

#### NeuroTech 2026

International Symposium on Advanced Neuroscience and Neuroengineering Technologies

Theme: "Bridging Brain, Engineering, and Regeneration"

April 2-5, 2026

# **©** Symposium Overview

NeuroTech 2026 will explore cutting-edge advances at the interface of neuroscience, neural engineering, and intelligent technologies.

The symposium focuses on how innovative materials, electronic systems, and Aldriven design are shaping the next generation of neural repair, stimulation, and prosthetic interfaces.

Bringing together researchers from neuroscience, materials science, and biomedical engineering, NeuroTech 2026 provides a platform to discuss both fundamental mechanisms and translational applications in brain–machine integration.

Symposium Tracks

◆ Track 1 – Neural Engineering and Brain–Machine Interfaces

- Next-generation neural interfaces for recording and stimulation
- Flexible and biocompatible electrode systems
- Soft neuroelectronics and implantable communication platforms
- Al-based decoding and control of neural signals
- Wireless and self-powered neuroprosthetic devices

## Track 2 – Neural Regeneration and Repair

- Bioinspired scaffolds and microenvironments for neural recovery
- · Controlled release systems for neurotrophic factors
- · Neural stem-cell integration and tissue regeneration strategies
- · Electrical and mechanical cues for axonal growth
- Translational research in spinal cord and brain injury

#### Track 3 – Neurostimulation and Functional Restoration

- Deep brain stimulation (DBS) and transcranial modulation
- · Magnetoelectric and piezoelectric stimulation technologies
- Adaptive and closed-loop neurostimulation systems
- · Wearable and minimally invasive neurorehabilitation devices

## Track 4 – Neuroimaging, Data, and Computational Neuroscience

- Multimodal neural imaging (fMRI, MEG, optical methods)
- Al and machine learning for neural data interpretation
- · Brain connectivity modeling and neural signal processing
- Integration of neuroimaging with implant design and monitoring

### Track 5 – Translational Neuroscience and Clinical Applications

- Neuroprosthetics and rehabilitation robotics
- Ethical, regulatory, and clinical aspects of brain technologies
- Cognitive enhancement and neuro—Al convergence
- Industrial collaborations in neurotech innovation