

## National Institute of Technology Rourkela

Upon the recommendation of the Senate, hereby confers the degree of

Doctor of Philosophy

on

Mukesh Kumar Singh

who has successfully defended the thesis entitled 
"Navigational Path Analysis of Mobile Robot in Various Environment" 
and has fulfilled all other requirements for the degree in the Department of 
Mechanical Engineering

Given this day, under the seal of the Institute at Rourkela in the Republic of India, the 16th Day of January 2010.

Registrar

Stague:

Chairman

**Board of Governors**