Universiti Teknologi MARA | Cawangan Perak

BUILDCON2023

COMPILATION OF PROJECT INNOVATION IDEAS
SEMESTER MARCH – AUGUST 2023

EMBRACING SMART CONSTRUCTION TRANSFORMATION

BUILDERS' CONVENTION DAY 2023

Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch

BUILDCON 2023
COMPILATION OF PROJECT INNOVATION IDEAS
SEMESTER MARCH – AUGUST 2023

Organised by
Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch
Malaysia

BUILDCON 2023
COMPILATION OF PROJECT INNOVATION IDEAS
SEMESTER MARCH – AUGUST 2023

Editors
Siti Akhtar Mahayuddin
Noor Rizallinda Ishak
Nor Asma Hafizah Hadzaman
Sallehan Ismail

Perpustakaan Negara Malaysia Cataloguing in Publication Data

No e- ISBN: 978-967-2776-24-6

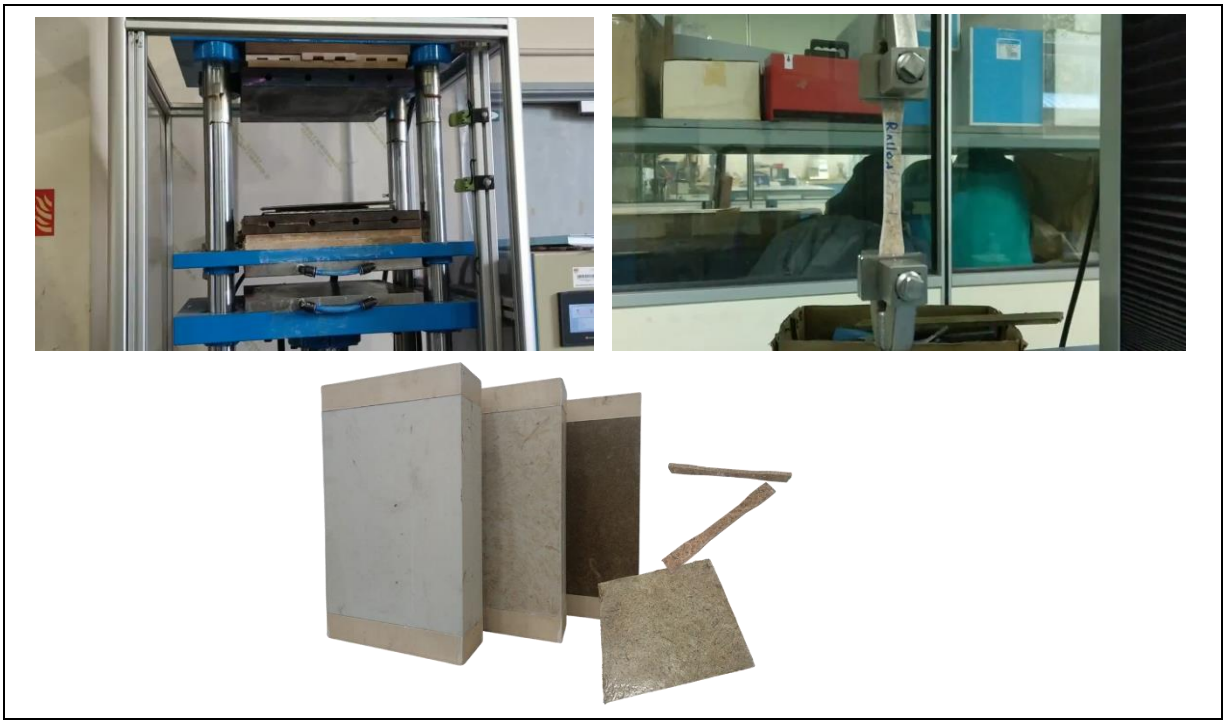
Cover Design: Muhammad Naim Mahyuddin
Typesetting : Siti Akhtar Mahayuddin

e ISBN 978-967-2776-24-6

9 789672 776246

OIL PALM EMPTY FRUIT BUNCH FIBRE (OPEFB) IN THERMOSETTING POLYMER COMPOSITE

Ahmad Afham Che Mohd Ruzaidi[1] and Normila Ahmad[2]
[1,2]Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi MARA Perak Branch,
32610 Seri Iskandar, Perak
Email: afhamcmr1@gmail.com[1], normi199@uitm.edu.my[2]



Oil Palm Empty Fruit Bunch Fibre (OPEFB) In Thermosetting Polymer Composite

Innovation Idea:

The studies of characteristics in natural fibres have been intensified in recent decades. However, the application of its use is still not widespread. Due to the issue of environmental conditions being increasingly affected by carbon dioxide (CO_2) emissions, significant changes in climate and weather patterns are also observed. This research offers a new idea that can be commercialised, taking substantial steps in introducing natural fibre-reinforced polymer composite (NFRPC) products. This especially pertains to the distinctive characteristic of OPEFB in the construction industry market. The selection of methods in forming innovative products for this structural material is also important to guarantee a stronger product and competitive in the current market. This is the reason for the shift in the use of new products or novel construction methods in the future to ensure the sustainability of construction is upheld while at the same time offer conservation to the environment. This study was conducted by employing a qualitative approach involving laboratory experiments. Through these experiments, the acquisition of performance data based on the research objectives could be accomplished. The study also intends to commercialise this innovation idea. The results of the study lead to a unique innovation, allowing potential users to have confidence in evaluating and thus moving forward to the development of this product.

Pejabat Perpustakaan
Librarian Office

Universiti Teknologi MARA
Cawangan Perak
Kampus Seri Iskandar
32610 Bandar Baru Seri Iskandar,
Perak Darul Ridzuan, MALAYSIA
Tel: (+605) 374 2093/2453 Faks: (+605) 374 2299

UNIVERSITI TEKNOLOGI MARA

Surat kami : 700-KPK (PRP.UP.1/20/1)
Tarikh : 20 Januari 2023

UNIVERSITI TEKNOLOGI MARA PERAK
TERIMA
25 JAN 2023
Tindakan
Universiti Teknologi MARA Perak
PEJABAT REKTOR

Prof. Madya Dr. Nur Hisham Ibrahim
Rektor
Universiti Teknologi MARA
Cawangan Perak

Tuan,

PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UiTM CAWANGAN PERAK MELALUI REPOSITORI INSTITUSI UiTM (IR)

Perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
Timbalan Ketua Pustakawan

nar

Setuju.

27.1.2023

PROF. MADYA DR. NUR HISHAM IBRAHIM
REKTOR
UNIVERSITI TEKNOLOGI MARA
CAWANGAN PERAK
KAMPUS SERI ISKANDAR