

## **FSG E-BULLETIN**

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# FSG AKNC 2021 OVERALL CHAMPION

IN THIS ISSUE

COMMERCIALISATION OF FSG RESEARCH INNOVATIONS

INTERNATIONAL
COLLABORATIONS WITH
SWEDEN, TAIWAN AND
INDONESIA

POST-FLOOD RELIEF
PROGRAMME BY FACULTY
OF APPLIED SCIENCES

#### **FSG Padu!**

A historic victory for FSG

Faculty of Applied Sciences emerged as the Overall Champion in "Anugerah Kualiti Naib Canselor 2021" of Universiti Teknologi MARA. FSG obtained the top prize by winning the following categories:

Juora Keseluruhan

- Best Faculty
- Field of Focus (Staff Management and Development)
- Criteria (Customer Focus)
- Criteria (Results)

Congratulations FSG, we did it!

### The Commercialisation of Research Innovations from Faculty of Applied Sciences, UiTM

By: Dr Norashirene Mohamad Jamil, Faculty of Applied Sciences, UiTM Shah Alam

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One of the positive impacts of research is translating research results and innovation from the lab into commercialised products. This commercialisation will subsequently contribute to societal benefit, economic growth, industry partnerships and entrepreneurship. In line with Malaysia's Ministry of Science, Technology and Innovation (MOSTI) Strategic Plan 2021-2025, Universiti Teknologi MARA (UiTM) is committed to accelerating innovation development and commercialisation as part of its educational mission.

One of UiTM's successful research innovations is green products by Assoc. Prof. Ts. Dr Rahmah Mohamed, founder of RM Poly Pack (M) Sdn Bhd and head of Green and Functional Polymer Research Group at the Faculty of Applied Sciences. By using Green Technology, Dr Rahmah and her team successfully manufactured a wide range of products using non-toxic and biodegradable materials to address the issue of pollution caused by plastic wastes. Her inventions include Bio Plastic Bag, Bio Straws, Plastic Bottles and Degradable Disposable Apron. Their Bio Plastic Bag products range from oil-based polymer Photodegradable Bag to starch-based Green Bio Bag, which are biodegradable and highly durable. The Bio Straws are polylactide- (PLA), starch- and starch hybrid-based, designed to be eco-friendly, compostable, and biodegradable. In the wake of increasing plastic pollution in our ecosystem, RM Poly Pack green products offer substitutes for traditional plastics. This innovative research effort has contributed to many positive outcomes, including the efficient and responsible use of natural resources, awareness on bioproducts usage and talent development for staff and students.

PAINA Chilli Sauce is another innovative product created by the Faculty of Applied Sciences lab. It was developed in 2017 by Dr Azizah Othman, Dr Fadhilah Jailani, and Dr Siti Roha Ab. Mutalib from the Department of Food Science and Technology. Made from quality, locally grown pineapple, the sauce is versatile and can be used as a condiment, marinade or incorporated into various dishes to create a refreshing tropical taste. With the support from the Product and Market Incubation (PMI) programme under UiTM's Office of the Deputy Vice-Chancellor (Research and Innovation) and UiTM's Business Innovation & Technology Commercialization Centre (BITCOM), PAINA Chilli sauce is now commercially produced and marketed.

A more recent innovative research output from UiTM is 'Dr Azri's Perfume'. The product which was developed at the Faculty of Applied Sciences consists of a range of premium perfumes with a long-lasting scent. A typical Eau de Parfum (EDP) fragrance can last between 8-9 hours; however, Dr Azri's Perfume is formulated to stay up to 72 hours on fabric surfaces. The product's founder, ChM. Dr Mohd Azri Ab Rani and his team have developed a way to reduce the volatility rate in the perfume with a novel fixative agent that acts as an adhesive material. By incorporating various extracts, five different scents were developed: The Man, Crush, Dr Azri x His Student, My Subject, and Founder's Fav. Dr Azri has also created charitable opportunities by donating the profits made from the products to the construction of water wells with electric pumps (Wakaf Telaga) in Cambodia. This is undoubtedly one of the many positive outcomes of transitioning innovative products to the markets.

In promoting research excellence, the Faculty of Applied Sciences, UiTM, is moving towards producing more commercialised research and development innovations through collaborations with the industry. Strong university-industry partnerships will enhance recognition, visibility, and graduate employability and ultimately bring numerous benefits to the university, the country, and the global community.

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