



## Air Quality Sensing and Approaches for Mitigation using Smart Solutions and Citizen Engagement

2nd Summer School organized by the iSCAPE project ([www.iscapeproject.eu](http://www.iscapeproject.eu))

**16 and 17 September, 2019**

**Universiteit Hasselt, Conference Room OG-B1.1 groen, Campus Hasselt,  
Martelarenlaan 42, 3500 Hasselt, Belgium**

### Objectives and Expected Outcomes:

The summer school aims to broaden awareness of air pollution and ways to control it. The summer school will provide participants with both theoretical knowledge and hands-on experience in relation to behavioral change initiatives and sensing technologies for air quality management and control. Through the interactive workshops and game environment during the 2-day summer school, participants will learn about the living lab approach, sensing technologies and how to engage citizens and city stakeholders to solve various problems related to the environment.

Participants will have an opportunity to use low-cost sensors, developed within the iSCAPE project and make sense of the collected data through visualization platforms. A team of international experts and practitioners will be there to guide participants throughout these 2 days.

This Summer School is organized as part of the iSCAPE project and it will showcase the most recent research and development activities.

### Who should attend:

We invite air quality and urban planning professionals, municipality staff members, PhD students, researchers who are involved in environmental and air quality management studies and have a keen interest in learning tools/methods in resolving air quality problems in the neighbourhood and cities.

### Cost:

Registration is free of cost, but seats are limited. Please click [here](#) for Registration

### Summer School Program

**Day 1: 16-09-2019**

Time	Activity	Speaker / Responsible
08:30- 9:00	Registration	
9:00-9:15	Summer School Introduction and Overview of iSCAPE Project	<b>Prof. Ansar-ul-Haque Yasar</b> University of Hasselt, Belgium



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9:15- 10:30	Assessment of Human Exposure to Air Pollution and Health Impacts- An international Perspective	<b>Dr. Evi Dons</b> Hasselt University & Flemish Institute for Technological Research (VITO), Belgium
10:30-10:45	Coffee break	
10:45-12:45	<p><b>Urban Living Lab Playground: The Game</b></p> <p>A diverse variety of unsuspecting stakeholders, and a common challenge of <b>air pollution</b>. How to bring everyone together, in the co-creation of innovative solutions, to tackle this challenge? The ULL playground is a serious game that aims to share the cornerstones of what Living Labs are and how they work: who are the staff members working there; what are the different types of co-creation tools can be used to engage citizens, what is the value of this process of bringing quadruple helix stakeholders (public, private, academia, citizens) together, etc. Players are introduced to Living Labs and how they work, while having some serious fun in exploring the iSCAPE interventions as potential solutions to the challenge.</p>	<p>Facilitators: <b>Ines Vaittinen</b> European Network of Living Lab (ENoLL) , Belgium</p> <p><b>Santa Stibe</b> University College Dublin, Ireland</p> <p><b>Katinka Schaaf</b> Connected Places Catapult (United Kingdom)</p>
12:45-13:45	Lunch	
13:45 - 14:30	<p><b>Solution I: Mobility-based Behavioural Interventions:</b></p> <ul style="list-style-type: none"> <li>- Air Quality-based <i>Route-2-School</i> informational intervention</li> <li>- Mobility-related policies and their effects: Learnings from simulation models</li> </ul>	<b>Dr. Muhammad Adnan &amp; Mr. Shiraz Ahmed</b> Hassel University, Belgium
14:30 -15:10	<p><b>Solution II: Green Infrastructure</b></p> <ul style="list-style-type: none"> <li>- Roadside hedges and trees- Sensing Experiment</li> <li>- Simulation Model / Validation and key findings</li> </ul>	<b>Mr. Abhijith Kooloth Valappil/ Mr. Arvind Tiwari</b> Global Centre for Clean Air Research, University of Surrey (United Kingdom)
15:10-15:30	Coffee Break	



15:30-16:15	<b>Solution III: Physical Infrastructure : Low Boundary Walls</b> <ul style="list-style-type: none"> <li>- Sensing experiment</li> <li>- Simulation Model / Validation and Key findings</li> </ul>	<b>Dr. Bidroha Basu</b> University College Dublin, Ireland
16:15 - 17:00	<b>Solution IV: Urban Design</b> <ul style="list-style-type: none"> <li>- Simulations in support of city planning</li> <li>- Climate change adaptation with green infrastructure</li> </ul>	<b>Mäkelä Antti</b> Finnish Meteorological Institute, Finland

**Day 2: 17-09-2019**

Time	Activity	Speaker / Responsible
9:00-10:00	<b>Hasselair Project:</b> <ul style="list-style-type: none"> <li>- Introduction and motivation</li> <li>- Sensing Technology and preliminary findings</li> </ul>	<b>Dr. Ir. Ilse Vermeulen</b> Project Director University College Leuven Limburg (Belgium)
10:30-10:45	Coffee break	
10:45 – 11:15	<b>Citizen Science Workshops in iSCAPE Cities:</b> <ul style="list-style-type: none"> <li>- Motivation and Methodology</li> <li>- Learnings and findings</li> </ul>	<b>Katinka Schaaf</b> Connected Places Catapult (United Kingdom)
11:15-12:30	<b>Air Quality Sensing Experiment - I</b> <ul style="list-style-type: none"> <li>- Sensing Technology</li> <li>- Citizen Science Platform</li> <li>- Research Experiment Details</li> </ul>	<b>Guillem Camprodon and Óscar González</b> The Institute for Advanced Architecture of Catalonia, Spain (IAAC)
12:30-1:30	Lunch	



1:30- 3:00	<b>Air Quality Sensing Experiment - II</b> <ul style="list-style-type: none"> <li>- Collecting data (Indoor vs outdoor)</li> <li>- Collecting data (busy traffic street vs Calm streets)</li> <li>- Collecting data (traffic lights vs free flow traffic)</li> </ul>	<b>Guillem Camprodon and Óscar González</b> The Institute for Advanced Architecture of Catalonia, Spain (IAAC)  <b>Dr. Muhammad Adnan &amp; Mr. Shiraz Ahmed</b> Hassel University, Belgium
3:00-3:15	Coffee Break	
3:15-5:00	<b>Air Quality Sensing Experiment - III</b> <ul style="list-style-type: none"> <li>- Data Visualization in the CS Platform</li> <li>- Data Issues &amp; Calibration</li> <li>- Data Interpretation</li> </ul>	<b>Guillem Camprodon and Óscar González</b> The Institute for Advanced Architecture of Catalonia, Spain (IAAC)
5:00-5:15	Closing Session & Feedback	

