



### **Dr. Karine Yaniv**

I recently led a study that makes it possible to detect the coronavirus in wastewater using a fast, PCR-based test that successfully classifies the different mutations of the virus.

#### **The decision-makers are waiting for me.**

Monitoring the amount of coronavirus in the population by detecting the virus in sewage allows early warning of outbreak centers and control of increasing or decreasing trends in morbidity. The study focuses on the fast and effective identification of the different variants. These tools

allow containment and regulation of the epidemic. Following the pilot's success, the State of Israel decided last month to expand the scope of the tests and start nationwide monitoring using this technology.

#### **Research in engineering in Ben-Gurion**

The laboratory for environmental biotechnology, where I perform my research works in collaboration with the Civil and Environmental Engineering Department to better understand the wastewater processes for normalization of the virus concentrations in relation to the size of the population. We also collaborated with researchers from the Department of Electro-Optics Engineering to develop sensors based on electro-optics, some of which can be used to monitor corona in water samples. The faculty provides significant assistance with research infrastructure (instrument and location), which, together with funding from various research areas, allows the generation, execution, and implementation of innovative ideas.