

News detail

< [New management member at npi](#)

> [ElectroPORATOR](#)

Hans Reiner Polder passed away

03.01.2020 15:03, Age: 192 days

We sadly have to announce that Hans Reiner Polder, founder and general manager of npi electronic, passed away in late December 2019.

npi and the scientific community lost a brilliant inventor, an excellent CEO and a very good friend. He contributed with invention and improvements of many instruments to life science all over the world and brought npi electronic to one of the leading companies in the field.

Despite of this sad news npi electronic looks forward to continue its commitment to life science. The tradition of a family-run company will be carried on by **Bernd Polder** and the whole team of npi to support science with proven instrumentation, know-how and innovative developments.



Hans Reiner Polder also disseminated his knowledge to the life sciences in several articles and book chapters.

Polder, H. R., Swandulla, D., Konnerth, A., & Lux, H. D. (1984). An Improved High Current Single-Electrode Voltage/Current Clamp System. *Pflügers Arch.* 402, R35.

Misgeld, U., Müller, W. & Polder, H.R. (1989). Potentiation and Suppression by Eserine of Muscarinic Synaptic Transmission in the Guinea-Pig Hippocampal Slice. *J. Physiol.* 409, 191-206.

Richter, D. W., Pierrefiche, O., Lalley, P. M., & Polder, H. R. (1996). Voltage-clamp analysis of neurons within deep layers of the brain. *J.Neurosci.Meth.* 67, 121-131.

Draguhn, A., Pfeiffer, M., Heinemann, U., & Polder, H. R. (1997). A simple hardware model for the direct observation of voltage-clamp performance under realistic conditions, *J.Neurosci.Meth.* 78,105-113.

Müller, A., Lauen, M., Berkels, R., Dhein, S., Polder, H. R., & Klaus, W. (1999) Switched single electrode amplifiers allow precise measurement of gap junction conductance. *Am.J.Physiol. (Cell)* 276, C980-988.

Schoepfer, R., Buchholz, G., Planck, J. & Polder, H. R. (1999). *CellWorks: A Control Software for the Entire Experimental Setup*, in: *Virtual Instruments in Practice*. ed. Jamal, R., pp. 321-328, Hüthig, München.

Friedrich, E., Polder, H. R., & Weskamp, M. (2001). New Technique Enhances Microinjection on Oocytes. *BioForum International*, 06/2001, G.I.T. Publishing Ltd., Darmstadt.

Polder, H. R., & Swandulla, D. (2001). The use of control theory for the design of voltage clamp systems: A Simple and standardized procedure for evaluating system parameters. *J.Neurosci.Meth.*, 109, 97-109.

Stett, A., Knott, T., Polder, H. R., & Nisch, W. (2002). Automated Patch-Clamp Approach Providing High Content Screening. *Biophys. J.*, 82, 266a

Sutor, B., Grimm, Ch., & Polder, H. R. (2003). Voltage-Clamp controlled Current-Clamp Recordings From Neurons: An Electrophysiological Technique Enabling the Detection of Fast Potentials Changes at Preset Holding Potentials. *Pflügers Arch.*, 446, 133-141.

Polder, H.R., M. Weskamp, K. Linz and R. Meyer (2004) Voltage-Clamp and Patch-Clamp Techniques, Chapter 3.4, pp. 272-323 in: Dhein, Stefan; Mohr, Friedrich Wilhelm; Delmar, Mario (Eds.) *Practical Methods in Cardiovascular Research*, Springer, Berlin, Heidelberg and New York 2004.

Daniel, J., Polder, H.R., Lessmann, V. & Brigadski, T. (2013). Single-cell Juxtacellular Transfection and Recording Technique. Pflügers Arch., 465, 1637-1649.

Riedemann, T., Polder, H.R. & Sutor, B. (2016) Determination and Compensation of Series Resistances During Whole-Cell Patch-Clamp Recordings Using an Active Bridge Circuit and the Phase-Sensitive Technique. Pflügers Arch., 468, 1725-1740.

Chaitanya, J., Gobbo, D., Zhao, N., Planck, J., Polder, H.R. & Kirchhoff F. (2019) Universal amplifier with automatic compensation of series resistance and capacitance in whole cell recordings using an active-bridge circuit and phase-sensitive technique. Poster presented at DPG Meeting, Ulm

[<- Back to: News archive](#)