

Multi-well Plate with Uniform Electric Field

The Problem

It is difficult to create a uniform electric field (EF) in *in-vitro* electric field stimulation devices, particularly standard circular culture-ware. This results in a reduced usable area and cell yield during assays.

The Solution

This technology provides a uniform electric field over up to 90% of the area of a circular petri dish. The device is modular and can be easily adapted to existing culture-ware.

Applications

- Tissue engineering
- Electroporation
- Growth stimulation/protein production
- Study of electotaxis, electotropism and wound healing

Benefits

- Low cost
- Cell yield increased by one order of magnitude
- Two fold increase in usable culture area
- Modular design for rapid cell recovery

Keywords

Pharmaceutical research, tissue engineering, biotechnology, cell growth stimulation, protein production, electotaxis, electotropism, *in-vitro* assay, modular culture-ware

Opportunity

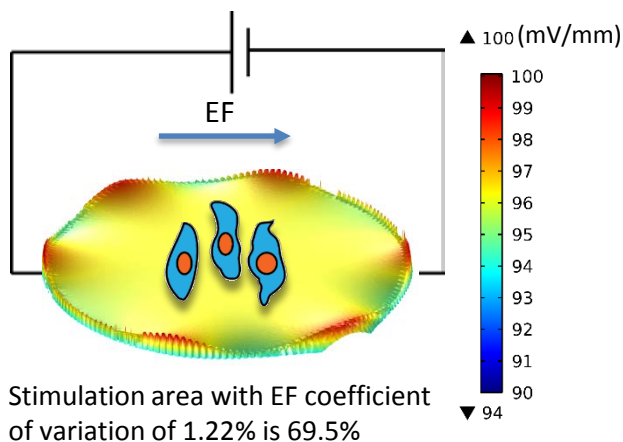
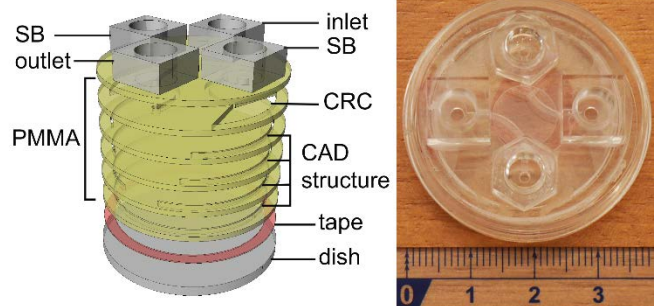
- Licensing

Patent Status

This technology is protect by an International Patent Application: PCT/JP2016/004255.

For more information

Technology Licensing Section at bdtl@oist.jp or +81-(0)98-966-8937



Drawing and photograph of the microdevice (top), effect on cells stimulated in a uniform 100 mV/mm electric field created by the microdevice (bottom).