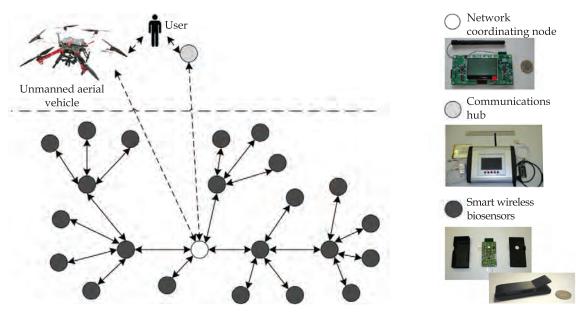
SMART WIRELESS SENSOR NETWORKS FOR AGRICULTURE, MEDICINE, AND ENVIRONMENT MONITORING



Wireless sensor network structure

Areas of Application

The sensor networks are designed to acquire data on the state of biological objects (plants, animals, and humans) from sets of sensors with wireless transmitters, which form a wireless network that can cover a large territory. It enables to quickly provide emergency medical aid to people injured in accident or ecological catastrophe who bear smart wireless sensors embedded in their clothes; also this can be used in smart agriculture to timely take measures for saving crops or protecting plants from influence of stress factors of natural or anthropogenic origin

Advantages

Availability of smart sensor sets for various applications, comparatively low cost

Specification

The number of nodes ranges from several to several hundreds; distance between the nodes is about 150 meters in conditions of obstacles; the network enables to connect variable sets of sensors; the sensors are resistant to climate influence

Stage of Development. Suggestions for Commercialization

IRL6, TRL6

Manufacture, delivery, warranty maintenance, and staff training, upon request

IPR Protection

IPR3

Contact Information

Sergii V. Yershov, Glushkov Institute of Cybernetics of the NAS of Ukraine; +38 044 526 41 78, e-mail: ErshovSV@nas.gov.ua