



# HILMI BIN AMIRUDDIN

## Senior Lecturer

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Scopus h-index: 4

### Education

- **M.Sc. Automotive Engineering** (2006).
- **B.Eng. (Mechanical-Automotive)** (2003).

### Field of Specialization

**Engine Performance, Automotive Performance, Automotive Tribology and Energy.**

### Professional Experiences

**Mechanical Engineer** (2002 –2004) - NEC Machinery (M) Sdn. Bhd., Shah Alam, Selangor.

### Teaching

**Internal Combustion Engine, Automotive Design, Automotive Technology, Vehicle Electrical System and Engineering Graphic.**

### Postgraduate Supervision

**Co-Supervision** – 1 Student - Master by Research (completed).

### Consultation & Community Service

**KKTM, Kuantan** (2007 -2008) – Automotive Lab Set-Up.

**KKTM, Kuantan** (2013) – Automotive Module.

**MRSM Tun Ghafar Baba** (2012) – SolidWorks.

### Selected Professional Appointments

- **Vice Treasurer** (2018) – The 6th Asia International Conference on Tribology (ASIATRIB2018).
- **Member of Publicity & Media Bureau Committee** (2016 - 2018) – Malaysian Tribology Society.
- **Vice Treasurer** (2015) – Malaysian International Tribology Conference (MITC) 2015.
- **Member of Certificates & Awards Committee** (2014) – Malaysian Technical Universities Conference on Engineering and Technology (MUCET) 2014.
- **Team Leader for EV Development** (2012) – Proton Green Mobility Challenge (PGMC) 2012.
- **Chairman** (2012) – Perodua Eco-Challenge (PEC) 2012.

### **Selected Grants**

- **FRGS (117,200)** – (Member) Synthesis of graphene film from palm kernel activated carbon using chemical vapor deposition for durability control, 2016 - 2018
- **TD-FRGS (RM 443,280)** – (Member) New Strategies For Energy Saving : The Future Focus On Energy Efficient Vehicles (EEV) In Malaysia, 2013 – 2015.
- **PROTON & AIM (RM 41,000)** – (Member) Development EV for Proton Green Mobility Challenge (PGMC) 2012, 2012.
- **PJP (RM 20,000)** – (Leader) Influence of Nanolubricant on Tribological Performance, Emissions and Fuel Consumption of a Diesel Engine, 2012.

### **Selected Publications**

- Mohmad, M., Abdollah, M.F.B., Tamaldin, N., & **Amiruddin, H.** (2018). Frictional characteristics of laser surface textured activated carbon composite derived from palm kernel, *International Journal of Advanced Manufacturing Technology*, 95(5-8), 2943–2949.
- Mahmud, D.N.F., Abdollah, M.F.B., Masripan, N.A.B., Tamaldin, N., & **Amiruddin, H.** (2017). Frictional wear stability mechanisms of an activated carbon composite derived from palm kernel by phase transformation study, *Industrial Lubrication and Tribology*, 69(6), 945-951.
- Shuhimi, F.F., Abdollah, M.F.B., Kalam, M.A., Masjuki, H.H., Mustafa, A., Mat Kamal, S.E., & **Amiruddin, H.** (2017), Effect of operating parameters and chemical treatment on the tribological performance of natural fibre composites: A review, *Particulate Science and Technology*, 35(5), 512-524.

### **Intellectual Properties**

- **CRLY00004439** (Copyright) –Agro-waste for sustainable self-lubricating materials(granted)
- **CRLY00001905** (Copyright) - Emerging Lubricant Technology For Ball Bearings (Granted).
- **CRLY00001906** (Copyright) - Nano-Oil For A Greener Future (Granted).

### **Selected Awards**

- **Outstanding Paper Award 2017 (Industrial Lubrication and Tribology Journal) by Emerald Publishing Limited, UK**
- **Excellence Service Award** (2012) – UTeM.
- **Special Group Award – Perodua Eco-Challenge (PEC)** (2013) – AAU 2013.
- **Special Group Award – Proton Green Mobility Challenge (PGMC)** (2012) – AAU 2012.
- **Gold Award – Nano-Oil as Lubricant for Improving Small Diesel Engine Performance** (2013) – UTeMEX 2013.
- **BioInnovation Silver Award – Nano-Oil for a Greener Future** (2013) – BioMalaysia 2013.
- **Silver Award – Nano-Oil for a Greener Future** (2013) – Pecipta 2013.

### **Professional Affiliations**

- **Board of Engineers Malaysia (BEM)** – Malaysia.
- **Malaysian Tribology Society (MYTRIBOS)** – Malaysia.
- **Society of Automotive Engineers (SAE)** – USA.