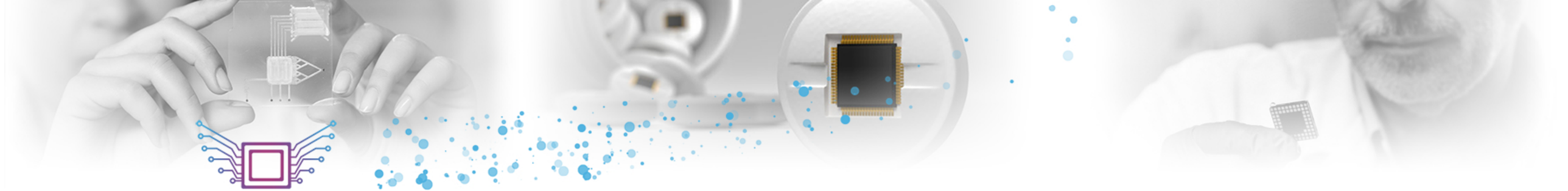

BioWings

BioWings is a project funded by the European Commission in the **Horizon 2020 framework**, under the **Future Emerging Technologies** (FET) Open programme. It is a Research Innovation Action (RIA) aligned with the key goal of the FET programme: supporting the early stages of science and technology research and innovation around new ideas, towards radically new future technologies.

Starting in June 2018 and for the **following 48 months of activities**, 7 partners will collaborate to investigate the unique properties of a completely new class of smart actuating materials and facilitate the integration in biocompatible MEMS.

The project will bring the technology to TRL4, preparing the ground for the industrialization of a **new class of "biomedical MEMS"** with increasing geometrical and functional complexity, suitable for a large variety of implantable and/or diagnostic applications.

Moreover, the results will be demonstrated in real biomedical applications: ultrasonic generation (MHz) in microprobes and blood cell sorting for bacteria separation and hematocrit level (HCT) estimation.

BioWings will benefit the overall biomedical industry by pursuing the following key goals:

- Substantial decrease in power consumption in active MEMS devices.
- Drastic reduction of the form factor, by integrating the materials as thin films into chips.
- Drastic reduction in manufacturing, thanks to fast integration with low temperature processing.
- Use of nontoxic raw materials, and greener and biocompatible manufacturing processes.

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