

Centre for Advanced Research in Sciences (CARS) University of Dhaka, Dhaka 1000

Director

Ph: 966 1920-59/Ext. 4616 Email: <u>coe@du.ac.bd</u> FAX: 880-2-8615583

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CARS SEMINAR SERIES-2023

Speaker:

Dr. MD. Latiful Bari Chief Scientist Centre for Advanced Research in Sciences (CARS), University of Dhaka.

Title:

Development of Rapid Food Testing Devices and Kits for ensuring food quality & safety.

Venue:

Date:

Committee Room(2nd Floor), Center for Advanced Research in Sciences (CARS), University of Dhaka

Tuesday, November 21, 2023

Time:

11:00 AM

You are cordially invited to attend the seminar.

Ishtiaque M Sye

Professor of Physics & 19 NOV 2023 Director Center for Advanced Research in Sciences (CARS) University of Dhaka



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Development of Rapid Food Testing Devices and Kits for ensuring food quality & safety

Md. Latiful Bari

Summary:

Modern food-safety management standards are based on quality assurance principles. Testing for the presence of analytes of food safety relevance is an important instrument in the verification process. Laboratory analysis, which often includes techniques such as chromatography and spectrophotometry, is a significant tool in both validation and verification. Most of these procedures are unsuitable for direct application in food enterprises since they are time intensive, need well-trained workers, and are therefore expensive. As a result, it has been stated that the food and beverage sectors want speedy and economical test methods not just to replace existing ones but also to test for analytes that have not previously been monitored for safety purpose. The availability of fast, reliable, and simple-to-use detecting equipment for food products is seen as a goal for both customer health protection and production optimization. These devices ensure "faster, better, cheaper" real-time testing of food. These are expected to become an integral part of quality assurance/quality control programs in the food industry and also for regulatory and surveillance purposes. In this presentation, we will discuss various lowcost and rapid detection kits for toxin in any liquid food, pb in turmeric powder, As and P in water and food color, and so on, which have been developed and are in the validation stage. However, it must be packed in such a way that it does not hurt the people or the environment. Such kits and devices can be widely used for regulatory purposes; food industry would also begin to use them for internal quality assurance and quality control purposes.

Keywords: Rapid test kits; Food safety; and quality assurance