

Richard A. Vollenweider, in memoriam

*Maria José L. Boavida
Universidade de Lisboa*

Richard Albert Vollenweider died on January 20, 2007, at the age of 84. Born in Switzerland, he earned his Ph. D. at Zurich, spent some productive years of his scientific career at Pallanza, Italy, and eventually moved to Burlington, Canada, where soon became a senior scientist at the National Water Research Institute, Environment Canada.

Vollenweider deserves recognition from all of us for his pioneer, fundamental research demonstrating that phosphorus was crucial in eutrophication of fresh water. Starting in 1966 by request of OECD, Vollenweider coordinated a group of scientists from all over the world working to find solutions to eutrophication; this resulted in the publication of the most significant of all technical reports ever produced (Vollenweider, 1968). For the first time a quantitative predictive model would relate the degree of eutrophication to phosphorus loadings. In 1987 the Citation Classic n° 35 stated that the Vollenweider report had already been cited in over 545 publications – quite unusual for a “gray” report. The OECD had to recopy the report several times to meet the demand, exceeding 10,000 requests worldwide. Vollenweider himself said that his secretary had to send at least one or two copies a week per request. After the OECD report Vollenweider organized and coordinated an 18 country Eutrophication Studies Program to collect data relating eutrophication to phosphorus loads in about 200 lakes of several continents – his findings were the underpinnings for the establishment of nutrient load limits in US and Canada. Vollenweider was the main advisor of the US and Canada joint governmental commission to solve the serious environmental problem involving Lake Erie and the other Great Lakes in the nineteen sixties – under his advice, the pollution of the world’s largest supply of fresh water was controlled and effectively reversed. It is known that, after he managed to recover Lake Erie, Dr. Vollenweider won the nickname of “Dr. God”. The Vollenweider model was adopted thereafter in eutrophication control programs of many western countries. Vollenweider was also the vice-President of the ILEC, International Lake Environment Committee, and traveled everywhere in the world on assignments with UNESCO.



Photo taken by R. Heath
at Óbidos, Portugal

However, he has always kept a strong liaison to Italy: In 1978 he became the major advisor to the Italian Regional Government of Emilia-Romagna regarding eutrophication of the Adriatic Sea, working in a research center in Cesenatico, where he would go very often; he was co-President of the International Center for Advanced Environmental Studies Alessandro Volta in Como as well.

Richard A. Vollenweider was awarded, among others, the Tyler Environmental Prize (1986), considered as the Nobel for environmental science, the Naumann-Thiennemann Medal by SIL (1987), the Global 500 Roll of Honor by UNEP (1988), the Premio Internazionale Cervia for his advisory on eutrophication of the Adriatic Sea (Italy).

I first met Richard in Otsu, Japan, and I was astonished at his austerity. After that we met many other times, often at Pallanza where we used to have dinner together and take the *lungolago* for unending conversations, also at Portugal, for an incredible one-week tour four or five of us took after a meeting on phosphorus/eutrophication held at Lisboa. His friends Tommy and Yvette Edmondson first met Richard at Pallanza, where he was living and they visited in 1959/1960, and they told about the musical evenings with Vollenweider, including occasions when he played his violin (Edmondson & Edmondson, 1990). Richard faced life in a truly artistic attitude – he said about Tom Edmondson “we both shared enthusiasm for limnology but also the love for baroque music. Tommy and Yvette, more than anyone else I met, felt both that art is a necessary complement to science to enhance appreciation of both” (SILnews, Jan. 2001).

More than anything else, Richard loved to be among simple people: Stories such as that in the Nile traveling in a boat with Egyptian fishermen, all passing around the one glass of drink and telling stories of adventures in the river were told by him with true delight.

The passing of Richard A. Vollenweider is a great loss for science, yet, more than the eminent scientist, we lost the Man who persisted in his condition of being a true friend.

REFERENCES

- Edmondson, W. T. & Y. H. Edmondson. 1990. Pallanza as a haven for visiting limnologists. In: *Scientific perspectives in Theoretical and Applied Limnology*. R. de Bernardi, G. Giussani & L. Barabanti (eds.). *Mem. Ist. ital. Idrobiol.* 47: 47-55.
- SILnews. 2001. *Letters to the Editor*, 32: 3.
- Vollenweider, R. A. 1968. *Scientific Fundamentals of the Eutrophication of Lakes and Flowing Waters, with Particular Reference to Nitrogen and Phosphorus as Factors in Eutrophication*. Paris, Rep. Organization for Economic Cooperation and Development, DAS/CSI/68.27, 192 pp.; Annex, 21 pp.; Bibliography, 61 pp.