

# Adsorptive Desulfurization of Diesel

- Lab scale process developed under a collaboration project between CSIR-IIP and SINTEF, Norway
- Initial screening of adsorbent formulations were done at milligram scale using combinatorial technique
- Promising adsorbents were scaled up to gram scale for bench scale adsorption study
- Cyclic adsorption-regeneration experiments completed at bench scale for stability check of desulfurization performance using commercial BS IV diesel (50 ppm S) as feed
- The process can bring down sulphur level to <10 ppm meeting BS VI specifications
- Adsorbent is completely regenerable
- Currently pilot scale validation of the process is ongoing at CSIR-IIP
- Adsorbent scaled up further to 20 Kg scale for Pilot Testing at CSIR-IIP

**Scale up factor: 150 times of single column bench scale study**

**Pilot Scale Study: Two column operation in tandem**

**Feed Throughput: 10 LPH BS IV diesel**

