



**Em.O.Univ.Prof. Dipl.-Ing. Dr.techn.
PETER LECHNER**

born in Vienna (Austria) 1943

Education

- 1971 degree in Civil Engineering and Water Management at the University of Natural Resources and Life Sciences, Vienna (BOKU)
- 1988 Doctoral Degree (Thesis „Investigations for the optimization of rotting systems using the example of composting at Oberpullendorf/Burgenland“) at the University of Technology, Vienna

Academic activities

1974 research assistant at the Institute of Water Quality and Waste Management, University of Technology (TU Vienna);
1988 Assistant Professor at the University of Technology Vienna;
1993 Full Professor for Waste Management at the University of Natural Resources and life Sciences, Vienna (BOKU)

Education activities

At the University of Technology in Vienna Prof. Lechner taught in the seventies the first courses in composting and landfilling of waste. He provided and co-supervised the first waste-related topics for diploma theses in the study-program “civil engineering”. After his call to BOKU he developed and implemented comprehensive waste management courses within the study program “civil engineering and water management”. A lot of diploma, master and doctoral theses were successfully elaborated under his supervision, both at TU and BOKU. He also played an important role in the development and modernization of the BOKU study program “civil engineering and water management”. Furthermore, he initiated the establishment of waste management as a core module in the study program “Environment and Bio-Resources Management”.

Scientific activities:

Together with Professor Walter Kemmerling (Peter Lechner was one of his first research assistant) - he set up the Institute of Water Quality and Waste Management at TU-Vienna. During this time his main research fields were landfilling and composting of wastes. In 1993 he started to establish the Institute of Waste Management at BOKU, which he headed till 2011 and where he initiated a broad scientific approach in waste management with research topics in waste prevention, waste logistics, recycling and composting, biological pre-treatment and landfilling of waste residues, aftercare and monitoring of landfill sites. Within these areas he always focused on natural and biological

processes when developing new technologies and methods. Based on his ideas new and alternative methods in waste analytics were adapted, as there are for example FTIR-spectroscopy, thermogravimetry and humic substance quantification to assess compost quality. Peter Lechner led a lot of research projects for the Austrian Environmental Ministry, municipalities as well as landfill and plant operators, and he was a member of the scientific board for waste management and remediation of contaminated sites advising the Austrian governance. It was always important to him to communicate and transfer new research findings into practice, what he tried to do by organizing seminars and conferences (e.g., three international BOKU-Waste Conferences).

Main Achievements

Based on his expertise the first technical guideline for landfills has been created, which again was the basis for the Austrian Landfill Ordinance 1996. Moreover, he initiated several working groups dealing with the technical standardization of compost quality, and he was a co-founder of the Austrian Compost Quality Association (KGVÖ), which he chaired from 1994 to 2012. Peter Lechner was

also a founding member of the International Waste Working Group (IWWG). Under his auspices many task groups were established – one of that (“Phönix”) published a joint paper, which became one of the most cited papers in the Journal Waste Management.

Others

Peter Lechner communicated his research findings in a lot of scientific and technical papers and proceedings, and he held numerous presentations at international conferences. In 2004 he published the book “Kommunale Abfallentsorgung”, which is used both in practice and university teaching as a source of basic information about municipal solid waste management.

However, Peter Lechner’s scientific interests were not only limited to waste. He was also conducting research on a specific type of cacti (*Turbinicarpa*), a new species that he found in South America was even named after him. Prof. Lechner retired in 2011, since then a new passion is the collection of seldom and exceptional forms of calcites.