



International
Water Association

60 second interview | *Peter A. Wilderer*

Prof. i.R. Dr.-Ing. Dr. h.c. Peter A. Wilderer
Institute of Advanced Studies on Sustainability
Moosweg 5, 83727 Schliersee, Germany

Peter A. Wilderer served at the Technical University of Munich, Germany as professor and director of the Institute of Water Quality Control and Waste Management from 1991, but retired from this position in 2004. Since then he has taken charge of the Institute of Advanced Studies on Sustainability of the European Academy of Sciences and Arts.

He joined IWA in 1968 as a PhD student. Over the years he served IWA in various functions, as member of the Scientific and Technology Committee, for instance, as chairman of the specialist group on Small Wastewater Treatment Systems, as editor of the journal *Water Research* and as editor-in-chief of the “*Water Science and Technology*” journal. More recently, he was appointed as co-chairman of the newly established IWA Council of Distinguished Water Professionals (CDWP).

- *What do you consider to be the most significant recent change in your field of expertise to have occurred in the last 10 years?*
Among the many advances which have been achieved over the past ten years three have had the greatest impact: membranes for solid-liquid separation, mathematical models combined with numerical simulation as research, design and operation tools, and the concept of decentralization which from my point of view is based on the recognition of the value of wastewater as a source.
- *What do you consider to be the most significant future challenge that professionals must deal with in the next 10 years?*
We are facing – worldwide - rapid urbanization caused by migration from rural areas to cities and from underdeveloped countries to developed ones. With the associated growth in population size, the demand for safe drinking water is increasing proportionally, and this will have to be provided from sources that are limited in size. In turn, with the increase in water consumption and related increases in the amount of wastewater generated, the need for building and operating sewers and wastewater treatment facilities increases, causing tremendous financial impacts to taxpayers, and on the carrying capacity of receiving waters in and downstream of metropolitan areas. The outcome of this situation is that investments have to be made within a very short period of time to avoid destabilizing urban societies. The traditional concept of urban water supply and sanitation appears to lack suitability in solving these local requirements within the time given. It must be substituted by novel means and concepts. Decentralization, rigorous application of membrane technology, computer aided supervision and control, recovery of safe water from wastewater, and water reuse are all possible answers which will gain increasing importance.
- *Whom do you consider to be the leading experts in your field, outside of your own organization, and why?*
Considering the dimension of the problems we are facing, I doubt that individuals will play a leading role in future. The future belongs to multi- and trans-disciplinary teams. Not only that engineers must listen and cooperate closely with chemists, microbiologists, administrators, law scientists and economists but that strengthened collaboration is needed between the social sciences and with civil society. The European Union Commission recognized the need for entering into this new area of urban water management by establishing the Water Supply & Sanitation Technology Platform (www.wsstp.org) of which IWA is a prominent member. I advise my colleagues around the world to watch closely the work done within WSSTP, and to contribute with both a critiques and with optimism to the various proposals suggested.
- *Which report, product or service from your organization deserves more attention and why?*
As a member of the European Academy of Sciences and Arts, my contribution to the discussion on problems and solutions in urban water management goes beyond the

spectrum of engineering sciences. Our approach is to provide platforms for intensive inter- and trans-disciplinary dialogues. A workshop held in 2003 dealt with the impact of local cultures on global sustainability, addressing a new perspective for science and engineering, economics and politics (Wiley-VCH Publisher, ISBN 0-470-85608-4). Currently in preparation is a workshop on the importance of education and training for promotion of sustainability, to be held in February 2007. In fact, this workshop will start in November 2005 with the presentation of impulse statements by its members, and will be discussed through Internet based conferences in coming months.

Based on the common understanding gradually evolving, no formal presentation will be given during the 2007 workshop; rather the two and half day meeting in a Northern Bavarian monastery will be used for dialogues and contemplation only. The results of the discussions will eventually be published in the form of a book. I strongly believe that this type of workshop will provide very valuable guidelines for the design of our common future.

- *In what ways would you like to see IWA change in the next 5 years?*

The strength of IWA stems from its members; their expertise and dedication. To take advantage of the wealth of membership expertise, it will be necessary to provide members with an environment for listening to each other, and drawing concepts and decision from dialogues. Large conferences are a good opportunities for members to meet and to talk to each other, but the exchange of thoughts and wisdom requires rather smaller events. I would be happy if the “old” concept of small specialized conferences, workshops and task groups could be re-invented and prioritized by IWA management, and if sponsors could become active in co-financing such important group work.

- *Contact points*

Prof. i.R. Dr.-Ing. Dr. h.c. Peter A. Wilderer
Institute of Advanced Studies on Sustainability
Moosweg 5, 83727 Schliersee, Germany

Email: peter@wilderer.de; paw@bv.tum.de

Internet: www.advances.de