

THESIS ON
“INVESTIGATION OF NOVEL SYNTHETIC MOLECULES
AND NATURAL PRODUCT FOR PROSTATIC
HYPERPLASIA”

Submission of thesis
for
the award of degree of

DOCTOR OF PHILOSOPHY
IN
DEPARTMENT OF BIOSCIENCES



INTEGRAL UNIVERSITY, LUCKNOW

SUBMITTED BY

Vikas Verma

ENROLLMENT NO- 10061

JUNE, 2014

THESIS ON
“INVESTIGATION OF NOVEL SYNTHETIC MOLECULES AND
NATURAL PRODUCT FOR PROSTATIC HYPERPLASIA”

Submission of thesis
for
the award of degree of

DOCTOR OF PHILOSOPHY
IN
DEPARTMENT OF BIOSCIENCES



INTEGRAL UNIVERSITY, LUCKNOW

SUBMITTED BY

Vikas Verma



*Division of Endocrinology
CSIR-Central Drug Research Institute
Lucknow*

Name of Supervisor

Dr. Rolee Sharma
Associate Professor
Department of Biosciences
Integral University,
Lucknow

Name of co-supervisor

Dr. Gopal Gupta
Senior Principal Scientist
Division of Endocrinology
Central Drug Research Institute
Lucknow

Enrollment No.-10061



Dedicated

to

My

Family

Date

CERTIFICATE

This is to certify that **Mr. Vikas Verma** has carried out the research work presented in the thesis entitled “**Investigation of novel synthetic molecules and natural products for prostatic hyperplasia**” for the award of **Degree of Doctor of Philosophy (Ph.D.) in Biosciences** from **Integral University, Lucknow** under my supervision. It is also certified that:

- (i) The thesis embodies the original work of the candidate and has not been earlier submitted by us or any other candidate elsewhere for any degree,
- (ii) The candidate worked under me for the prescribed period,
- (iii) The thesis fulfills the requirements of the norms and standards prescribed by the Integral University, Lucknow.

Signature of Supervisor

Dr. Rolee Sharma
Associate Professor



सी.एस.आई.आर.-केन्द्रीय औषधि अनुसंधान संस्थान, लखनऊ
(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

सेक्टर 10, जानकीपुरम विस्तार, सीतापुर रोड, लखनऊ – 226021 (भारत)

CSIR - Central Drug Research Institute

(Council of Scientific & Industrial Research)

Sector 10, Janakipuram Extension, Sitapur Road, Lucknow - 226 021 (India)



Dr. Gopal Gupta, PhD

Senior Principal Scientist

Division of Endocrinology

June 12, 2014

CERTIFICATE

This is to certify that **Mr. Vikas Verma** has carried out the research work presented in the thesis entitled “**Investigation of novel synthetic molecules and natural products for prostatic hyperplasia**” under my supervision, for the award of **Degree of Doctor of Philosophy (Ph.D.) in Biosciences** by the **Integral University, Lucknow**.

It is also certified that:

- (i) The thesis embodies original work of the candidate that has not been submitted earlier by us or any other candidate elsewhere for any degree,
- (ii) The candidate worked under me for the prescribed period,
- (iii) The thesis fulfills the requirements of the norms and standards prescribed by the Integral University, Lucknow.

Dr. Gopal Gupta
(Co-Supervisor)