

### ***Interface* Editor Named Associate Dean**



KRISHNAN RAJESHWAR, the editor of *Interface*, has been named associate dean of the College of Science at The University of Texas at Arlington (UTA). Rajeshwar has been a member of the UTA faculty since 1983, and is a past recipient of the University's Distinguished Record of Research Award, earned for his pioneering research in water purification. The College of Science includes six units: chemistry and biochemistry, physics, geology, psychology, math, and biology.

Raj, as he is known to the readers of *Interface*, has been an ECS member since 1981 and was named a Fellow of the Society in 2002. He earned his bachelor's degree from University College in Trivandrum, India, in 1969, his master's from the Indian Institute of Technology in 1971, and his PhD from the Indian Institute of Science in 1974. He undertook postdoctoral training at Colorado State University. ■



## *In Memoriam*

# Masayuki Dokiya

## 1939-2003

Dr. Masayuki Dokiya, born in Osaka, Japan on January 1, 1939, passed away on June 25, 2003 in Yokohama, Japan at the age of 64, after a struggle against pancreatic cancer for almost ten years. He is survived by his widow, his mother, and his daughters.

Dr. Dokiya obtained a bachelor's degree in 1963 and a masters' degree in 1965 in applied chemistry from the University of Tokyo. Immediately after that, he joined the Governmental Research Institute for Chemical Investigation (which later became the National Chemical Laboratory for Industry) in Tsukuba, Japan. From August 1968 to January 1970, he was a guest researcher at the Northwestern University in Evanston, Illinois. After he became the group leader/section chief in the Energy Chemistry Division of the National Chemical Laboratory for Industry in 1975, he started investigation on energy-related research topics. The first topic was hydrogen production by water splitting through thermochemical cycles, and the second topic was aluminum blast furnaces to produce aluminum metal without using electricity. In these investigations, he showed a remarkable ability to attack energy-related issues in a straightforward manner and with prompt action.

Dr. Dokiya obtained a doctor of engineering degree, working on thermochemical production of hydrogen, in 1979 from the University of Tokyo. After that, he organized a large research group in the field of solid oxide fuel cells (SOFCs), which required a detailed knowledge of a wide range of properties of materials, strategic thinking, and enthusiasm for a new technology. After serving as the principal research scientist in the National Institute of Material and Chemical Research (which was formerly the National Chemical Laboratory for Industry), he moved to Yokohama National University on April 1, 1997 as a Professor and took over the position, which was until then held by late Prof. H. Tagawa, the founding president of the SOFC Society of Japan. This gave Professor Dokiya the opportunity to promote research and development of SOFCs in Japan, particularly under international collaborations with the U.S. and Europe.

From his early investigations on catalysis, thermochemical methods of hydrogen production and aluminum blast furnaces, Dr. Dokiya recognized the importance of high temperature materials science and high temperature electrochemistry for innovative research work in energy-related fields. He easily recognized the beneficial attributes of solid oxide fuel cells in obtaining high electric conversion efficiency and decreased CO<sub>2</sub>, SO<sub>2</sub> and other environmental pollutant gases, and started investigations on solid oxide fuel cells in late 1980s. He also recognized that to commercialize SOFCs, the technologies for

low-cost fabrication, long-term stability and high power density would be crucial. His major efforts were directed to clarify the fundamental basis for such technological issues. In particular, his development of cell fabrication processes such as wet-sintering were essential for the low-cost cell fabrication and led to the development of low-cost SOFC stacks by Japanese SOFC manufacturers. This was a big step toward the commercialization of SOFC power systems.

Dr. Dokiya served as the chairman of the steering committee on SOFC development in the New Energy and Industrial Technology Development Organization (NEDO) of Japan. He was also the founding organizer of the SOFC Society of Japan with the late Prof. Tagawa and others in 1988 inside the Electrochemical Society of Japan, and initiated collaboration with the High Temperature Materials Division of The Electrochemical Society, which resulted in the now well-established international symposium series on Solid Oxide Fuel Cells (SOFC). Professor Dokiya co-chaired SOFC-IV (Yokohama, Japan), SOFC-VI (Honolulu, Hawaii), SOFC-VII (Tsukuba, Japan), and SOFC-VIII (Paris, France) with Dr. S. C. Singhal, and also served as a member of the executive committee of the High Temperature Materials Division of The Electrochemical Society. He also served as an officer of the International Society for Solid State Ionics.

Dr. Dokiya received the Takayama Award for the production of hydrogen and aluminum using high temperature chemical reactions in 1985 and in 1995, and the Minister Award of the Japan's Science and Technology Agency for Investigations on Solid Oxide Fuel Cells. Even with the knowledge of his cancer since 1994, Dr. Dokiya remained active in research, education, and in helping organize the SOFC series of symposia, and was very keen to promote research and development of solid oxide fuel cells. For his dedicated contributions to solid oxide fuel cells, he was awarded the Christian Friedrich Schoenbein Gold Medal by the European Fuel Cell Forum in 2002. Finally, on the day of his death on June 25, 2003, Dr. Dokiya was awarded the Kyokujitsu Shou-Jushou (The Order of the Rising Sun, Gold Rays with Rosette) through the Prime Minister of Japan, Junichiro Koizumi. ■

*This notice was contributed by Dr. Harumi Yokokawa, National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan; and Dr. S. C. Singhal, Pacific Northwest National Laboratory, Richland, Washington, USA.*