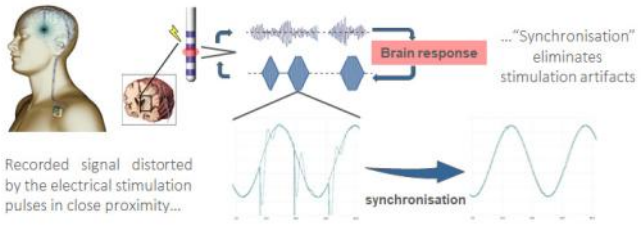
PROJECT NUMBER

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.

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