



**MANGOLRE UNIVERSITY**  
**DEPARTMENT OF MEDICAL PHYSICS**

**CERTIFICATE**

This is to certify that **Mr. Sandeep Dsouza** (Register Number:P05AZ22S130020) has satisfactorily completed a project entitled “**Effect of contrast media on the dose deposition and evaluation of force electron density feature in monaco treatment planning system-a dosimetric study**” under the guidance of **Mr. Avin Kumar**, Chief Medical Physicist & RSO, A.J. Hospital and Research Centre Mangalore and **Prof. Karunakar Naregundi**, Coordinator Medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2023-24.

  
**Mr. Avin Kumar**

Chief Medical Physicist & RSO  
AJHRC, Mangalore

  
**Prof. Karunakara Naregundi**

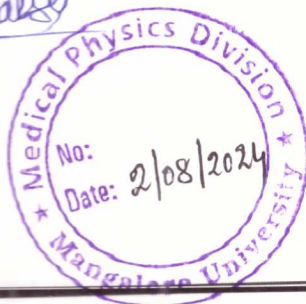
Co-Ordinator  
Medical physics Division  
Mangalore University

**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

External examiners

1. 

2.






**MANGALORE UNIVERSITY**  
**DEPARTMENT OF MEDICAL PHYSICS**  
**CERTIFICATE**

This is to certify that **Mr. Nkurunziza Rodgers** (Registration Number: P05AZ22S130026) has satisfactorily completed a project entitled "**Comparison of gamma analysis using two different commercially available 2D array detectors for pre-treatment verification of volumetric modulated arc therapy**", under the guidance of **Mr. Avin Kumar**, medical physicist & RSO, AJ Hospital and Research Centre and **Prof. Karunakara Naregundi**, coordinator medical physics division, Mangalore university, in partial fulfilment of the requirements for the award of the degree of master of science in medical physics by Mangalore university during the academic year 2022-2024.

  
**Mr. Avin Kumar**

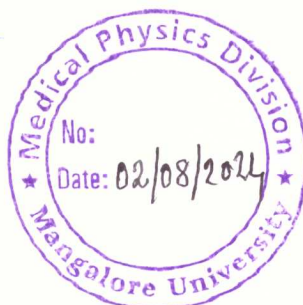
Chief Medical Physicist & RSO  
AJ Hospital and Research Centre  
Mangalore

  
**Prof. Karunakara Naregundi**

Coordinator  
Medical Physics Division  
Mangalore University  
**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

External examiners:

1. 
2. 





## MANGALORE UNIVERSITY

### DEPARTMENT OF MEDICAL PHYSICS

#### CERTIFICATE

This is to certify that **Mr. Vinayaka R Shenoy** (Register Number: P05AZ22S130022) has satisfactorily completed a project entitled **“Validation of impact of iodinated contrast agents on dose deposition in radiotherapy using different dosimetric systems”** under the guidance of **Mr. Avin Kumar**, Chief Medical Physicist & RSO, A.J. Hospital and Research Centre, Mangalore, and **Prof. Karunakara Naregundi**, Coordinator of the Medical Physics Division, Mangalore University, Mangalagangothri, in partial fulfillment of the requirements for the award of the degree of Master of Science in Medical Physics by Mangalore University during the academic year 2023-24.

  
**Mr. Avin Kumar**

Chief Medical Physicist & RSO  
A.J Hospital and Research Centre  
Mangalore

  
**Prof. Karunakara Naregundi**

Co-Ordinator  
Medical Physics Division  
Mangalore University

External examiners:

1. 

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**MANGALORE UNIVERSITY**

**DEPARTMENT OF MEDICAL PHYSICS**

**CERTIFICATE**

This is to certify that **Mr. Ishaq C.I** (Register Number: P05AZ22S130016) has satisfactorily completed a project entitled “**Comparision of Esophagus Dose in Breast Cancer Patients undergoing Supraclavicular Irradiation with and without Esophagus Contouring**” under the guidance of **Mr. Krishna Chandrasekar**, Lead Medical Physicist & RSO, Mangalore Institute of Oncology, Mangalore. and **Prof. Karunakara Naregundi**, Coordinator Medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2023-24.

**Mr. Krishna Chandrasekar**  
Lead Medical Physicist & RSO  
Mangalore Institute of Oncology  
Mangalore

**Prof. Karunakara Naregundi**

Co-Ordinator  
Medical Physics Division  
Mangalore University

**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

External Examiners:

1.

2.





**MANGALORE UNIVERSITY**  
**DEPARTMENT OF MEDICAL PHYSICS**

**CERTIFICATE**

This is to certify that Varsha (Reg No: P05AZ22S130015) has satisfactorily completed a project entitled **“Study on field output correction factors in small field dosimetry based on IAEA /AAPM code of practice”** under the guidance of Dr. K. Jayapalan, senior medical physicist & Radiological safety officer, Zulekha Yenepoya Institute of Oncology, Yenepoya Medical College Hospital, Yenepoya (Deemed to be university) and Prof. Karunakara Naregundi, Coordinator Medical Physics Division, Mangalore University, in partial fulfillment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2023-24.

**Dr. K. Jayapalan**  
Senior medical physicist & RSO  
Dept of Radiation Oncology  
Zulekha Yenepoya Institute of Oncology

**Prof. Karunakara Naregundi**  
Co-ordinator  
Medical Physics Division  
Mangalore University

**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

External examiners:

- 1.
- 2.





**MANGOLRE UNIVERSITY**

**DEPARTMENT OF MEDICAL PHYSICS**

**CERTIFICATE**

This is to certify that **Mr. Prathyush P Kumar** (Register Number-P05AZ22S130021) has satisfactorily completed a project entitled “**Comparison of VMAT Plan Parameters for Carcinoma Head and Neck regions using Flattened and Flattening Filter Free High energy photons**” under the guidance of **Mr. Avin Kumar**, Chief Medical Physicist & RSO, A.J. Hospital and Research Centre Mangalore and **Prof. Karunakar Naregundi**, Coordinator Medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2022-24.

**Mr. Avin Kumar**

Chief Medical Physicist & RSO

AJHRC, Mangalore

**Prof. Karunakara Naregundi**

Co-Ordinator

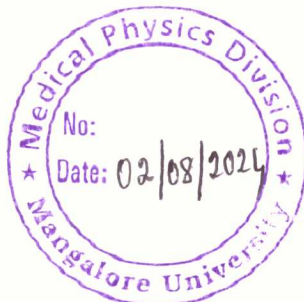
Medical physics Division

Mangalore University

**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

External examiners

- 1.
- 2.





**MANGALORE UNIVERSITY**  
**DEPARTMENT OF MEDICAL PHYSICS**

**CERTIFICATE**

This is to certify that **Ms. ZULEKHA M.A** ( Reg No: P05AZ22S130017 ) has satisfactorily completed a project entitled "**COMPARISON STUDY OF PORTAL DOSIMETRY WITH PTW 2-D ARRAY SYSTEM FOR RAPID ARC FOR PATIENT SPECIFIC QA IN CERVIX CANCER PATIENTS**" under the guidance of **Mr. Krishna Chandrasekhar**, Lead Medical Physicist & RSO, Mangalore Institute of Oncology, Mangalore and **Prof. Karunakara Naregundi**, Coordinator Medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic Year 2022-2024.

**Mr. Krishna Chandrasekhar**

Lead Medical Physicist & RSO

Mangalore Institute of Oncology

Mangalore

**Prof. Karunakara Naregundi**

Co-Coordinator

Medical Physics Division

Mangalore University

**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

External examiners:

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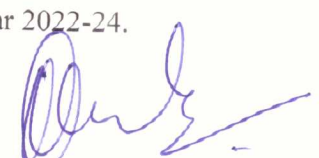


**MANGOLRE UNIVERSITY**  
**DEPARTMENT OF MEDICAL PHYSICS**

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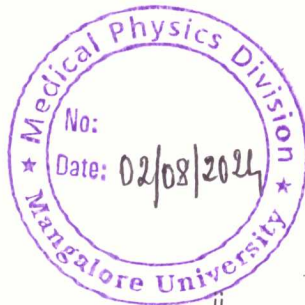
This is to certify that **Mr. Sumanth G Madivala** (Reg.No-P05AZ22S130018) has satisfactorily completed a project entitled **“IMPACT OF MULTI-LEAF COLLIMATOR DESIGN AND THE TREATMENT PLANNING SOFTWARE ON PLAN QUALITY FOR CARCINOMA PROSTATE USING IMRT STEP & SHOOT TECHNIQUE”** under the guidance of **Mr. Avin Kumar**, Chief Medical Physicist & RSO, A.J. Hospital and Research Centre Mangalore and **Prof. Karunakar Naregundi**, Coordinator Medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2022-24.

  
**Mr. Avin Kumar**  
Chief Medical Physicist & RSO  
AJHRC, Mangalore

  
**Prof. Karunakara Naregundi**  
Co-Ordinator  
Medical Physics Division  
Mangalore University  
**Coordinator**  
Medical Physics Division  
Mangalore University  
Mangalagangothri - 574199

External examiners

1. 
2. 






MANGALORE UNIVERSITY

DEPARTMENT OF MEDICAL PHYSICS

CERTIFICATE

This is to certify that Mr Boifang Nchengeti Khani (Register Number: P05AZ22S130024) has satisfactorily completed a project entitled **"Effect of CT slice thickness on radiotherapy planning for carcinoma prostate using volumetric modulated arc therapy "** under the guidance of **Mr. Avin Kumar**, Chief Medical Physicist & Radiological Safety Officer, Dept of Radiation Oncology, A.J Hospital and Research Centre and **Prof. Karunakara Naregundi**, Coordinator Medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2023- 2024.

  
**Mr. Avin Kumar**

Chief Medical Physicist and RSO

Dept of Radiation Oncology

A.J Hospital and Research Centre



**Prof. Karunakara Naregundi**


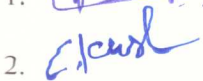
Coordinator

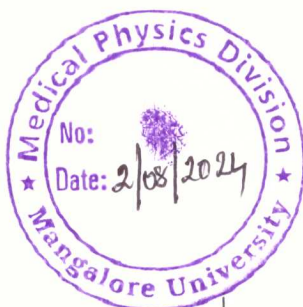
Medical Physics Division

Mangalore University

**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

External Examiners:

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## MANGALORE UNIVERSITY

### DEPARTMENT OF MEDICAL PHYSICS

#### CERTIFICATE

This is to certify that **Ms. Haritha P** (P05AZ22S130014) has satisfactorily completed a project entitled **"Invivo skin dose measurement in inguinal node case and breast case using EBT3 film "** under the guidance of **Mr. Krishna Chandrasekar**, Medical physicist & RSO, Mangalore institute of oncology, Pumpwell, Mangalore and **Prof. Karunakara Naregundi**, coordinator medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2022-24.

**Mr. Krishna Chandrasekar**

Medical physicist & RSO

Radiation safety officer

MIO, Pumpwell, Mangalore

**Prof. Karunakara Naregundi**

Co-ordinator

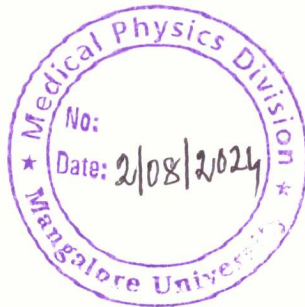
Medical Physics Division

Mangalore University

**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

External examiners:

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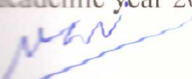




**MANGALORE UNIVERSITY**  
**DEPARTMENT OF MEDICAL PHYSICS**

**CERTIFICATE**

This is to certify that **Shama Bhandary** (Reg No: P05AZ22S130023) has satisfactorily completed a project entitled **"Beam characteristics of flattening filter free photon beam"** under the guidance of **Dr. K. Jayapalan**, senior medical physicist & Radiological safety officer, Zulekha Yenepoya Institute of Oncology, Yenepoya Medical College Hospital, Yenepoya (Deemed to be university) and **Prof. Karunakara Naregundi**, Coordinator Medical Physics Division, Mangalore University, in partial fulfillment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2023-24

  
**Dr. K. Jayapalan**

Senior medical physicist & RSO

Dept of Radiation Oncology

Zulekha Yenepoya Institute of Oncology

  
**Prof. Karunakara Naregundi**

Co-Ordinator

Medical physics division

Mangalore University

**Coordinator**

**Medical Physics Division**

**Mangalore University**

**Mangalagangothri - 574199**

External examiners:

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2. 





## MANGALORE UNIVERSITY

### DEPARTMENT OF MEDICAL PHYSICS

#### CERTIFICATE

This is to certify that **Mr. Bryan Collen Thebeemang** (Register Number: P05AZ22\$130025) has satisfactorily completed a project entitled **“Evaluating the efficacy of Pylinac in radiation therapy quality assurance: A comparative analysis with established quality assurance software”** under the guidance of **Mr. Krishna Chandrasekar**, Medical physicist & RSO, Mangalore Institute of Oncology, Pumpwell, Mangalore and **Prof. Karunakara Naregundi**, coordinator medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2022-24.

**Mr. Krishna Chandrasekar**

Medical physicist & RSO

Radiation safety officer

MIO, Pumpwell, Mangalore

**Prof. Karunakara Naregundi**

Co-ordinator

Medical Physics Division

Mangalore University

**Coordinator**

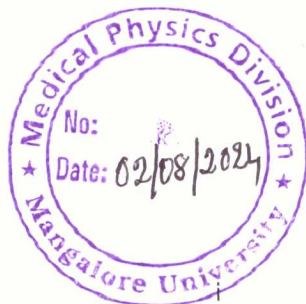
**Medical Physics Division**

**Mangalore University**

**Mangalagangothri - 574199**

External examiners:

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- 2.




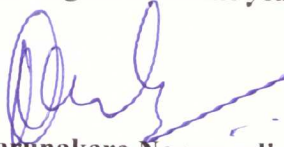


**MANGALORE UNIVERSITY**  
**DEPARTMENT OF MEDICAL PHYSICS**


**CERTIFICATE**

This is to certify that **Mr. Rahul R.S** (P05AZ22S130019) has satisfactorily completed a project entitled **"DOSIMETRIC STUDY OF GLIOBLASTOMA MULTIFORME USING COPLANAR AND NON-COPLANAR BEAMS"** under the guidance of **Mr. Krishna Chandrasekar**, Medical physicist & RSO, Mangalore institute of oncology, Pumpwell, Mangalore and **Prof. Karunakara Naregundi**, coordinator medical Physics Division, Mangalore University, in partial fulfilment of the requirements for the award of degree of Master of Science in Medical Physics by Mangalore University during the academic year 2023-24.

  
**Mr. Krishna Chandrasekar**  
Medical physicist & RSO  
Radiation safety officer  
MIO, Pumpwell, Mangalore

  
**Prof. Karunakara Naregundi**  
Co-ordinator  
Medical Physics Division  
Mangalore University  
**Coordinator**  
**Medical Physics Division**  
**Mangalore University**  
**Mangalagangothri - 574199**

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