



Webinar On

Digital Micro fluidic Biochip and its Applications

Date: 04th December, 2020

Time: 7:00 pm - 9:00 pm

**Jointly organized by Department of Information Technology and IEEE Student Chapter, RCC
Institute of Information Technology**

Mission

To groom the students to:

[M1] Be able to develop effective solution, in different settings and capacity, by analyzing various problems cross cutting multiple domains through emphasis on the basic concepts of engineering and customized application of Information Technology.

[M2] Be devoted for lifelong learning for adapting to modern tools and to engage in research and innovation on complex problems to meet societal and environmental needs.

[M3] Be able to apply leadership qualities and professional ethics to work in a team with effective communication and interpersonal skills for designing economically feasible applications.

Vision

To empower students to become pacesetters in the industry or academia for ethically promoting and nurturing Information Technology based solutions addressing multidisciplinary needs of the society towards sustainable development.

Registration link:

<https://forms.gle/GiowKnT1mZ4uR6jy6>

Microfluidic biochips are replacing the conventional biochemical analyzers, and are able to integrate on-chip all the basic functions for biochemical analysis. The “digital” microfluidic biochips (DM-FBs) are manipulating liquids not as a continuous flow, but as discrete droplets on a two-dimensional array of electrodes. Basic microfluidic operations, such as mixing and dilution, are performed on the array, by routing the corresponding droplets on a series of electrodes.

❖ Course Objectives:

CO1: Explain an emerging lab-on-a-chip technology platform, digital microfluidic biochips (DMFBs) have been widely used for executing various laboratory procedures in biochemistry and biomedicine such as gene sequencing and near-patient diagnosis, with the advantages of low reagent consumption, high precision, and miniaturization and integration.

CO2: Describe the ongoing rapid deployment of DMFBs, however, these devices are now facing serious and complicated security challenges that not only damage their functional integrity but also affect their system reliability

Speaker

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