

SARTON MEDAL LECTURES

LAUDATIO PIETER EIJKHOFF

Achiel Van Cauwenberghe

A good old Dutch saying states “Goede wijn behoeft geen krans” (which means: excellent wine does neither need a wreath nor praise). Being a graduate judge of wines and a real oenophile, our guest speaker of today will certainly agree with it. Nevertheless, the ceremonial protocol requires that the qualities of the Sarton medalist should be described to some extent by a truthful and reliable witness. Let me try to meet these demands.

Professor Pieter Eijkhoff was born in Den Haag (The Hague) on the ninth of April 1929. I can confirm that this is a real nice day to be born on, as it coincides with my own birthday. Hence, being born under the same lucky stars I do assume that we must have some common characteristics, flavours and tastes.

He studied electrical engineering at the Technical University in Delft (graduating in 1956) and got a doctoral degree (Ph.D.) from the University of California in Berkeley, USA in 1961. In 1964 he became professor in measurement and control at the Electrical Engineering Faculty of the Technical University in Eindhoven. From 1977 to 1980 he served as Dean of this Faculty.

Together with Åström, Bohlin and Strejc he laid the foundations of “Identification” as a separate discipline. His paper with Åström in 1971 is a classic, still very often cited. His book “System identification, parameter and state estimation” (Wiley 1974/79) has been translated in many languages and is a real “Citation Classic”.

Prof. Eijkhoff was very active in many national and international organizations and institutions. Particularly the International Federation of Automatic Control, IFAC for short, was one of his favourites. Indeed, he

served as Executive Councilor from 1975 to 1981 and was a leading member of the Publications Managing Board (1976-90), the IFAC Publications Committee (1981-87), the Automatica Editorial Board (1981-87) and the IFAC Awards Committee (1981-87). He is still editor of the IFAC journal "Control Engineering Practice" (since 1992).

He has been awarded many distinctions and honours as e.g. fellow of the Institute of Electrical and Electronics Engineers of the United States of America (1979), honorary professor of Xian Jiaotong University, China (1986), member of the Koninklijke Nederlandse Akademie van Wetenschappen (Royal Dutch Academy of Sciences) since 1988, doctor honoris causa of the Vrije Universiteit Brussel (Free University of Brussels) in 1990. He got the Outstanding Service Award of IFAC in 1990 for "sustained outstanding performance in major leadership positions" and was knighted in the Order of the Dutch Lion in 1991.

As a quality conscious and creative thinker he was very influential and instrumental in many other areas as

- his initiative in medical engineering in Eindhoven
- his endeavours to upgrade the Dutch engineering curriculum, leading to a new curriculum in the Netherlands in 1996.

He was an active advocate of human rights, many years before these became standard on the political agenda.

But all these, although impressive themselves, are not enough to obtain a Sarton medal. Much expertise and interest in the history of sciences is a requisite. And this is certainly the case with Prof. Eijkhoff, who developed a keen interest in the history of electrical engineering in general and control engineering in particular. As such he authored history contributions as

"IFAC 20 years old, 20 years young" (1978)

"Highlights from the history of IFAC" (1986) (with Michel Cuénod)

and is actively involved in the Foundation for the History of Electrical Engineering (Fonds voor de Geschiedenis van de Elektrotechniek) at the Technical University in Eindhoven.

He was also the driving force and organizer of many IFAC Sympo-

sia. As the origin of "Symposium" (a title of one of Plato's dialogues) was "a convivial meeting with much drinking and other pleasant activities", one could doubt if this contributed to his later activities as oenologist, wine expert and wine identifier. Moreover, he was always a busy photographer of IFAC's scientific and social activities, establishing an outstanding historical record of these events.

During the years, he developed a special relation with China (he was the president of the Netherlands-China friendship society from 1984-1991 and is a renowned and recognized connoisseur of Chinese wines) and Flanders (being interested in Flemish art and science). Of course, both countries can hardly be compared: what we Flemings miss in quantity, we have to make up in quality.

Dear professor Eijkhoff, dear Piet,

I consider it as a big favour to get to know you and your beloved life companion Hanneke, already for many years. I learned to appreciate you as a quiet and honest man, but decisively and relentlessly searching for the truth, as a top quality scientist and a top notch engineer. We developed a warm and fruitful friendship.

How you dealt with uncertainty while identifying sometimes very precarious processes as wine-making and tasting has always risen my interest and stimulated my curiosity. I assume that the audience is equally interested to hear your ideas on the "uncertainty as an assignment: the feedback control principle throughout the ages".