



Figure 3. EDAX analysis results for ZnO, Mg(OH)₂, CaCO₃ and SiO₂

CONCLUSION

Wear is the loss of material from the rubbing surfaces and its calculate quantity, by weight or volume or size reduction. Wear is the loss of material from the rubbing surfaces and it can be calculated quantity, weight and volume or size reduction. In this study; high density polyethylene incorporated nano powders were found to improve wear rate. Contribution rates have increased abrasion values. All material contribution rate, the highest values were observed in the highest wear. ZnO - HDPE composite materials for wear values increased about 20%. This increase was determined at Mg (OH)₂ at 27%, 109% in the addition of SiO₂, 126% of CaCO₃ filler respectively. Finally, it seen that wear rate of SiO₂ did not change at %20. It is understood that the SiO₂ nano-fill is not effective after this at 15%. After this work, researcher can work on filled new rate and their statistical analyses.

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