




# Bharathiar University

State University | "A++" Grade by NAAC | 26<sup>th</sup> Rank in MoE-NIRF  
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

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<p><b>Research Area</b></p> <ul style="list-style-type: none"> <li>• Radiation dosimetry includes Monte Carlo aided dosimetry,</li> <li>• Biological dosimetry and Nanodosimetry</li> <li>• Radiation Safety</li> </ul>	<p><b>Courses Teaching</b></p> <ul style="list-style-type: none"> <li>• Radiation Detection and Measurement</li> <li>• External Beam Radiation Therapy</li> <li>• Radiation Biology</li> <li>• Radiation Protection</li> <li>• Radiation Hazards Evaluation and Control</li> <li>• Radiation Dosimetry and Calibration</li> <li>• Nuclear Medicine and Internal Dosimetry</li> </ul>
<p><b>Research Experience:</b></p>	<p><b>Teaching Experience:</b></p>
<p><b>Research Credentials</b> (as on June 2024 – Source: Google scholar) H-index: 237                      Citations: 8                      i10-index: 7</p>	
<p><b>Patents :</b>                      Granted: 1</p>	
<p><b>Publications</b> Books/Chapters: 2                      National Journals: 3                      International Journals: 2</p>	
<p><b>Institutional Responsibilities</b> <b>Member of Internal Complaints Committee (ICC)</b> Period :Oct 2020 to Till date Nature of Responsibility : <b>Senate Member of Bharathiar University</b> Period :Apr 2020 to Till date Nature of Responsibility :</p>	
<p><b>Collaborations</b> 1. Society for Applied Microwaves Electronics Engineering and Research (SAMEER) - 2021-12-01 )</p>	
<p><b>Publications</b> <b>International Journals - 2</b> <b>2. Fabrication and Dosimetric Characteristics of Silicon Elastomer-Based Bolus Using External Beam Radiotherapy</b> Journal Name: Asian Pacific Journal of Cancer PreventionVol.:24Page No.:141-47Impact Factor:2.514 (January 2023) M Boopathi, D Khanna, P Venkatraman, R Varshini, C S Sureka, S Pooja <b>1. An In-Vitro study for early detection to and distinguish breast and lung malignancies using the PCB technology based nanodosimeter</b> Journal Name:Scientific ReportsVol.:9 Page No.:1-16Impact Factor:4.01 (January 2019) P.Venkatraman and C. S. Sureka</p>	



## Books/Chapters - 2

### 2. Artificial Intelligence Theory, Models and Applications (Chapters 4 and 6)

Edited by: P. Kaliraj and T. Devi Publishers: CRC Press, Taylor & Francis Group, New York, USA ISBN: 9781003175865 (October 2021) Sureka

### 1. Radiation Biology for Medical Physicists

Publishers: CRC Press, Taylor & Francis Group, New York, USA ISBN: 9781498765893 (October 2017)  
C. S. Sureka & C. Armpilia

## National Journals - 3

### 3. Variance reduction techniques used in the EGSnrc Monte Carlo code to improve ion-chamber dose calculation efficiency

Journal: Journal of Medical Physics Volume No.: 43 Page No.: 185-194 (December 2018)  
S. Sangeetha and C. S. Sureka

### 2. A homogeneous water-equivalent anthropomorphic phantom for dosimetric verification of radiotherapy plans

Journal: Journal of Medical Physics Volume No.: 43 Page No.: 100-105 (December 2018)  
Manikandan Arjunan, Sureka Chandra Sekaran, Biplab Sarkar, Sujatha Manikandan

### 1. Quality Assurance and Average Glandular dose measurement in mammography units

Journal: Journal of Medical Physics Volume No.: 42 Page No.: 181-190 (December 2017)  
C Senthamil Selvan, and C. S. Sureka

## Patents

### Granted - 1

1. An efficient instrument to detect ions and its applications 01-1970 Patent No.: 333366  
Grant Sl.No.: 044117957  
Dr. C. S. Sureka and Dr. P. Venkatraman