



In 1972, Heinz Walz started his firm as a one-man enterprise with support of his wife, Hannelore, who took care of the unavoidable small business demands. Besides his professional qualifications as master craftsmen and electrical engineer, his chief start-up capital was a patented concept for measuring photosynthetic CO<sub>2</sub> uptake by plants [1]. Its essential characteristics were a flow-through measuring chamber and the evaluation of the CO<sub>2</sub> difference between the gas passing through the measuring chamber and the gas of a reference line. In short, Heinz Walz had the design of today's high-performance gas exchange machines in mind. Before that, plant photosynthesis was mostly measured in closed chambers by metering the CO<sub>2</sub> added to compensate for plant CO<sub>2</sub> uptake.

The convincing measuring principle let the company grow. At the same time, the number of scientific partnerships with Heinz Walz increased. The original cooperation between Prof. Dr. Werner Koch of the Forest Botanical Institute in Munich and Heinz Walz was followed by numerous partnerships with German and international researchers. Their successful work is documented in publications which were coauthored by Heinz Walz [2-5]. In 1990, the particularly fruitful collaboration between Prof. Dr. Otto Lange of the University of Würzburg and Heinz Walz was recognized by a German award for technology transfer.

A few years earlier, another scientist from the University of Würzburg approached Heinz Walz: Dr. Ulrich Schreiber. He introduced the method of pulse-amplitude modulated (PAM) chlorophyll fluorescence as another way to measure photosynthesis [6, 7]. With the production of the first commercially available PAM fluorometer, a long-term cooperation between Dr. Schreiber and Heinz Walz began. Nowadays Dr. Schreiber is a senior advisor of Heinz Walz GmbH.

The Heinz Walz GmbH culture is built on close collaboration with extraordinary scientists assisting with the development of state-of-the-art instrumentation. Within the company, the instrument support staff are excellent scientists in their own right assuring that the customers receive both high caliber application and technical assistance.

Starting from this first fluorescence instrument, Heinz Walz, and later his sons, Harald and Steffen, created a small universe that expanded to other optical measurements of photosynthetic reactions including proton translocation, redox reactions or UV screening. At the same time, the scope of fluorescence techniques was expanded. Instruments were built to improve agriculture or to monitor photosynthetic activity worldwide from the Arctic to the Antarctic, above ground in woods and underwater in coral reefs. All these developments have led to PAM fluorometers currently being used in almost 15000 scientific publications.

Presently, the management duties of Heinz Walz GmbH are in the process of being passed on to the third generation. Julia Walz took over the job as chief executive from her father, Harald Walz. André Walz, Son of Steffen Walz, joined the development division of the Heinz Walz GmbH. With younger people involved in leading the company, the Heinz Walz GmbH will continue to produce excellent equipment for photosynthesis research.

On occasion of the anniversary, we have put on the web an illustrated history of the company (<https://www.walz.com/company/history.html>) and we remember the life of Heinz Walz (<https://www.walz.com/company/founder.html>). You are invited to visit the Heinz Walz website and have a glance at the past.

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SINCE 1972

**WALZ**

