

# Measurement of pumping speed of the noble gas in the closed-refrigeration cryopump

## Abstract

*Exhaust and Fuelling Technology Development division is working in the field of cryogenics and vacuum. EFTD, Division have developed cryopumps for the TOKAMAK applications. Cryopump is a vacuum pump which can produce Ultra-High Vacuum with large pumping speed for various gases with high adsorption capacity because of the high porosity of activated charcoal. Pumping speed of the noble gases is required to be measured for finding the sticking co-efficient of the gases at the different temperatures. This project involves assembly of the components for the pump, pumping speed test and data analysis using Molflow.*

## Academic Project Requirements:

1) Required No. of student(s) for academic project: 1

2) Name of course with branch/discipline: Mechanical Engineering

3) Academic Project duration:

(a) Total academic project duration: 40 Weeks

(b) Student's presence at IPR for academic project work: 5 Full working Days per week

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