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## ICB PhD public presentations

# ADVANCED MICROFLUIDIC PLATFORMS FOR PATHOGEN DETECTION


**Zahra Halvorsen**
ICB / DeMello group
Supervisor: Prof. Dr. Andrew deMello
Co-examiners: Dr. Klaus Eyer, Dr. Stavros Stavrakis and Dr. Vincent Revol


**27/01/2021, 3:00 pm, on Zoom**
**Meeting ID: 282 750 4045**


Project Summary: The rapid diagnosis of pathogens is crucial in the early stages of treatment of diseases, Motivated by this importance, we develop robust and high throughput microfluidic platforms to be integrated with existing technologies for accurate determination of pathogens including Flow cytometry or Nucleic Acid Amplification Techniques. Microfluidic devices have distinctive advantages (e.g. miniaturization, portability, automation, and low cost), and can be used to improve and facilitate rapid diagnosis of pathogens. This thesis shows the benefit of combining interdisciplinary knowledge in biology, chemistry, and engineering, to develop industry-oriented tools for point of care diagnostics applications, especially for resource-limited areas.


CV: Zahra obtained her Master degree from the Department of Chemical Engineering of Polytechnic University of Turin with a master thesis project performed in the Department of Material Science of EPFL. In 2017 she started her doctoral studies in the Department of Chemistry and Applied Bioscience of ETH Zurich.