



Das Institut für Optische Technologien lädt ein zum Kolloquiumsvortrag

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Sensitive and multiplexed assays for point-of-need applications: innovations for robust, reliable, and user-friendly diagnostics

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The development of portable analytical assays, particularly during the SARS-CoV-2 pandemic, has revolutionized diagnostics and expanded their use to areas such as food safety, environmental monitoring and forensics. These assays offer the advantage of rapid on-site decision making without the need for laboratory facilities. The omnipresence of mobile devices with advanced cameras and processing power further increases their usability. However, most current assays are limited to detecting single parameters. The challenge now is to develop robust multiplexed assays that can simultaneously detect multiple parameters with high sensitivity.

This lecture will present generic approaches developed at BAM with a focus on supramolecular chemistry, luminescence detection, nanomaterials and miniaturization of devices. Examples include mesoporous nanomaterials, gated indicator systems, imprinted polymers, microfluidic devices, test strips and smartphone-based analysis.

Einladender: Prof. Dr. Michael Schäferling

Ort:

Raum D 145

(Gebäudeteil D, Parkplatz P3)

Stegerwaldstraße 39

48565 Steinfurt

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17.00 Uhr c. t.

