

ENERGY-EFFICIENT DEVICE FOR MEASURING MAGNETO-DIELECTRIC RESPONSE



CUTTING EDGE TECHNOLOGY

Specialized device enabling the measurement of magneto-dielectric properties of thin dielectric layers by generating a well-defined magnetic field thanks to the small size of the device and its energy efficiency.

COMPETITIVE ADVANTAGE

- measuring of influence of the magnetic field without the need of a special laboratory,
- the possibility of placing the device in a special atmosphere or a cryogenic liquid,
- the possibility of measuring the effect of magnetic field on living organisms,
- low acquisition costs,
- economical operation of the device,
- the need for a significantly smaller volume of the tested liquid/material,
- the generated magnetic field acting on an investigated sample is homogeneous,
- excellent parameters of the generated magnetic field in the measuring place,
- variability of the properties of the generated magnetic field and its intensity.

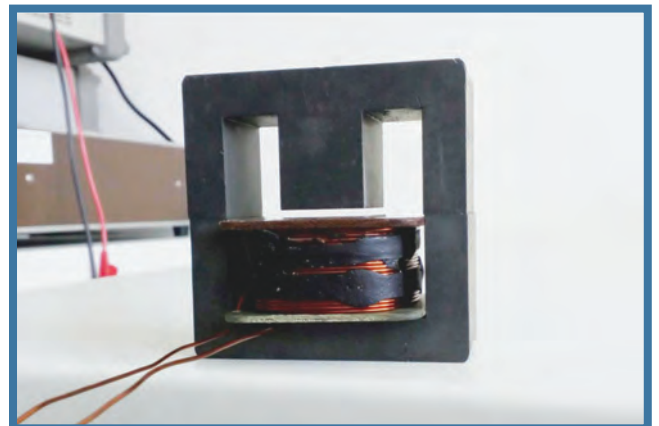
STAGE OF PROTECTION AND DEVELOPMENT

- priority SK **patent application** (PP 50062-2021)
- **technology validated** in relevant environment,
- **prototype** ready for demonstration

POSSIBILITY OF APPLICATION

New energy-efficient device can be used for example for:

- testing of the influence of magnetic field on the dielectric response of a thin layer of magnetic fluid,
- induction and detection of Fréedericksz phase transitions in ferronematic liquid crystals,
- formation of structured nanocomposite polymer films,
- generation of homogeneous magnetic field:
 - to study magneto-dielectric properties of materials at low temperatures down to 4K,
 - with ultra-low or low frequency,
 - with ultra-low or low frequency to study living organisms.



WE ARE LOOKING FOR A PARTNER FOR LICENSING/SELLING THE TECHNOLOGY.

For more information please contact:



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