



Obituary

Salvador de Aza

Salvador de Aza was born in Madrid on November 13, 1933.

He graduated in Chemistry at the University of Barcelona in 1958 and, after four years of work in the ceramics industry, he started his scientific career in the Patronato Juan de la Cierva, now the Institute of Ceramics and Glass (Instituto de Cerámica y Vidrio), of the National Research Council of Spain (Consejo Superior de Investigaciones Científicas, CSIC).

In 1965 he became PhD in Chemistry with a thesis entitled “Cold Chemically Bonded Basic Refractories” at the Universidad Complutense de Madrid. With this work he won the “Juan de la Cierva” national award for scientific and technical research.

In 1969 he received a grant from The Royal Society to work in the Department of Ceramics with Refractory Technology in the University of Sheffield (United Kingdom), where he was hired as a Research Fellow in January 1970. During this period he developed and published the patent, “An Improved Basic Refractory”.

He became Fellow of the British Ceramic Society in 1971, also the year of his return to the Institute of Ceramics and Glass, firstly as Head of the Refractory Section and then as Head of the Department of Ceramics. He became Research Professor of CSIC in 1975.

He was the director of the Institute of Ceramics and Glass from 1983 to 1991, when he became Vice President of Science and Technology of CSIC, holding this position until August 1996, when he rejoined the Institute of Ceramics and Glass, where he continued his research in the Department of Ceramics as Research Professor until 2004 and then as Professor Emeritus until his death.

Most of the scientific and technical research of Prof. De Aza was oriented towards theoretical and experimental studies of phase equilibrium diagrams and their application to the development of materials exhibiting specific properties. Among his most notable contributions are the study, interpretation and representation of phase equilibrium diagrams of quaternary systems for the first time and the application of scientific paradigm to the ceramic industry, in contrast to the classical, essentially empirical approach. The growth and leadership of the Spanish ceramic

industry since the 70s until recent years are largely due to the contributions of Prof. De Aza. In the field of bioceramics, he predicted and obtained the first polycrystalline material lacking bioactive phosphorous, wollastonite, in opposition to the glasses and glass-ceramics of Hench and Kokubo and developed the first bulk bioactive bioceramic, Bioeutectic[®], when only superficially bioactive materials were known.

Prof. De Aza was General Secretary of the Spanish Ceramic and Glass Society from 1973 to 1977, Chief Editor of its Bulletin (Boletín de la Sociedad Española de Cerámica y Vidrio) and Honorary Member of the Society since 1985. In 1993, he received the Stuijts Memorial Award of the European Ceramic Society for his contributions to the application of ceramic phase equilibrium diagrams. In 1996 he received the Silver Medal of the CSIC for his services to the institution and to Materials Science.

During his long career he made numerous contributions to R&D with public and private societies, which allowed the recording of national and international patents, some of which are currently in operation.

Prof. de Aza had also more than 50 years of teaching experience. He was Honorary Professor at the Universidad Autónoma of Madrid and the Universidad de Santiago de Compostela and visiting Professor at several universities in America, China and Taiwan, and he collaborated with ALAFAR in the training of engineers and technicians from the refractory industry and with CYTED as a lecturer in Biomaterials.

Prof. de Aza will be always remembered not only for his scientific wisdom but also for his humanism, his friendliness and his willingness to listen and share his knowledge of science and life with all.

Colleagues from the Instituto de Cerámica y Vidrio, CSIC, Sociedad Española de Cerámica y Vidrio and the European Ceramic Society

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