

Mohammad Khalid

Position: Professor

E-Mail: khalids@sunway.edu.my

Office Extension: 7594



Education:

Ph.D, Engineering (Biotechnology), International Islamic University, Malaysia

MSc, Chemical & Environmental Engineering, University Putra Malaysia, Malaysia

B.E, Chemical Engineering, Visvesvaraya Technological University, India

Teaching:

Multiphase systems

Heat Transfer

Fluid Mechanics

Brief Employment History:

University of Nottingham: Associate Professor (2015-2017)

University of Nottingham: Assistant Professor (2011-2014)

UCSI University: Lecturer (2009-2011)

Research Interests:

My research focusses on nanomaterial synthesis, heat transfer fluids, phase change materials, and energy harvesting. More specifically, I'm currently working on solar energy harvesting using deep eutectic salts (DES) and carbon nanoparticles based nanolubricants and coolants for improving engine performance. Simultaneously, I'm also working on nanocomposites, polymer recycling and radiation processing of polymer blends.

Selected Publications:

1. Priyanka R. Jagadish, **Mohammad Khalid**, Nowshad Amin, Lau Phei Li, and Andy Chan. Process optimisation for n-type Bi₂Te₃ films electrodeposited on flexible recycled carbon fibre using response surface methodology. Journal of Material Science, 2017. **DOI:** 10.1007/s10853-017-1284-2.
2. Mohamed Osama, Amarpreet Singh, Rashmi Walvekar, **Mohammad Khalid**, Thummalapalli Chandra

- Sekhara Manikyam Gupta, Wong Wai Yin. Recent developments and performance review of metal working fluids, *Tribology International*, 114: 389–401, 2017. **DOI:** 10.1016/j.triboint.2017.04.050.
3. Sumair Faisal Ahmed, **M.Khalid**, W.Rashmi, A.Chan, Kaveh Shahbaz Recent progress in solar thermal energy storage using nanomaterials, *Renewable and Sustainable Energy Reviews* 67: 450–460, 2017. **DOI:** 10.1016/j.rser.2016.09.034.
 4. Suganti Ramarad, Chantara T. Ratnam, **Mohammad Khalid**, Abdullah Luqman Chuah, Svenja Hanson. Improved crystallinity and dynamic mechanical properties of reclaimed waste tire rubber/EVA blends under the influence of electron beam irradiation. *Radiation Physics and Chemistry* 130: 362–370, 2017. **DOI:** 10.1016/j.radphyschem.2016.09.023.
 5. Soo Hui Qing, W Rashmi, **M Khalid**, T C S M Gupta, M Nabipoor, Mohammad Taghi Hajibeigy. Thermal conductivity and electrical properties of hybrid SiO₂-graphene naphthenic mineral oil nanofluid as potential transformer oil. *Material Research Express*, 4: 015504, 2017. **DOI:** 10.1088/2053-1591/aa550e
 6. Anand Bellam Balaji, **Mohammad Khalid**, Chantara Theyy Ratnam, Feven Matthews Michael, and Rashmi Walvekar Co-PP/EPDM Blend Optimization Using D-Optimal Design for Medical Applications. *Polymer-Plastics Technology and Engineering*, 56: 216–226, 2017. **DOI:** 10.1080/03602559.2016.1211695.
 7. Mostafa Yusefi, **Mohammad Khalid**, Faizah Md Yasin, Luqman Chuah Abdullah, Mohammad Reza Ketabchi, Rashmi Walvekar. Performance of Cow Dung Reinforced Biodegradable Poly(Lactic Acid) Biocomposites for Structural Applications. *Journal of Polymers and the Environment*, 2017. **DOI:** 10.1007/s10924-017-0963-z
 8. A.K.Rasheed, **M.Khalid**, A.Javeed, W.Rashmi, T.C.S.M.Gupta, A.Chan. Heat transfer and tribological performance of graphene nanolubricant in an internal combustion engine. *Tribology International*, 103: 504–515, 2016. **DOI:** 10.1016/j.triboint.2016.08.007.
 9. A.K.Rasheed, **M.Khalid**, W.Rashmi, T.C.S.M.Gupta, A.Chan. Graphene based nanofluids and nanolubricants–Review of recent developments. *Renewable and Sustainable Energy Reviews*, 63: 346–362, 2016. **DOI:**10.1016/j.rser.2016.04.07.
 10. Feven Matthews Michael, **M.Khalid**, C.T.Ratnam, Ching Yern Chee, W.Rashmi, M.E. Hoque. Sono-synthesis of nanohydroxyapatite: Effects of process parameters. *Ceramics International*, 42: 6263–6272, 2016. **DOI:** 10.1016/j.ceramint.2016.01.009.