



19/1878/514EE1013



National Institute of Technology Kourkela

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

Doctor of Philosophy

on

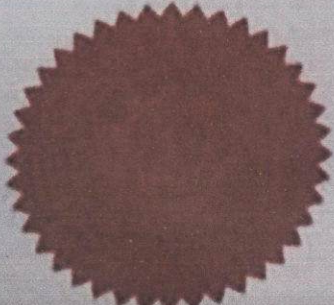
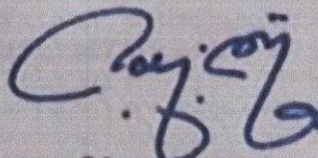
Jagatpati Raiguru

who has successfully defended the thesis entitled
"Promoting Earth Abundant Semiconductor - CZTS as Hole
Transporting Material for Perovskite Solar Cell Application"

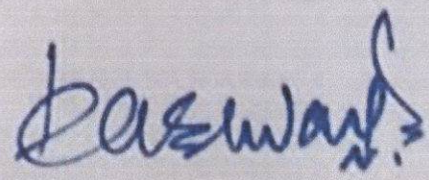
and has fulfilled all other requirements
for the degree in the Department of
Electrical Engineering.

22/8
PRINCIPAL
Aditya Engineering College
SURAMPALEM

Given this day, under the seal of the Institute
at Kourkela in the Republic of India,
the 13th Day of August 2022.



Registrar




Director