



**WEBINAR ON ADVANCEMENTS AND APPLICATIONS OF BUTTERWORTH FILTERS IN BIOSIGNAL PROCESSING**

|                       |   |
|-----------------------|---|
| Event No              | BM002   |
| Organizing Department | Biomedical Engineering  |
| Date                  | 04/06/2024  |
| Time                  | 03:00 PM to 04:00 PM  |
| Event Type            | Webinar   |
| Event Level           | Dept. Level   |
| Venue                 | I BME   |
| Meeting Medium        |   |
| Meeting Link          | <a href="https://meet.google.com/apc-xvda-kii">https://meet.google.com/apc-xvda-kii</a> |
| Total Participants    | 73  |
| Faculty - Internal    | 2   |
| Students - Internal   | 71  |

Related SDG



Resource Persons

| Sl | Type            | Name       | Designation | Company                           | Email                  | Phone      |
|----|-----------------|------------|-------------|-----------------------------------|------------------------|------------|
| 1  | Resource Person | Ramkumar C | Professor   | Sri Krishna College of Technology | proframkumar@gmail.com | xxxxxxxxxx |

Involved Staffs

| Sl | Name         | Role     |
|----|--------------|----------|
| 1  | Rajasingam N | Convenor |

Outcome

Participants are able to, Understand the basics of Butterworth filters, including their design, characteristics, and advantages Explain the smooth frequency response and maximally flat magnitude response of Butterworth filters Understand the recent developments in the design of Butterworth filters to enhance their performance in biosignal processing Compare the Butterworth filters with other types of filters in terms of performance and suitability for different biosignal processing tasks

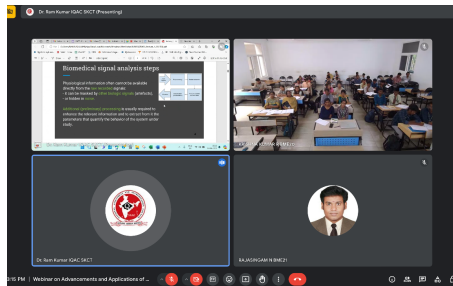
Event Summary

The **Department of Biomedical Engineering** organized a Webinar on '**ADVANCEMENTS AND APPLICATIONS OF BUTTERWORTH FILTERS IN BIOSIGNAL PROCESSING**'. Biosignal processing is the analysis of physiological data recorded from the human body using various sensors and instruments. This field combines aspects of biomedical engineering, signal processing, and data analysis to interpret complex biological signals for diagnostic, therapeutic, and research purposes. A Butterworth filter is a type of signal processing filter designed to have a maximally flat frequency response in the passband. This characteristic makes it particularly useful in applications where it is important to maintain the amplitude of the signals within the passband while attenuating frequencies outside this range. Ms. Savitha E, from I year, Department of Biomedical Engineering introduced the Chief Guest **Dr. C. Ramkumar**, to the students. Speakers emphasis the basics of Butterworth filters, including their design, characteristics, and advantage. The lecture focused on various steps in biomedical signal analysis, signal conversion from analog to digital and digital to analog and recent developments in the design of Butterworth filters. The lecture was highly motivating and inspired all the participants. Students found that the information highly valuable and well-presented, expressing gratitude to the resource persons for sharing such impactful knowledge. Dr. N. Rajasingam, Assistant Professor (SL. G), Department of Biomedical Engineering proposed the vote of thanks.

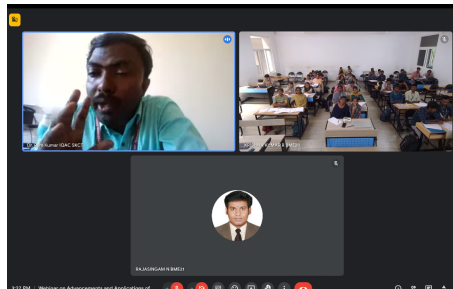


The poster features the KPR Institute of Engineering and Technology logo at the top left. The main title is "WEBINAR ON ADVANCEMENTS AND APPLICATIONS OF BUTTERWORTH FILTERS IN BIOSIGNAL PROCESSING". Below the title, it says "JOIN AND LEARN". The date and time are "04.06.2024 - 03.00 pm ONLINE". A Google Meet link is provided: "https://meet.google.com/apc-xvda-kij". The speaker is identified as "Dr. C. Ramkumar, Professor, Sri Krishna College of Technology", with a circular portrait of him. The department is "DEPARTMENT OF BIOMEDICAL ENGINEERING". Logos for G2, IIT, and AICTE are at the bottom right.

[Click to View](#)



[Click to View](#)



[Click to View](#)

\*\*\* END \*\*\*