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CITI-SENSE – A Europe-Wide Project Designed to Increase Public Participation and Awareness to Air Pollution – was Launched. Haifa is One of Nine Cities Participating in the Project

Israel is represented by the Technion and by the startup AirBase; the total budget of the project is nearly 12 million euros and around 30 research groups and commercial companies from 20 countries are participating in it

CITI-SENSE, a Europe-wide research project financed by FP7, the European Union's Seventh Framework Programme for Research, is on its way. The project aims to increase public awareness and involvement in environmental decision making processes, especially where air pollution is concerned, both at the personal level and at the public level. In frame of the project, nine cities (Haifa, Belgrade, Ljubljana, Oslo, Barcelona, Ostrava, Edinburgh, Vienna and Bilbao) were selected in which advanced sensor networks will be deployed for monitoring air pollution and assessing the exposure to air pollutants.

These cities will hold activities designed to enlist public involvement in the data collection process, the environmental significance of these data and the health implications of the findings. The project will take around four years, is budgeted at a total of nearly 12 million euros and around 30 research groups and commercial companies from 20 countries are participating in it.

At the heart of the project is an innovative concept called Citizen Observatory, comprising active participation of the public in data collection, ensuring the accessibility of the information collected to the public, and increasing public involvement in decision making processes.

Israel is represented in the project by two industry leaders: the Division of Environmental, Water and Agriculture Engineering in the Technion Faculty of Civil and Environmental Engineering – Prof. David Broday who is the project leader and Assistant Professor Barak Fishbain, and the startup company AirBase Systems, which will be among the main suppliers of sensor networks to be deployed in the different cities.

Prof. David Broday, Head of the Technion Center of Excellence in Exposure Sciences and Environmental Health, said that "the research opens new horizons to the spatial and temporal measurement of air pollution at an extremely high resolution at the exact locations and times in which we are exposed to pollutants and can be affected by their damaging properties. The innovative concept of 'citizen observatory' offers a partnership between academy, industry, the public and decision makers, while building an aware, understanding and connected community that has the ability to make a difference and reduce personal exposure to air pollution".

Irad Kuhnreich, founder and CEO of AirBase and graduate of the Technion in Mechanical Engineering, added: "we believe that CITI-SENSE presents a real opportunity to make the technological leap that the air monitoring industry has yearned for. Involvement, participation and transparency are about to become major milestones in the collection and presentation of environmental information in the 21st century, and CITI-SENSE is the first to implement this in practice.

The Division of Environmental, Water and Agriculture Engineering in the Technion Faculty of Civil and Environmental Engineering participates in many and varied studies on environmental issues, from reducing pollutant emissions to the environment to treating land, water, air, marine environment and ecological and agricultural systems. In particular, air quality issues researched at the Division include, among others, atmospheric flow systems and pollutant movement in the Mediterranean Basin, remote sensing of pollutants in the air, air quality in urban regions and in the borders between them and agricultural regions, and air quality inside buildings. The materials currently at the focus of research include air pollutants originating in transportation, pesticides, and inhalable particles. These studies are conducted in the Technion Center of Excellence in Exposure Sciences and Environmental Health

AirBase Systems Ltd. is an Israeli startup that has developed a new technology for measuring air pollution levels. At the heart of AirBase's technology is a tiny monitoring station comprising air pollution sensors that employ state-of-the-art nanotechnology. This station is designed to operate within spatial monitoring networks and is able to connect independently to the internet (Wi-Fi or GSM). In addition to the major technological achievement, AirBase has also succeeded in dramatically reducing the price of the system, compared to standard monitoring stations.