The photographs of the tensile samples are given here in this section without disturbing the format of the thesis from the current form.



Figure a. 1 Tensile Sample before test



Figure a. 2 Tensile Sample after test

Paper published in refereed journals:

- A. Kumar, S. Kumar, and N. K. Mukhopadhyay, "Introduction to magnesium alloy processing technology and development of low-cost stir casting process for magnesium alloy and its composites," *J. Magnes. Alloy.*, vol. 6, no. 3, pp. 245– 254, 2018.
- [2]. A. Kumar, S. Kumar, and N. K. Mukhopadhyay, "Casting and characterization of TiC particulate reinforced AZ91 magnesium alloy metal matrix composite through stir casting process," *Int. J. Mech. Eng. Technol.*, vol. 9, no. 06, pp. 856–863, 2018.
- [3]. A. Kumar, S. Kumar, and N. K. Mukhopadhyay, "Synthesis and Characterization of SiCp Reinforced Magnesium Alloy Based Metal Matrix Composite Through Vacuum Assisted Stir Casting Process," *Int. J. Appl. Eng. Res.*, vol. 12, no. 24, pp. 16087–16093, 2017.

Paper accepted in refereed journals:

[1]. A. Kumar, S. Kumar, and N. K. Mukhopadhyay "Development of Magnesium Processing Technology for Casting of Magnesium alloy based Metal Matrix Composites" J. Adv. Manuf. Technol. 2018 (Accepted).

Paper communicated in refereed journals:

[1]. **A. Kumar**, S. Kumar, and N. K. Mukhopadhyay "Mechanical and wear behaviours of sic particulate reinforced magnesium alloy based metal matrix composites" *J. Magnes. Alloy.*, Sept, 2018. (Under review).

Paper presented in an international conference:

- [1]. **A. Kumar**, S. Kumar, and N. K. Mukhopadhyay, "Study of magnesium processing technology and development of low-cost stir casting process for production of magnesium-alloy and its composites," in *International Conference on Emerging Trends in Mechanical & Industrial Engineering*, 2017.
- [2]. A. Kumar, S. Kumar, and N. K. Mukhopadhyay, "Characterization of SiC p Reinforced Magnesium Alloy Metal Matrix Composite by Vacuum Assisted Stir Casting Process," in *International Conference on Emerging Trends in Mechanical* & *Industrial Engineering*, 2017.

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