

Internal Webinar

Advanced Engineering of Electromagnetic and Microfluidic Systems for Biomedical Applications

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This presentation delves into the significance of engineered planar structures in biomedical applications, emphasizing their electromagnetic and microfluidic components pertinent to advancements in sensing, diagnosis, and therapeutic technologies. In the electromagnetic realm, we will examine metamaterials and microstrip patch antennas, focusing on their contributions to frequency fine-tuning and cancer cell detection. The segment on paper-based microfluidics will highlight the diverse applications of this transformative technology across biotechnology, medicine, and environmental science, leveraging engineered planar paper substrates. We will explore the integration of microfluidic systems, illustrating their vital role in enhancing analytical capabilities and enabling innovative applications. Throughout the discussion, we will encapsulate foundational insights and methodologies that underscore the interdisciplinary synergy between electromagnetic theory, materials science, and fluid dynamics.

Tuesday, Nov 26th 2024

16:00 Hrs

