



Vel Tech

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



Sl. No. : **10774**

Reg. No. : **15REME1018**

The Board of Management of
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of
Science and Technology (Deemed to be University)

hereby makes known that

N.V.S.S. SAGAR

S/O RAMADEVI K

has been admitted to the Degree of

Doctor of Philosophy

in

MECHANICAL ENGINEERING

having been certified by duly appointed examiners to be

qualified to receive the same in the year **APR-2020**

in accordance with the provisions of

UGC Regulations 2009 (for the award of Ph.D. Degree)

Title of the Thesis:

**DESIGN OF MONOCOQUE QUADCOPTER STRUCTURE THROUGH INTEGRATION
OF TOPOLOGY OPTIMIZATION AND ADDITIVE MANUFACTURING**

Given under the seal of this Deemed to be University

Dated : **06-NOV-2021**

Registrar



S. Sathish
Vice Chancellor



B. Srinivas
Chancellor



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PROCEEDINGS OF THE Ph.D. ORAL EXAMINATION OF Mr N V S S Sagar HELD AT 02 P.M. ON 22.04.2021 THROUGH ONLINE MODE AT VEL TECH RANGARAJAN Dr. SAGUNTHALA R&D INSTITUTE OF SCIENCE AND TECHNOLOGY, AVADI, CHENNAI-600 062.

The Ph.D. Oral Examination of Mr./Ms. N V S S Sagar (Reg. No. 15REME1018) on the thesis title Design of Monocoque Quadcopter Structure Through Integration of Topology Optimization and Additive Manufacturing has been conducted on 22.04.2021 at 02 A.M./P.M., through online mode using Zoom tool.

Members Present

- | | |
|----------------------------|-----------------------|
| 1. Dr Venkateswarlu Karodi | Indian Examiner |
| 2. Dr. G. S. Dangayach | Subject Expert |
| 3. Dr. E. Balasubramanian | Supervisor & Convener |

The research scholar Mr./Ms. N V S S Sagar 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 Good.

Based on the scholar's research work, oral presentation, 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 Mechanical Engineering in the School of Mechanical and Construction, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology to Mr./Ms. N V S S Sagar

- | | |
|----|-----------------------|
| 1. | Indian Examiner |
| 2. | Subject Expert |
| 3. | Supervisor & Convener |



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23/4/2021

**REPORT OF THE BOARD OF EXAMINERS FOR THE PH. D. PUBLIC ORAL
EXAMINATION OF N V S S SAGAR (REG. NO. 15REME1018), PART-TIME RESEARCH
SCHOLAR, DEPARTMENT OF MECHANICAL ENGINEERING,
VEL TECH RANGARAJAN DR. SAGUNTHALA R&D INSTITUTE OF
SCIENCE AND TECHNOLOGY, AVADI, CHENNAI- 600062.**

The Public Viva-Voce examination of N.V.S.S Sagar (Reg. No. 15REME1018), on his Ph. D thesis entitled "*Design of Monocoque Quadcopter Structure Through Integration of Topology Optimization and Additive Manufacturing*" submitted for the award of Ph. D degree in the Department of Mechanical Engineering of Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology has been conducted as per the following schedule:

Date : 22/04/2021, Thursday at 2.00 P.M.
Mode : Online Video Conference - Zoom
Meeting Link : Meeting ID:- 728 0314 3301, Password:- h5cWYT
<https://us04web.zoom.us/j/72803143301?pwd=QWowSWh6MlRlWU9vNEhBakl5eHQrUT09>

Indian Examiner : Dr. Venkateswarlu Karodi
Senior Principal Scientist
CSIR – National Aerospace Laboratories
Bangalore - 560017, Karnataka, India.
Email: kvenkat@nal.res.in ; Phone Number: 080-25086333

Subject Expert : Dr. G. S. Dangayach
Professor
Department of Mechanical Engineering
National Institute of Technology, Jaipur, India.
Email: dangayach@gmail.com; Mobile: +91 9549654493

Supervisor and Convener : Dr. E. Balasubramanian (Professor, Vel Tech)

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 have 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 Mechanical Engineering of Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology to the candidate.

Subject Expert

Indian Examiner

Supervisor