

Innovate Johor



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

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ISKANDAR UTM JOHOR

Innovate Johor 2019 is one of the platform for the researcher especially from UTM to feature the latest innovative and technologies developed by them.

Interdisciplinary research is promoted through the Research Alliances(RA), Centers of Excellence (CoE) and Research Group(RG). During this event, interested industrial partners and potential sponsors are welcome to discuss the issues regarding commercialisation of technologies or products with the respective inventors. We also can see there is trend in innovate Johor where they tend to implement the waste-to-wealth concept in their research.

Pinagel as a Second Skin

This product is actually is an alternative to traditional dressing (gauze) and it is also be a replacement for synthetic hydrogel. It made up from cellulose of pineapple leaves.



- Transparent
- High water content
- Good mechanical Strength
- Biocompatible & non-toxic

Asphalt-FWB

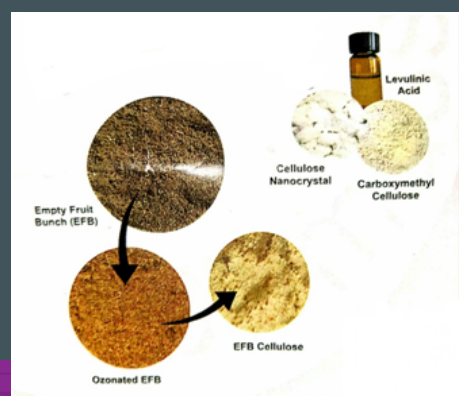
The innovation product is a new potential bio-binder in asphalt pavement. Conversion of WET biomass (food waste) into crude bio-oil. Product features is high density liquefied, black and sticky substance.

- Reduce food waste in landfill
- Reduce world dependence on petroleum
- Bring positive impact on health, environment and economic factors



OZONOLYSIS OF OIL PALM BIOMASS

It is a novel and compact design for the ozonolysis biomass pretreatment technology. An Ozone generator, a horizontal acrylic reactor with ribbon impeller, Automatic Control system for inline ozone monitor, ball valve, electrical motor are the main equipments. It recycle the wastes and we can find the resources easily. It's safe, zero waste and user friendly. This technology can be used into biomass hub or bio-based chemical industry. It can be used for the lignocellulosic biomass. This technology pretreat and fractionate biomass into cellulose and lignin.



Task for each Members :

1. Nurul Najwa Binti Hussein : introduction, reflection & editing
2. Keertennah Devi A/p Ponnambalam : report on Asphalt-FWB
3. Md Sakib Khan : report on Ozonolysis of oil pump biomass
4. Lim Yoke Hui : report on Pinagel as a Second Skin

The invention of new products give a lot of positive impact to human life. Technology also shapes the future and it can help to make it compatible with nature. By using the sustainable resource in invention of products, we just not only save our nature but we also have increased the standard of living and provided people with opportunities to improve their lives.