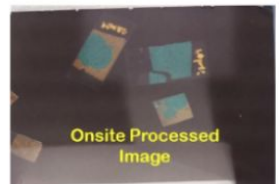
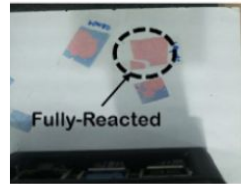
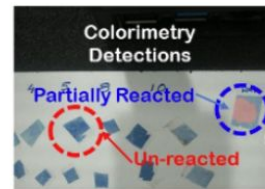


PENDING**(IN202411008440)**

Portable point of source testing (PoST) multimode optical detection system



NEED

Rural clinics and emergency units lose critical time due to delays in fluid analysis. Lack of portable systems often results in misdiagnosis or late treatment. But what if accurate tests fit in a backpack?

TECHNOLOGY OVERVIEW

This patent discloses a Portable Point of Source Testing (PoST) system for body fluid analysis using multimode optical methods such as colorimetry and luminescence. It includes a camera module, sampling chamber, reagent unit, and plunger mechanism—all integrated into a compact device. Instant remote transmission and precise in-situ diagnostics make it ideal for decentralized healthcare.

TECHNOLOGY KEY FEATURES

Multimode detection (colorimetry, luminescence), replaceable sampling chamber, compact reagent unit, plunger-based pumping, dark chamber design, and image-to-data transmission via camera and microcontroller—all housed in a portable device with digital display and remote connectivity.

[Read more here](#)

MARKET ANALYSIS

The global point-of-care diagnostics market is projected to reach \$98.2B by 2033, growing at 11.2% CAGR. Demand for fast, portable testing in rural health, emergency care, and pandemic control are key drivers. Indian diagnostics market is growing at 15% CAGR, with strong government push for decentralized testing. (Sources: Precedence Research 2023, IBEF 2024)

Target Industries

1) Rural health infrastructure and mobile clinics integrators, 2) Emergency and defense field diagnostics solution developers, 3) Public health monitoring and disease surveillance technology providers.

AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation and Infrastructure), SDG 10 (Reduced Inequalities)

Technology is available for licensing/ co-development.

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