AARHUS UNIVERSITY EXTERNAL SEMINAR DEPARTMENT OF ENVIRONMENTAL SCIENCE Frederiksborgvej 399, 4000 Roskilde 24 June 2019, 11:00 – 12:00 Venue: <u>the Pavilion at Risø Campus in Roskilde, AU</u>



Title: Advances in Air Pollution Science: Meteorological Modeling, Cost-Benefit Optimization, Litigation Support

Speaker: Dr. Paolo Zannetti is the President and Founder of EnviroComp Consulting, Inc. and the non-profit EnviroComp Institute. He has performed studies and scientific research in environmental sciences for four decades. His major field of investigation and competence is air pollution. He has written more than 300 publications, and 40+ books and book chapters, including the book "Air Pollution Modeling", completed in 1990, which was the first comprehensive book in the field and is still today a widely used textbook. A 4-volume, multi-author, revised and expanded edition of this book has been published during the period 2003-2010 under his direction and chief editorial management.

Dr. Zannetti has studied air quality problems all over the world, often using computer models to simulate the transport and fate of atmospheric chemicals. In addition to his academic and scientific achievements, Dr. Zannetti is very familiar with litigation cases and has provided testimony at depositions and trials in more than 40 cases.

Abstract: This seminar presents some recent advances in Air Pollution Science. (1) With the more frequent use of real 3D air pollution models (such as CALPUFF) instead of strait-line Gaussian models (like AERMOD), it has become more common, and fully acceptable by US regulatory agencies, to use prognostic models such as WRF to provide the meteorological input. (2) Cost-benefit optimization techniques, virtually ignored in the past, are becoming more appealing for decision makers. Their future use seems very appropriate, especially in developing countries. (3) Air Pollution Litigation is very frequent, especially in the US. Scientists should be aware of the possibility of involvement in litigation cases, and the pros and cons.

Host: Jørgen Brandt, Professor, Section for atmospheric Environment, Department of Environmental Science, Aarhus University

External Guests interested in attending the presentation should e-mail Department Secretary Christel Ege-Johansen, cej@envs.au.dk