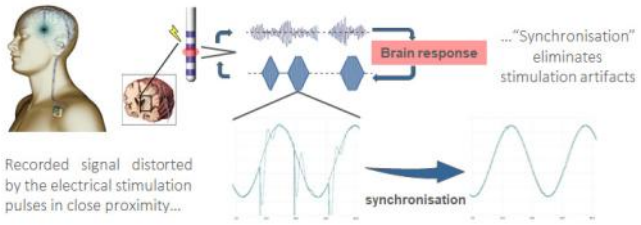
PROJECT NUMBER

**15499**

# Simultaneous stimulation and artefact-free recording for neuromodulation devices

Simultaneous stimulation and artefact-free recording for neuromodulation devices.

**Applications:** Health monitoring, medical devices, neurostimulation, neuromodulation, deep brain stimulation




| Features | Benefits |
|---|---|
| Artifact-free recording of local field potentials (LFP) | Greatly improving recorded signal quality and increased signal-to-noise ratio (SNR); Maintaining uninterrupted sampling allows closed-loop delivery of deep brain stimulation (DBS) |
| Simultaneous stimulation and recording | Enabling adaptive, on-demand deep brain stimulation (DBS) therapy; Reducing side effects as stimulation parameters are adjusted to real-time requirements |
| Operative over a wide frequency range | Applicable to a diverse range of situations where simultaneous stimulation and recording is required |

| Features | Benefits |
| --- | --- |
| Same implanted device used for both stimulation and recording; Easily implementable as software only and/or hardware modules to existing or new neurostimulator devices | Cost effective; Upgrading existing neurostimulation devices; Reducing the need for additional invasive procedures |

## Patented and Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.