

CERTIFICATE OF THE GUIDE

This is to certify that this Thesis entitled “**ATTACKS OVER MOBILE AD-HOC NETWORKS: CHALLENGES, DETECTION AND COUNTERMEASURES**” by **SUNIL KUMAR JANGIR**, submitted in fulfillment of the requirement for the Degree of Doctor of Philosophy in **COMPUTER SCIENCE & ENGINEERING** under School of Engineering of JECRC University, Jaipur, during the academic year 2014-2018, is a bonafide record of work carried out under my guidance and supervision.

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