**5. Conclusions:**

* 1. The wear rate of the aluminum alloy coating can be found with the help of pin on disc test under dry sliding conditions.
  2. The wear rate was depended on the load. With increase in load the wear rate was found to be increased. The wear rate was also found depend on the pin material, the wear rate in case of tungsten carbide pin was higher than that of high carbon steel pin& mild steel pin.
  3. The coefficient of friction was found high at high load. result has shown by increasing load coefficient of friction of aluminum silicon piston alloy has increased with high carbon steel and tungsten carbide pin but in case of mild steel it has decreased with increased load.
  4. The SEM micrographs showed that the wear mechanism of the coating was accompanied by abrasion, micro cutting and adhesion.
  5. The rise of temperature during the wear test was very low due to high heat conduction capacity of aluminum.
  6. The coating can be used for self standing coating, and can be used as a light weight and high strength application such as piston.