

# Tentative Outline

## Special Thematic Issue for the journal *Current Materials Science*

**Title of Thematic Issue: "Mechanical behaviour of Natural fibre composites"**

**Guest Editor: Professor S.M. Sapuan**

**Co-Guest Editor: Dr. RA Ilyas**

- **Scope of the Thematic Issue:**

The scope of the thematic issue includes all aspects of mechanical performance of natural fibre composites

**Aim:** To collect the special issue on the mechanical properties of natural fibre composites, including tensile, flexural, impact and fatigue properties.

**Keywords:** Biocomposites; Natural fibre composites; Natural fibres; Mechanical properties

### Sub-topics:

- Tensile properties of natural fibre composites
- Flexural properties of natural fibre composites
- Impact properties of natural fibre composites
- Fatigue properties of natural fibre composites

### Tentative titles of the articles:

- Properties of sugar palm fibre polymer composites.
- Mechanical properties of natural fibre reinforced starch biopolymer composites.
- Evaluation performance of Young's Modulus of natural fibre composites and synthetic fibre composites using statistical analysis.
- Mechanical Properties of Sugarcane Bagasse Reinforced Thermoplastic Cassava Starch/Wax Composites.
- Tensile Properties of Ramie Fibre: Effect of Fibre Maturity Level.
- Quasi-Static Indentation Behaviour of CFRP/ Ramie Fiber Interply Hybrid Laminate.
- Surface modification impact on the mechanical and physical properties of core kenaf fibre reinforced vinyl ester composites.
- Thermal and Mechanical Properties of Woven/non-woven of Water Hyacinth Fibers Reinforced Bio/Synthetic Epoxy Composites
- Mechanical and Thermal Characteristic of Polyvinyl Alcohol Biocomposite Filled by Albizia Chinensis Wood Sawdust Fiber.
- Mechanical properties of plasma treated natural fiber reinforced polymer composites \_A mini Review
- "Mechanical characterization of natural fiber-based hybrid composites – A thematic review"
- Mechanical Properties of Kenaf Fibre Reinforced Acrylonitrile Butadiene Styrene Composites Fabricated by Fused Filament Fabrication
- Notch effects on tensile properties of the natural fibre reinforced composites
- A review of Sago palms (*Metroxylon sago*): Application, fiber characterization and composites.
- Optimization of Natural Polymer Additives Towards Tribological Behavioural of Bio-oil extracted from peel waste of *Musa Aluminata Balbisiana* by Using Taguchi Method
- A review on mechanical properties of thermoplastic for aerospace engineering.
- Mechanical Performance on Carbon Nanotubes reinforced Polymer Composites : A Review

- Influence of 3D fabrication technique on the mechanical performance of natural-based composites: A review
- Micromechanical properties of oil-palm nanocellulose nanocomposites
- Tensile properties of the palm fibre based composites

#### **Schedule:**

- Thematic issue submission deadline: **15 April 2023**

#### **Contacts:**

*Guest Editor Name: Professor S.M. Sapuan*

*Affiliation: Department of Mechanical and Manufacturing Engineering, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia*

*Email: [sapuan@upm.edu.my](mailto:sapuan@upm.edu.my)*

*Co-Guest Editor Name: Dr. R.A. Ilyas*

*Affiliation: Faculty of Chemical and Energy Engineering, Universiti Teknologi Malaysia, UTM Johor Bahru 81310, Johor, Malaysia*

*Email: [ahmadilyas@utm.my](mailto:ahmadilyas@utm.my)*