Indian Institute of Technology Kharagpur

Upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

in

Engineering

on Nil Ratan De

Given this day under the seal of the Institute at Kharagpur in the Republic of India.

The 12th March 1990.

Title of thesis:

Some Studies on Distortion in Welding.

Registered in:

Department of Mechanical Engineering

Registrar

de la constante