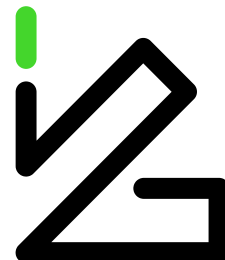


Multiparametric sensor for soil monitoring



Transient Electronics for Sustainable ICT
in Digital Agriculture



Łukasiewicz
Institute of
Microelectronics
and Photonics



**Multiparametric sensor
based on substrate with
smooth surface, improved
flexibility, mechanical
strength and temperature
resistance**

Efficient, low-power, autonomous and reusable electronic module for sensor interface, energy management and optimised wireless communication:

- acquires the data from degradable multisensoric element.
- monitors the growth of plants during their lifetime
- provides nutrient to soil when they degrade.



**Grow Up
Your Business
With Us**



common materials
natural polypeptides
biodegradable polymers

New materials to be designed and developed

substrate, encapsulation, conductive tracks, electronic layers etc. for sustainability



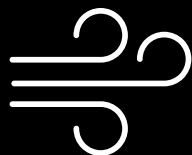
Fully degradable/compostable device

Multisensory patch, energy storage, energy harvesting modules. The multisensory patch will have pH, temperature and bioimpedance sensors.

Multisensory system applications



water monitoring

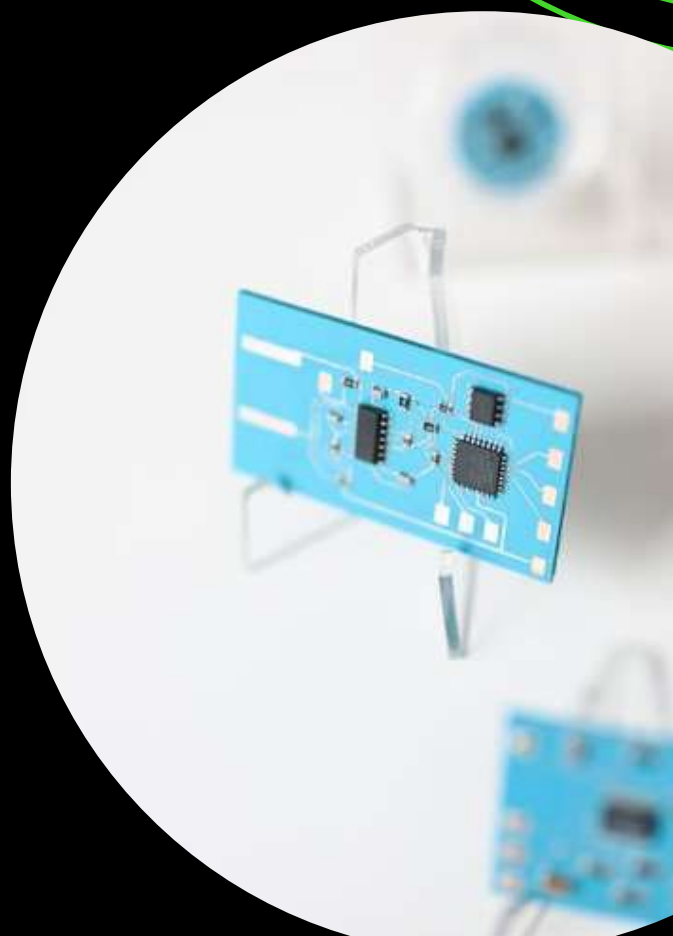


air monitoring



soil monitoring

**Biodegradable
substrates produced
with the use of low
temperature co-fired
ceramics technology**



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