



इलेक्ट्रॉनिकी अभियांत्रिकी विभाग
भारतीय प्रौद्योगिकी संस्थान
(काशी हिन्दू विश्वविद्यालय)
वाराणसी-221005
DEPARTMENT OF ELECTRONICS ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
(BANARAS HINDU UNIVERSITY)
VARANASI-221005

Phone: 0542-2307010, 6701501

Fax: 0542-2366758

e-mail: head.ece@itbhu.ac.in

DECLARATION BY THE CANDIDATE

I, **Saeed Hamood Ahmed Mohammed Alsamhi**, certify that the work embodied in this thesis is my own bonafide work carried out by me under the supervision of **Dr. N. S. Rajput, Assistant Professor** for a period of **three years and one months** from (**October 2012 to October 2015**), at the **Department of Electronics Engineering, Indian Institute of Technology (Banaras Hindu University)**, Varanasi. The matter embodied in this Ph. D. thesis has not been submitted for the award of any other degree/diploma.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and the body of the thesis. I further declare that I have not willfully lifted up some other's work, paragraphs, text, data, results, etc. reported in the journals, books, magazines, reports, dissertations, thesis, etc., or available at websites and included them in this thesis and cited as my own work.

Date:

(Signature of the candidate)

Place : Varanasi

(**Saeed Hamood Ahmed Mohammed Alsamhi**)

Certificate from the Supervisor

It is certified that the above statement made by the candidate is correct to the best of my knowledge.

(Supervisor)

Dr. N. S. Rajput

(**Prof. Satyabrata Jit**)

Head

Department of Electronics Engineering
Indian Institute of Technology
(Banaras Hindu University), Varanasi