

# Dr. Jafrey Daniel James D

**Assistant Professor** 

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# I. Particulars of Educational Qualification:

- 1. Studied B.E Mechanical Engineering at MIET Engineering College, Anna University, 2006-2010
- 2. Studied M.E CAD/CAM at Sri Krishna College of Engineering and Technology, Anna University, 2010-2012.
- 3. Got Ph.D in Production Engineering at NIT-Tiruchirappalli, 2017.
- **II. Title of Ph.D. Thesis**: Manufacturing and Experimental Investigations on Polypropylene/Cloisite30B/Elvaloy-AC-3427 nanocomposites

**IV. Academic Experience** : 1.11 Year

#### VI. List of Publications

## I) INTERNATIONAL JOURNALS: 12

- 1. Jafrey Daniel D and K. Panneerselvam. Modelling of Tensile Properties, Dispersion Studies and Hardness Evaluation of Cloisite 30B in Polypropylene with Elvaloy AC 3427 as Compatablizer. Journal of Composite materials 2015, 50(23), 3219-3227.
- Jafrey Daniel D and K. Panneerselvam. Mechanical and Thermal Behavior of Polypropylene/Cloisite 30B/Elvaloy AC 3427 Nanocomposites Processed by Melt Intercalation Method. Transactions of the Indian Institute of Metals, 70(4), 1131-1138, 2016.
- 3. Jafrey Daniel D and K. Panneerselvam. Processing of Polypropylene/ Spheri Glass 3000 Nanocomposites by Melt Intercalation Method. Procedia Technology, 25, 1114-1124, 2016.
- 4. Jafrey Daniel D and K. Panneerselvam. Study on Tensile Strength, Impact Strength and Analytical Model for Heat Generation in Friction Vibration Joining of Polymeric Nanocomposite Joints. Polymer Engineering and Science, 57(5), 495-507, 2016.

- 5. Jafrey Daniel D and K. Panneerselvam. Manufacturing Issues of Polypropylene Nanocomposite by Melt Intercalation Process. Material today Proceedings, 4, 4032-4041, 2017.
- 6. Jafrey Daniel D and K. Panneerselvam. Mechanical properties of polypropylene nanocomposites: Dispersion studies and modelling. Transactions of the Indian Institute of Metals, 71(1), 225-230, 2018.
- 7. Jafrey Daniel D and K. Panneerselvam. Abrasive wear of Polypropylene/Cloisite30B/Elvaloy AC 3427 nanocomposites. Journal of Composite materials. 52(13), 1833-1843, 2018.
- 8. Jafrey Daniel D and K. Panneerselvam. Investigation on the effects of Cloisite 30B and copolymer (ethylene and butyl acrylate) reinforcement with Polypropylene thermoplastic by Melt Intercalation Method. Journal of Thermoplastic Composite Materials. 31(10), 1371-1392, 2018.
- 9. Jafrey Daniel D and K. Panneerselvam "Mechanical Investigation of Friction Stir Welded Polymeric Nano composites Joints. ISME Journal of Manufacturing Science, 6(2), 38-48.
- 10. Jafrey Daniel D and K. Panneerselvam" Experimental Investigation of Resistance Welded Polypropylene Nanocomposite Joints. Journal of Adhesion Science and Technology. DOI: 10.1080/01694243.2018.1478601.
- 11. Jafrey Daniel D and K. Panneerselvam K. Investigation on Thermal and Tribological Properties of Polypropylene/Spheri Glass 3000 Composites Processed by Melt Intercalation Method. Silicon. DOI: 10.1007/s12633-019-0073-8
- 12. Jafrey Daniel D, S. Manoharan, G. Saikrishnan, and S. Arjun. Influence of Bagasse/Sisal Fibre Stacking Sequence on the Mechanical Characteristics of Hybrid-Epoxy Composites. Journal of Natural Fibers. DOI:10.1080/15440478.2019.1581119.

## II) NATIONAL JOURNALS: 1

**1. Jafrey Daniel D** and K. Panneerselvam "Mechanical Investigation of Friction Stir Welded Polymeric Nano composites Joints. **ISME Journal of Manufacturing Science**, **6(2)**, **38-48**.

#### III) INTERNATIONAL CONFERENCES: 8

- 1. Jafrey Daniel D and K. Panneerselvam. "An experimental investigation on polymeric nano composite material" Proceedings of the 5<sup>th</sup> International and 26<sup>th</sup> All India Manufacturing Technology, Design and Research Conference. AIMTDR 2014, Dec 12-14, 2014, IIT Guwahati, 2014.
- 2. Jafrey Daniel D. "Investigation and Beneficial Effects of Cryogenic Treated Method over Cryogenic Injection Method". Proceedings of Recent Advances in Manufacturing and Materials (RAMM'11), 8-9<sup>th</sup> April 2011.
- 3. Panneerselvam K, T.Raghavendra, Jafrey Daniel D and K.Lokesh "Optimization of Tribological Properties of Aramid and Palm fibers Reinforced with Nylon Hybrid Composite" Proceedings 6th International & 27th All India Manufacturing Technology, Design and Research Conference (AIMTDR-2016), Dec 16-18, 2016, College of Engineering., Pune, Maharashtra, INDIA.
- 4. Panneerselvam K, T.Raghavendra, **Jafrey Daniel D** and Chandresh D "Investigation on Mechanical and Metallurgical Characterization of Sisal and Banana Fibers Reinforced With Polypropylene" **Proceedings 6th International & 27th All India**

- Manufacturing Technology, Design and Research Conference (AIMTDR-2016), Dec 16-18, 2016, College of Engineering., Pune, Maharashtra, INDIA.
- 5. Panneerselvam K, T.Raghavendra, Jafrey Daniel D and T.N.S Ramakrishna" Investigation on Mechanical Characterization and surface morphology of Kenaf and Jute Fibers Reinforced with HDPE" Proceedings 6th International & 27th All India Manufacturing Technology, Design and Research Conference (AIMTDR-2016), Dec 16-18, 2016, College of Engineering., Pune, Maharashtra, INDIA.
- 6. Ramamoorthi R, Sampath P S, Nishanth S and **Jafrey Daniel James D.** "Thermal Properties of Modified Epoxy Nanocomposite". **Proceedings on Advances in Design and Manufacturing Systems (ADAMMS -2012), 5-6**<sup>th</sup> **April 2012**
- 7. **Jafrey Daniel D** and K. Panneerselvam. Multiple Response Optimization of Abrasive Wear of Polypropylene/Cloisite30B/Elvaloy-AC-3427 Nanocomposites using Response Surface Methodology. **CDAMBIES**, **18-20 Jan, 2018**, **NIT-Tiruchirappalli**.
- 8. Jafrey Daniel D. "Investigation and Beneficial Effects of Cryogenic Treated Method over Cryogenic Injection Method". Proceedings of Recent Advances in Manufacturing and Materials (RAMM'11), 8-9<sup>th</sup> April 2011.