



Vel Tech

Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. as 3 of UGC Act, 1956)



Sl. No. : 7366

Reg. No. : 09REEC1007

The Board of Management of this Deemed University
hereby makes known that

N.SUDHAKAR REDDY

has been admitted to the Degree of
Doctor of Philosophy
in

ELECTRONICS AND COMMUNICATION ENGINEERING

having been certified by duly appointed examiners to be
qualified to receive the same in the year JUL-2017

in accordance with the provisions of
UGC Regulations, 2009 (for award of Ph.D. Degree)

Title of the Thesis:

**ARTIFICIAL BEE COLONY BASED SMART ULTRA DISC ANTENNA
CLUSTERING FOR IMPROVING SIGNAL TO NOISE RATIO**

Given under the seal of this Deemed University



11.08.2018


Registrar


Vice Chancellor


President

Veltech Dr.RR & Dr.SR University

(Estd. in 3 of UGC Act, 1956)

PROCEEDINGS OF THE Ph.D. ORAL EXAMINATION OF Mr./Ms. N. Sudhakar Reddy HELD AT 11:00 A.M./P.M. ON 24/07/17 IN THE video conference Hall VELTECH DR.RR & DR.SR UNIVERSITY, AVADI, CHENNAI-600 062.

The Ph.D. Oral Examination of Mr./Ms. N. Sudhakar Reddy (Reg.No. 09REEC1067) on the thesis Artificial Bee Colony based Noise Ratio Smart Ultra Disc Antenna clustering for Improving signal has been conducted on 24/07/17 at 11:00 A.M./P.M. in the video conference Hall Vel Tech Dr.RR & Dr.SR Technical University, Avadi, Chennai-600 0062.

Members Present

1. Dr. P. RATESH KUMAR Thesis Examiner
2. Dr. T. RAMASHRI Expert Member
3. Dr. K. SIDDAPPA NAIDU Supervisor & Convener

24.07.17
The research scholar Mr./Ms. N. Sudhakar Reddy has presented the salient features of his/her research work. The members of the Board and audiences have posed the questions related to the subject. The questions raised by the Foreign and Indian Examiners have also been put to the scholar. The scholar has answered all the questions from the Board Members and the audiences. The scholar's performance in the Ph.D. Oral Examination is Successfully completed

Based on the scholar's research work, oral presentation and, clarifications and answers to the questions from the Examiners and audiences, the Board unanimously recommends to accept the Ph.D. Thesis for the award of Degree of Doctor of Philosophy in Electronics & Communication Engineering in the the School of S&EC, Veltech Dr.RR & Dr.SR University to Mr./Ms. N. Sudhakar Reddy.

1. [Signature] Thesis Examiner
2. [Signature] Expert Member
3. [Signature] Supervisor & Convener

Prof. Dr. E. Kannan
Registrar

Vel Tech
Rangarajan Dr. S. Sankaranarayanan
R&D Institute of Science and Technology
(Decreed in 3 of University Act, 1956)

**REPORT OF THE BOARD OF EXAMINERS FOR THE PUBLIC ORAL EXAMINATION
IN THE CASE OF MR.N.SUDHAKAR REDDY (REG. NO. 09REEC1007), PART-TIME
RESEARCH SCHOLAR, DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING, VELTECH Dr. RR & Dr. SR UNIVERSITY,
AVADI, CHENNAI- 600062.**

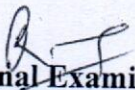
The Public Viva-Voce examination of Mr.N.Sudhakar Reddy (Reg. no. 09REEC1007), on his thesis entitled "Artificial Bee Colony Based Smart Ultra Disc Antenna Clustering for Improving Signal to Noise Ratio" submitted for the award of Ph.D degree in Electronics & Communication Engineering of Veltech Dr. RR & Dr. SR University has been conducted as per the following schedule:

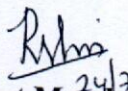
Date: 24.7.17, Monday at 11 a.m.
Venue: Video Conference Hall, VTU
External Examiners: Dr.P.Rajesh Kumar,
Professor & Head, ECE,
Andhra University college of Engineering,
Visakhapatnam,
A.P-530003.

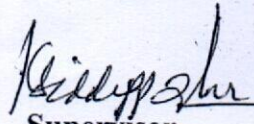
Dr. T Ramashri
Professor,
Dept. of ECE,
S.V. College of Engineering,
S.V.U Tirupathi
Pin - 517502

Supervisor and Convener: Dr. K. Siddappa Naidu, (Professor, VTU)

Based on the candidate's exposition of his thesis and his answers to the questions raised by the examiners and other participants, the Board of Examiners has resolved to recommend that the performance of the candidate in his Ph.D. Oral Examination is good and declare to have Passed his Ph.D. Oral Examination and further recommend the award of Ph.D degree in Electronics and Communication Engineering of Veltech Dr. RR & Dr. SR University to the candidate.


External Examiner


Expert Member


Supervisor