

## Chemical Sensors for Breath Analysis

### Overview

The Short Course explores chemical sensors in breath analysis provides and covers knowledge on chemical sensors, data analysis and breath analysis for lung cancer detection as well as established medical practices for lung cancer detection.

The main objective is to give an overview of the available technologies and current research with a focus on practical applicability and real life problems.

The short course is ideal for medical scientists, clinicians and industrialists who want to get a head start on chemical sensors in breath analysis, and for researchers and engineers who want to use their technology in lung cancer breath analysis.

Friday, June 14, 2013

09:00 – 10:30	A Comprehensive Review of Lung Cancer - Understanding the unmet need in Lung Cancer diagnosis.  An overview on lung Cancer from clinical perspective emphasizing the unmet need in the diagnostic avenue. Challenges, practical issues and a wish list from the medical practitioner	<b>Nir Peled</b>
10:30 – 10:45	Coffee break	
10:45 – 12:15	Chemical Sensors Overview of chemical sensor technologies and their applicability to breath analysis. Advantage and disadvantages of the different technologies in breath analysis applications.	<b>Hossam Haick</b>
12:15 – 13:45	Lunch	
13:45 – 15:15	Data Analysis for Chemical Sensors Introduction to data analysis for chemical sensors. Filtering, extraction, statistical methods, pattern recognition. Good practices and pitfalls.	<b>Santiago Marco</b>
15:15 – 15:30	Coffee break	
15:30 – 17:00	Practical examples and hands-on demonstration of chemical sensors and sensor arrays. Life demonstration of different chemical sensor systems	<b>Jan Mitrovics</b>

**Organizers:** Prof Santiago Marco      University of Barcelona, Spain  
Dr Jan Mitrovics      JLM Innovation GmbH, Germany

**Additional Lecturers:** Prof Hossam Haick      Technion Institute of Technology, Israel  
Dr. Nir Peled      Sheba Medial Center, Israel

For further information visit: [www.olfactionsociety.org/course/breath2013](http://www.olfactionsociety.org/course/breath2013)

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