



# AQUASENSE Summer School 2019



## Sensor Technologies for Water Monitoring

25-27 September 2019  
Fondazione Bruno Kessler, Trento Italy

### OBJECTIVES

- Providing a broad overview of materials, sensors, microfabrication processes and methods for data analysis as enabling technologies for new products development in environmental and water monitoring.
- Providing a basic training on classic MEMS and Microfluidics devices and the related technologies
- Disseminating the results of some European Projects, giving information about the most recent and relevant research topics.

### THE SUMMER SCHOOL IS

#### ADDRESS TO:

- PhD Students
- Master Graduating Students
- Early Stage Researchers
- Future European Entrepreneurs

### WHY PARTECIPATING

- Improve your Knowledge
- Hands-on-MEMS
- Network & Interact
- Communicate your activity and research interests

### CONTACTS and REGISTRATION:

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**REGISTRATION Link:** <https://www.eventbrite.it/e/aquasense-project-summer-school-on-sensor-technologies-for-water-monitoring-registration-67210527497>



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## School Program

25 September 2019 Materials for sensors	26 September 2019 Sensors and Technologies	27 September 2019 Systems and applications
8.00 – 9.00 Welcome: AQUASENSE Project and summer school overview	8.45 - 9.00 Introduction to the program of the day	8.45 - 9.00 Introduction to the program of the day
9.00 – 10.00 New materials for micro-scale sensors and actuators	9.00 – 10.00 Optofluidic micro and nanostructured devices and systems for (bio)sensing	9.00 - 10.00 Methodologies for the environmental monitoring
<b>10.00-10.15 TEA/COFFEE BREAK</b>	<b>10.00 -10.15 TEA/COFFEE BREAK</b>	<b>10.00 -10.15 TEA/COFFEE BREAK</b>
10.15 - 11.15 Fabrication of integrated sensor and actuator platforms by Supersonic Cluster Beam Deposition	10.15-11.15 Machine Learning methods for data analysis	10.15 – 11.15 - Water quality monitoring in rivers and lakes of Trento province
11.15-12.15 Flexible Sensors and Electronics	11.15 – 12.15 Photonics sensors	11.15-12.15 Chemical gas sensors for agri-food water management
12.15-13.15 Surface treatments for biosensing	12.15-13.15 Microfluidics: an overview	12.15-13.15 Multifunctional micro- and nanosystems for chemical and physical sensing
<b>13.15- 14.30 LUNCH &amp; POSTER SESSION</b>	<b>13.15 -14.30 LUNCH &amp; POSTER SESSION</b>	<b>13.15 -14.30 LUNCH &amp; POSTER SESSION</b>
14.30 -15.30 FBK Facility Tour LABSSAH and CLEAN ROOM	14.30-15.30 Silicon-based microfabrication technologies	14.30 - 15.30 Statistical process optimization through design of experiment
15.30– 17.30 3D PROM Mechatronics Pole (lab visit) in Rovereto City	<b>Group 1</b> - 15.30 – 17.30 Hands on MEMS (lab visit and experimental lessons)	<b>Group 1</b> - 15.00-17.30 Ink Jet printer – How does it work?
	<b>Group 2</b> - 15.30- 17.00 Ink Jet printer – How does it works?	<b>Group 2</b> - 15.00-17.30 Hands on MEMS (lab visit and experimental lessons)
	<b>20.00- 22.00 Workshop Social Dinner</b>	17.30 - 24.00 Conclusion of the school and visit to the Researchers' Night at MUSE (free visit)