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(57) Abstract :
The brake friction composite prepared with fly ash-an industrial waste, white ark shell powder- a sea waste, reinforcing fiber, binder and the friction modifiers comprises composition of Phenol formaldehyde 18-20% by wt.; a glass fiber forming 3-5% by wt.; a Al2O3 5-8% by wt.. Fly ash 25-30 % by wt.; a CNSL powder 8-10 % by wt., Graphite 3-5 % by wt., Nitrile Butadiene Rubber (NBR) 3-5 % by wt., White ark shell powder 6-11 % by wt., Barium Sulphate 15-20 % by wt. The composition is expected to satisfy most of the performance criteria. Besides, it can also offer less release of wear dust during braking, negligible heat transfer at the backing plate to avoid the risk of backing plate detachment, and less noise and vibrations. The use of more than 40 wt. % of waste materials can increase the waste material utilization as well as reduce the overall cost of development of the product.

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