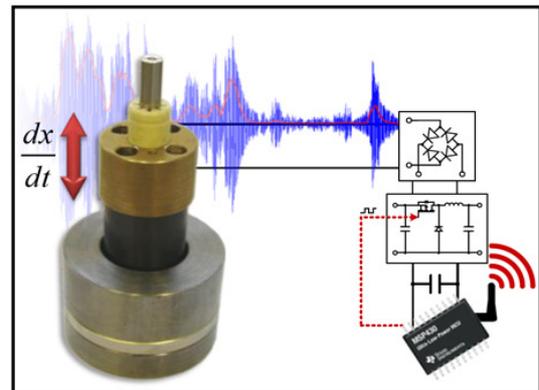


# Optimization of an Electrodynamic Energy Harvester

## Task

An electrodynamic system is one possibility to harvest energy from movements and vibrations. Therefore the chair of measurement and sensor technologies has constructed a system which is functional and operational. In different field tests problems have emerged which result in the need of a major revision of the whole system.

All details of the construction of the old system, like drawings and simulations, are available and can be used for the optimization process. The currently used mechanic spring should be changed to a magnetic spring. Also the position of the magnet and the coil should be changed. Therefore additional calculations and simulations are necessary. Target is to have an improved system which is operational and functional in the end.



## Requirements

- Motivation to work independently
- Knowledge about the design of electric circuits
- Electrical and mechanical knowledge
- FEM-methods (Ansys, Comsol,...)

## Supervision

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