## INTRODUCTION TO THE LINNEBORN AWARD AND LAUDATIO FOR THE AWARDEE 2010

W.P.M van Swaaij, University of Twente, Enschede, The Netherlands Chairman of the Linneborn Prize Committee

The Johannes Linneborn Prize was established in 1994 on behalf of the European Commission by Dr. Wolfgang Palz to honor a European individual for an exceptional life-time contribution to the field of sustainable energy from biomass. This prestigious award was connected to the name of Johannes Linneborn, a German biomass pioneer and businessman. He was the manufacturer of more than 500,000 Imbert small-scale wood gasifiers used to fuel cars, trucks and lorries when fossil liquid fuels were scarce. I met this great man in person, somewhere in the 1980ies and could experience his enthusiasm, energy and wisdom. His ideal was a world in which mankind lives in harmony with nature with optimal exploiting of biomass for energy and materials. On the picture you see Mr. Linneborn together with the young Dr. Palz when he paid him a visit probably in the early 80ies or late 70ies.

From a long list of excellent candidates the Prize Committee unanimously selected as winner of the Linneborn Prize 2010:

Dr. Kyriakos Maniatis Principal administrator Energy Technologies & Research Coordination DG ENER, European Commission

The prize is awarded him for his leadership in promoting biomass as a sustainable energy source within the European Union and worldwide for more than 20 years.

This leadership is solidly based on his scientific and engineering abilities reflected in more than 100 publications: research papers, contributions to conferences, handbooks and authoritative reviews with stimulating directives and advice on how to proceed with technologies and policies in different subfields of biomass as energy source.

Areas of interest included biomass gasification, combustion, pyrolysis, norms and standards, applications in developing countries and algae.

Kyriakos Maniatis studied at the University College in London and received his PhD on fluid bed biomass gasification in 1987 at Aston University. Prof. Tony Bridgwater was his thesis director and the actual R&D work carried out at VYNCKE in Belgium. In this period, sound chemical engineering methods found their way to the design and development of biomass gasifiers and his thesis was a fine example. Maniates was strongly committed to the concept of biomass as an adoptable solution for energy generation in developing countries and specially he contributed to activities in rural Indonesia and Zaire. In Belgium he taught engineering and management at the Vesalius College of the Vrije Universiteit Brussel for more than 10 years. Here he got involved in research, among others in collaboration with Prof. Buekens, on different subjects like fluid bed gasification, pyrolysis (in particular the design, construction and operation of the Egemin entrained flow fast pyrolysis process and circulating beds), cogeneration, gas turbine applications, char coal production,

combustion and many more subjects. While working for the Commission he managed in a superb way the bioenergy demonstration part of the EC Framework Programmes over the last 20 years and had a large contribution to the shaping of the technology and the policy of biomass as a sustainable source of energy in Europe. He was responsible for all technical issues of first, second generation of biofuels and polygeneration in the 7<sup>th</sup> framework and contributed to the legislative actions. In particular he initiated and drove the EC biomass IGCC demonstration programme in the early 1990s to establish demonstration plants for fluid bed gasifiers and gas turbines between 8 and 12 MWe

Moreover he initiated the CEN standardization work on solid biomass fuels, recovered fuels, bioethanol and the biodiesel standard. He currently leads a EU team to realize Tripartite International Compatible Biofuel standards with US and Brazil that issued a white paper on the subject.

Maniatis represents the Commission in the Executive Committee of the International Energy Agency Bioenergy Agreement and was a very successful Exco chairman in 2002, 2005, 2006 and 2007. He made extensive efforts to modernize the organization to improve the methods to achieve the desired results, all this while reaching out for consensus. His management style in all his work is dynamic, persistent and very effective in coping with bureaucratic obstacles. He was also an excellent chairman of the 15<sup>th</sup> Biomass Conference held in Berlin 2007.

Maniatis is often invited, worldwide, as an authorative speaker with clear vision and a fine eye for excellence in work of others. He takes all his jobs very seriously and adds to this a lot of personal charm.

Kyriakos Maniatis, the Committee of the Linneborn Prize and, I am sure, the whole biomass community is convinced that you really deserve this award. We hope that you will keep up the good work in the future.

Congratulations!