

## Preface



On behalf of the friends, academic and industrial colleagues, postdoctoral and graduate students who have had the opportunity to work or collaborate with Professor Vasalos during his career, we have the privilege of dedicating this special issue of *Catalysis Today* to celebrate his contribution to chemical engineering over the last 40 years. Many of the contributors also attended the International Symposium on “Hydrocarbon Catalysis and Catalytic Engineering: Present Status and Perspectives” held in Artemon on his home island Sifnos, Greece. Over 80 participants gathered in a relaxed atmosphere during the weekend of June 28–30, 2007, to highlight important developments in the field of hydrocarbons and alternative fuels and to discuss the scientific challenges. Not only the excitement about future perspectives, but also the reminiscence of common projects, challenges and adventures gave the symposium a special character. In this preface we will attempt to give the highlights of the career of Professor Vasalos as academic scholar, as industrial scientist and as science manager.

Professor Vasalos was born in 1938 on the small island of Sifnos located in the middle of the Aegean Sea. He was one of 10 children and despite the hard life of a farming family, he was sent to Athens for secondary education. After graduating from high school, he studied Chemical Engineering at the National Technical University, Athens. Supported by excellent grades and driven by strong motivation, he was admitted to MIT for graduate studies under the supervision of Professor Adel Sarofim. He received his Master’s degree in 1967 and his Ph.D.

in 1969. He proved experimentally that the radiative properties of particle suspensions may be predicted from theory, provided that the particle diameter, the refractive index and the thickness of the irradiated surface are known.

The Amoco Research Center in Naperville, Illinois, was his first professional environment. He worked there for 10 years from 1969 to 1979, as a research engineer, project manager, process specialist and research supervisor. During this period he was mainly involved in research areas related to fluid catalytic cracking, resid cracking, flue gas DeSO<sub>x</sub> and oil shale retorting. He was one of the inventors of the DeSO<sub>x</sub> process for reducing SO<sub>x</sub> emissions from the regenerators of fluid cracking units and of the fluidized bed process for producing shale oil from inorganic oil shale rocks. He is the author or coauthor of 43 international patents many of which have been successfully applied in the refineries. While working at Amoco, he received his Master in Business Administration in the Manager’s Program of the Northwestern University in Chicago.

There Professor Vasalos met his wife, Eva Tsitsibakou, at that time a graduate student in the Classics Department of the University of Chicago. They have been happily married for 31 years and have three daughters: Mina, Sophia and Christina.

In 1979 he returned to Greece to the newly founded Department of Chemical Engineering in the Aristotle University of Thessaloniki. He was appointed Professor in the Chair of Petrochemical Technology. From the very beginning he actively participated in important committees in the Chemical Engineering Department, which determined

the course and the development of the Department. As soon as he settled in Thessaloniki, he organized a research team and initiated activities related to catalytic hydrocarbon activation, such as catalytic steam cracking for olefins production and fluid catalytic cracking. He was one of the first researchers involved in the area of biomass valorization to chemicals via catalytic pyrolysis. On account of his active involvement in a series of EU funded projects in areas, such as methane coupling, syngas production with emphasis on catalytic reaction engineering and modelling coupled with overall process simulation, he was established as one of the leading European Chemical Engineers.

His vision to establish a research institute related to chemical engineering became reality in 1985 with the foundation of Chemical Process Engineering Research Institute (CPERI). Over the last 20 years it grew into a research center of excellence in applied research in various disciplines of chemical engineering, and became the nucleus for the establishment in 2000 of the Center of Research and Technology Hellas (CERTH). In parallel with his academic and administrative duties as Director of CPERI, Professor Vasalos was the key initiator of the establishment of the Thessaloniki Technology Park with the mission to foster the ties and collaboration between local industry and research groups. He served as the first director of CPERI for 15 years. During that time he set up the Lab of Environmental Fuels and Hydrocarbons, which is recognized as one of the cornerstone labs of the Institute. Excellent and state of the art experimental units were successfully designed, ranging from lab to pilot scale, with the heart of the activities being in FCC. Professor Vasalos' expertise and scientific intuition allowed him to make significant contributions in the area of catalytic reaction engineering related to the refining processes.

His contribution to the process development and catalyst evaluation in Fluid Catalytic Cracking is highly acknowledged from the industrial community since the Lab of Environmental Fuel and Hydrocarbons is one of the few labs providing worldwide services to the refining industry.

His scientific accomplishments include over 130 publications in refereed journals, numerous presentations in national and international conferences and invited lectures and seminars. In the course of his academic career, he has supervised 12 Ph.D. theses. A number of his students and postdoctoral associates hold important positions in both academia and chemical industry in Greece and abroad. Professor Vasalos' remarkable scientific achievements stem from a right blend of broad knowledge,

outstanding creativity, everlasting enthusiasm and never ending energy for team work.

His broad expertise in energy related processes, coupled with hard work and dedication, have been appreciated by the research policy makers in Greece and EU where he has successfully served as member in many committees with the most important assignments being: national representative in the Programme Committee for Industrial Technologies and Energy, member of advisory group Energy EU DG Research and member of National Research Council.

Professor Vasalos officially retired from the Department of Chemical Engineering and from the Directorship of CERTH on August 31, 2005. Nevertheless, his administrative activities never stopped, to be more precise, they were intensified. He undertook the responsibility to chair Technology Park of Thessaly and to establish the Center for Research and Technology in Thessaly (CERETETH). To this long list it is worth adding one more recent distinction. He has been nominated as the first Chairman of Innovation Zone of Thessaloniki (June 2007).

At this point we would like to thank all authors as well as Professor Julian Ross and the Editorial Staff of *Catalysis Today* for making this special issue possible.

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