



ANNA UNIVERSITY, CHENNAI - 600 025  
CENTRE FOR RESEARCH




CERTIFICATE

1. This is to certify that no corrections/suggestions were pointed out by the Indian/Foreign Examiner(s) in the Thesis titled " Persistence of Nodes Robustness on Scalable Multicast Routing in MANET"  
" submitted by Mr./Ms. Velumani.R

OR

2. This is to certify that all corrections and suggestions pointed out by the Indian /Foreign Examiner(s) are incorporated in the Thesis titled " Persistence of Nodes Robustness on Scalable Multicast Routing in MANET"  
" submitted by Mr./Ms. Velumani.R

Signature of the Joint Supervisor  
(if applicable)

  
Signature of the Supervisor

Place : *Tiruchengode*

Date : *31.08.11*

*Dr. K. DURAISWAMY, B.E., M.Sc., Engg. Ph.D.*  
DEAN  
M.S. RANGASAMY COLLEGE OF TECHNOLOGY  
TIRUCHENGODE-637209.  
NAMAKKAL DIST. TAMILNADU.



ANNA UNIVERSITY, CHENNAI - 600 025  
CENTRE FOR RESEARCH



Proceedings of the Ph.D. Viva-Voce Examination of Mr./Ms. Velumani.R held at 11.30 AM on 31.08.2015 in Department of CSE,K.S.R College of Technology,Thiruchencode

The Ph.D. Viva-Voce Examination of Mr./Ms. Velumani.R (Reg. No. 10960621117) on his/her Ph.D. Thesis Entitled " Persistence of Nodes Robustness on Scalable Multicast Routing in MANET

" was conducted on 31.08.2015 at 11.30 AM in the Department of CSE,K.S.R College of Technology,Thiruchencode.

The following Members of the Oral Examination Board were present:

- |    |  |                       |
|----|--|-----------------------|
| 1. | Dr. K.Chandra Sekaran,Professor,Department of Computer Science & Engineering,National Institute of Technology Karnataka,Surathkal Srinivasnagar (po) Mangalore | Indian Examiner       |
| 2. | Dr. R.Shanmugalakshmi,Associate Professor,Department of Computer Science and Engineering,Government College of Technology,Coimbatore                           | Subject Expert        |
| 3. | Dr. Duraiswamy,K,Professor & Dean,K.S.Rangasamy College of Technology,   | Supervisor & Convenor |

The research scholar, Mr./Ms. Velumani.R presented the salient features of his/her Ph.D. work. This was followed by questions from the board members. The questions raised by the Foreign and Indian Examiners were also put to the scholar. The scholar answered the questions to the full satisfaction of the board members.

The corrections suggested by the Indian/Foreign examiner have been carried out and incorporated in the Thesis before the Oral examination.

Based on the scholars research work, his/her presentation and also the clarifications and answers by the scholar to the questions, the board recommends that Mr./Ms.Velumani.R be awarded Ph.D. degree in the **Faculty of Information and Communication Engineering**.

- |    |   |                           |
|----|---|---------------------------|
| 1. |  | Indian Examiner           |
| 2. |  | Subject Expert            |
| 3. |  | Supervisor & Convenor     |
| 4. |   | Joint Supervisor (If any) |

**ANNA UNIVERSITY**  
**CHENNAI 600 025**

**CERTIFICATE**

The research work embodied in the present thesis entitled “**PERSISTENCE OF NODE’S ROBUSTNESS ON SCALABLE MULTICAST ROUTING IN MANET**” has been carried out in the Department of Computer Science and Engineering, K.S. Rangasamy College of Technology, Tiruchengode. The work reported herein is original and does not form part of any other or dissertation on the basis of which a degree or award was conferred on an earlier occasion or to any other scholar.

I understand the University’s policy on plagiarism and declare that the thesis and publications are my own work, except where specifically acknowledged and has not been copied from other sources or been previously submitted for award or assessment.



**VELUMANI R**  
RESEARCH SCHOLAR

**Counter Signed by**



**Dr. K. DURAISWAMY**

SUPERVISOR

Professor,

Department of Computer Science and  
Engineering,

K.S. Rangasamy College of Technology,

Tiruchengode- 638 215,

Tamil Nadu, India.