



www.biophysics2016.org

Nanion's “no wish stays open” instruments for ion channel- & ion transporter research: From low noise single channel recordings to HTS 768 measurements in parallel

Membrane proteins in general and especially ion channels are essential in a wide range of cellular functions and their malfunction underlies many diseases making them crucial targets in drug discovery. Automated patch clamping (APC) used for ion channel screening is well established within academic research and drug discovery efforts in pharmaceutical high throughput research. Further development of existing devices and introduction of new systems widen the range of possible experiments and further increase throughput.

Here we present the diversity and capability of Nanion's product portfolio to thoroughly characterize biophysical and pharmacological relevant features of target proteins ranging from fundamental low noise single channel recordings in artificial bilayers to automated high throughput APC platforms capable of up to 768 independent experiments in parallel.

Nanion Technologies was founded in 2002 as a spin-off from the University of Munich, Center for Nanoscience (CeNS). Over the last 14 years it has grown to a prosperous company with over 90 employees worldwide. Based in Munich, Germany, Nanion opened further sites in the USA, China and Copenhagen, with distribution partners in 7 further countries, including Japan. Nanion has been recognized for its quality and innovation by being nominated twice for the Federal President's Award for Technology and Innovation (Deutscher Zukunftspreis) in 2007 and 2014. The company has become known for its high quality instruments for ion channel research (Port-a-Patch, Patchliner SyncroPatch and Patch Engine product families) and has expanded its product range to include impedance and field potential screening (CardioExcyte 96), parallel bilayer recordings (Orbit mini and Orbit 16) and parallel membrane transporter protein recordings (SURFE2R). Since 2014, Nanion carries Axion's multi-electrode array (MEA) systems in Europe and China.