

DR. FRITZ R. KALHAMMER

After more than 20 years in positions of increasing responsibility at the Electric Power Research Institute (EPRI), Dr. Fritz Kalhammer retired in 1995 and is now an independent consultant in energy and process technology, with focus on battery and fuel cell technology for electric and hybrid electric vehicles. His last full-time EPRI position was Vice President of Strategic R&D with responsibility for organization and direction of EPRI's longer-term core R&D programs. Before that assignment, Dr. Kalhammer led the establishment of EPRI's end use R&D and was Vice President of EPRI's Energy Management and Utilization Division from 1979 to 1988. Before then, he established and directed the Institute's programs for energy storage, fuel cells, and electric vehicles.

Prior to joining EPRI, Dr. Kalhammer was Manager of the Electrochemistry Program at Stanford Research Institute (SRI). He had been associated with SRI since 1961, serving first as a senior physical chemist, and later as Manager of the Physical and Electrochemistry Laboratories, conducting and directing R&D on fuel cells, batteries, and electrochemical syntheses.

A native of West Germany, Dr. Kalhammer was a member of the technical staff of the Farbwerke Hoechst in Hoechst, West Germany. In 1958, he joined Philco Corporation in Pennsylvania as a project manager in solid state R&D. Dr. Kalhammer received B.S. and M.S. degrees in physics and a Ph.D. degree in physical chemistry (summa cum laude) from the University of Munich.

Dr. Kalhammer has written and lectured extensively and chaired national as well as international symposia on topics such as storage, conversion, conservation and utilization of energy. While at EPRI, he served on the Board of Directors of the Electric Vehicle Development Corporation and the Lighting Research Institute and on review committees for the Lawrence Berkeley Laboratory Applied Physics Division and the Oak Ridge National Laboratory's Energy Division. Between 1995 and 2001, he served on a number of committees and panels, including the Scientific Advisory Board of Monsanto (1995), the Task Force on Strategic Energy R&D advising the Secretary of Energy (1996), the Advisory Committee of the National Science Foundation Engineering Directorate (Chair 1996), expert panels for the State of California Air Resources Board (ARB) to assess status and prospects of advanced batteries for electric vehicle propulsion (Chair 1995 and 2000) and of automotive fuel cell technology (Chair 1998).

Between 1996 and 2001, Dr. Kalhammer served on the National Research Council Committee to review the U.S. Government - Industry research program of the Partnership for the Next Generation of Vehicles (PNGV). Since 1999, he is serving as a member of the South Coast Air Quality Management District's Clean Fuels Advisory Committee. Also since 1999, Dr. Kalhammer is engaged in a series of consulting

activities focused on the assessment of batteries for electric-drive vehicles, comparison of hybrid electric vehicles, and on the design, development and demonstration of hybrid electric vehicles recharged from the electric power grid.