

# **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR-05**

(A Govt. Aided UGC Autonomous Institute Affiliated to RGPV, Bhopal)

**Department of Chemical Engineering**

## **Fluid Particle Mechanics Lab**

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1. To analyze the given sample by differential, cumulative methods using standard screen.
  2. Determination of size and surface area of irregular particles using a measuring gauge.
  3. To study the crushing behavior and to determine the Rittinger's and Bond's constant of the given solid in a jaw crusher.
  4. To study the crushing behavior and to determine the Rittinger's and Bond's constant of the given solid in a ball mill.
  5. To study the crushing behavior and to determine the Rittinger's and Bond's constant of the given solid in a hammer mill.
  6. Determination of mixer effectiveness and mixing index of given slurries.
  7. To study the filtration behavior of a given slurry using a Plate and Frame Filter press.
  8. To study the filtration behavior of a given slurry using a leaf filter press.
  9. To study the filtration behavior of a given slurry using a rotary drum filter press.
  10. To study the characteristics of liquid-solid fluidized bed.
  11. To study the characteristics of gas-solid fluidized bed.
  12. Study of gas/liquid solid cyclone separator and to evaluate the separation efficiency.
  13. To study the performance of a Dorr Thickener.
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