



2005 PAC Winner

Helmut A. Schaeffer,

Helmut A. Schaeffer, member of the International Commission of Glass Steering Committee, has been designated the thirty-fifth recipient of the Phoenix Award. Mr. Schaeffer was selected for the award in recognition of his many contributions to the glass industry.

During his high school education, Mr. Schaeffer was privileged to be a recipient of the American Field Service scholarship which enabled him to attend Wooster School in Danbury, CT. After graduating in 1956, he returned to Germany to finish his high school education and his undergraduate studies at the Technical University of Berlin.

In 1965, he completed his Diploma thesis (corresponding to a MS degree) entitled "Magneto-optical effects of gadolinium and terbium", and commenced his PhD work at the Max Planck Institute for Silicate Research in Würzburg. The title of his theses was "Mass spectrometric determination of oxygen-18 diffusion in lead silicate glasses".

In 1969, Mr. Schaeffer followed his PhD adviser, Professor Dr. Heribert Oel, to the newly founded Institute of Materials Science at the University of Erlangen-Nürnberg. Along with teaching courses in glass science and glass technology and supervising MS and PhD students, he performed research in the fields of glass structure, transport phenomena, glass surface modification, and redox reactions in glass melts.

In 1980, he completed the "Habilitation" (Dr.-Ing. Habil.) with a thesis entitled: "Oxygen and silicon diffusion in silicate glasses". In 1982, he was appointed Professor of Materials Science (Glass and Ceramics).

During his time at the university, Mr. Schaeffer also participated in other scholarly activities. From 1974 to 1975, he attended the Institute for Materials Research, National Bureau of Standards (now NIST) in Washington D.C. on a scholarship from the Max Kade Foundation to study volatilization processes of sodium from glass melts.

During the years 1977 and 1979, he was a visiting scientist at the Houldsworth School of Applied Sciences in the Department of Ceramics. And in 1982, Mr. Schaeffer was a visiting professor at the New York State College of Ceramics, Alfred University.

In 1985, he became Managing Director of the Research Association of the German Glass Industry (HVG) and the German Society of Glass Technology (DGG). HVG is a non-profit association and is comprised of company members in the glass manufacturing and supply industries.



HVG receives funding from the German Federal Ministry of Economic Affairs to carry out practice-oriented, cooperative research projects in close collaboration with university departments. DGG is a scientific-technical society which represents its technical committee work, offers advanced teaching courses and organizes national and international conferences.

During Mr. Schaeffer's service, he initiated research in the field of situ sensors and developed a device for non-destructive testing of fusion-cast refractories. Situ sensors monitor the glass melt behavior by means of electrochemical devices for determining oxygen activity and redox phenomena as well as devices to monitor the furnace atmosphere. Since the late 1980s, HVG/DGG and the Center for Glass Research in Alfred, NY alternately organize the conference "Advances in the Fusion and Processing of Glass."

Mr. Schaeffer also served as editor of the International Journal of Glass Science and Technology which he changed from German into English in 1987.

Mr. Schaeffer's involvement with the International Commission of Glass (ICG) started in 1987 when he initiated a new technical committee dealing with "Gases in Glass". He served as chairman of this committee from 1978 until 1983. In 1983, he began to serve as a member of the Coordinating Technical Committee (CTC).

From 1987 until 1992 he served as chairman of the CTC, coordinating and supervising the work of the twenty technical committees. From 1992 through 1997 he again was a member of the CTC. In 1997, Mr. Schaeffer was elected vice-president of the ICG and from 2000 until 2003 he served as president, being responsible for the organization of the XIX International Congress on Glass in Edinburgh in 2001. Since 2003, Mr. Schaeffer has been serving as a member of the ICG Steering Committee.