





National Institute of Technology Rourkela

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

Doctor of Philosophy

on Nishi Yadav

who has successfully defended the thesis entitled "Efficient 3D-Localization Algorithms in Underwater Acoustic Sensor Network Employing Optimization Methods"

on 26-Feb-2025

and has fulfilled all other requirements for award of the degree.

Given this day, under the seal of the Institute at Rourkela in the Republic of India, the 06th Day of September 2025.



Pegistrar

ar Director