, D. Manzano

Company: Provital, S.A.

Abstract: Modern science has opened a variety of new ways to improve survival and quality of life. Meanwhile, the recent movement towards preventative health among the ever-increasing mature segment of the population, has boosted the emerged success of new healthcare concepts such as bihacking. This one-health movement goes hand in hand with unprecedented scientific advances appearing in the anti-aging field, particularly for cellular senescence. As these new advances on cellular senescence take ground in the scientific community, the beauty industry can better tap into the opportunities that this longevity era can offer. In this regard, Provital is taking the lead in a new type of cosmetics that will leverage technology, science, natural and holistic preferences to push the boundaries on efficacy and selectivity, while still supporting an environmentally friendly brand positioning: Dermohacking cosmetics. Altheostem™ is Provital's first dermohacker. An Althaea rosea stem cell active that has proven its ability to selectively eliminate cellular senescence.



Siham Bouhrir (Provital) and Robert Fischer (SOFW)

This lab-grown active ingredient leverages biotechnology for a selective biological action on aged skin. In this article, Provital describes how the positive effects of its senolytic activity are thoroughly tested in vitro and in vivo, using both instrumental and Artificial Intelligence analysis, thus unveiling its well-aging power.