On January 29, 2001, Jan Amesz passed away very unexpectedly because of complications after lung surgery. Jan was born in Gouda, The Netherlands, on March 11, 1934. There he also attended the Latin school (gymnasium) and obtained his diploma in 1951. He then entered Utrecht University where he started his studies in chemistry. Jan received his Master’s with honors, and decided to start preparing a Ph.D. with Lou Duysens in 1958, who had accepted an appointment in Leiden a few years earlier as associate professor of biophysics. Jan has played a major role in shaping the Biophysics Department at the Leiden University from these early days on.

Jan received his Ph.D. with honors in 1964, writing a thesis on Intracellular Reactions of Nicotinamide-dinucleotide in Photosynthetic Organisms. A large part of the work described in his thesis concerned the oxidation/reduction reactions of NADP⁺ and NADPH. Just a few years before, Calvin and Benson had elucidated the carbon fixation cycle, for which Calvin received the Nobel prize in 1961. The connection of this cycle with the plant photosystems, however, was still largely unknown. Jan’s work contributed much to what is now textbook knowledge.

After finishing his Ph.D., Jan went as a research fellow to the Carnegie Institution, Stanford, from 1966–1967. Jan used to describe this period as a happy and fruitful time. He worked mostly on photo reactions involving the primary donor P700 in photosystem I and cytochrome f, resulting in no few-er than 14 papers co-authored with D.C. Fork with whom he closely collaborated during this period.

Upon his return to Leiden Jan was soon promoted to associate professor in 1968. He continued working
on photosystem I, but gradually his interest shifted to photosystem II, especially the acceptor side. One of the papers he himself particularly liked was the demonstration of the two-electron gate (B.R. Velthuys, J. Amesz, Charge accumulation at the reducing side of system 2 of photosynthesis, Biochim. Biophys. Acta 333 (1974) 85–94; an identical model was independently proposed by Bernadette Bouges-Bocquet, Biochim. Biophys Acta 314 (1973) 250–256).

In the course of time Jan also started research on the photosynthetic bacteria, first primarily the purple non-sulfur bacteria. When Hans van Gorkom was tenured in 1976, Jan decided to leave the supervision of photosystem II research to him, and initiated a new research field, the photosystem of green bacteria. This field would constitute his major, but not exclusive, interest for the remainder of his career. He had many contributions to this field, especially in the development of isolation procedures, the study and analysis of pigment composition, and the investigation of energy and electron transfer pathways in green bacteria. A significant recent achievement was the isolation of an active reaction center core complex from green sulfur bacteria, which always had been elusive.

In 1980 Jan became full professor of biophysics. At the same time he assumed the responsibilities of chairman of the Department of Biophysics, a post held until then by Lou Duysens. Jan provided leadership for more than 15 years, and contributed greatly to the status of the Department, not only at Leiden University, but also at the national and international level. Although Jan formally retired in 1999, he remained very active until his untimely death. He was still strongly involved in research, especially as coordinator of a TMR research network on ‘Green Bacterial Photosynthesis’ of the European Community. One of the last manuscripts from his hand is to appear in this issue.

Summarizing Jan’s achievements, it is clear that they paralleled the amazing increase in our understanding of the photosynthetic primary reactions over the past 40 years. At several points Jan’s contributions have been crucial, and they will have a lasting impact on the field. In addition to his great gifts as a scientist, Jan was an able administrator. Within Leiden University he served in several posts, amongst others as chairman of the Division of Physics and Astronomy. He was a member of the Royal Dutch Academy of Sciences, in which he served terms as President of the Standing Committee for Biochemistry and Biophysics, and of the Section for Biochemistry and Biophysics. Jan served in several functions in the Dutch Society for Biophysics. At the international level Jan was a member of numerous organizing committees of international conferences, workshops and summerschools. He has been associate editor of several journals, among which Photosynthesis Research, Plant Science and Biochimica et Biophysica Acta, and was (co-)editor of several books on photosynthesis research. Last but not least, he was still a member of the Standing Committee for the Life and Environmental Sciences (LESC) of the European Science Foundation.

Jan had a strong sense of care and responsibility for the people around him, and all his students can testify to that. He always had time for his students and collaborators, who could drop in any time to discuss scientific and other matters. Jan had a sharp mind with a dry sense of humor, and was knowledgeable in many areas. Conversations with him were never boring.

We will remember Jan as an exemplary scientist, a fine colleague, and an inspiring teacher. He leaves his wife Anik, his children Stella, Robert and Bas, and his grandchildren, to whom we extend our deepest feelings of sorrow and sympathy.

A.J. Hoff, T.J. Aartsma