

Research Group
Smart Nanodevices would
like to invite you to the
seminar:



PAPER BASED MICROFLUIDICS FOR INSTRUMENT-FREE ASSAYS

DELIVERED BY

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CEITEC Brno University of Technology, Smart Nanodevices

ABSTRACT

Portable analytical technologies have been advancing rapidly influenced by factors such as rising medical care costs and need for rapid and on-site answers at low cost. The speaker will focus on factors critical to the success of μ PADs, specifically low fabrication costs, flexibility of design, rapid automated high-precision and high-throughput fabrication, and non-instrumental detection using distance-based measurement, and will endeavour to show how these properties brought together make for a powerful combination. Examples of own previous research include a novel, highly flexible and low-cost fabrication method using a desktop digital craft plotter/cutter and technical drawing pens, with the μ PADs fabricated with high precision in a rapid high-throughput fashion at very low cost. Distance-based detection methods entirely eliminate the need for any external detector/device and thus enable instrument-free assays. Importantly, we have shown that the range of reagents and assays can be greatly increased when other ways of immobilisation of the reagent are used. Examples from our current research will include novel μ PADs designed to utilise distance-based detection.

The speaker's involvement in CEITEC based IMPROVE project set in this broader area will be outlined.

WEDNESDAY START 15:00

09/10/2019

Seminar room M2.12

MENDELU, Zemědělská 1



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