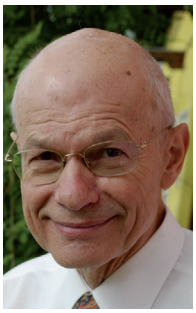

Dieter M. Kolb

Dieter M. Kolb (1942–2011)

Professor Dieter M. Kolb, Director of the Institute of Electrochemistry at the University of Ulm from 1990 to 2010, passed away on October 4, 2011, following a severe illness.

Dieter Kolb was born on October 11, 1942 in Amberg, Germany, where he spent his early childhood, before his family moved to Munich, where his father served as a judge. In 1961, he enrolled at the Technical University of Munich to study physics. He carried out his *Diplom* research under the supervision of his lifelong mentor, Professor Heinz Gerischer, at the Institute of Physical Chemistry, investigating radical reactions using ESR spectroscopy. In 1969 he completed his doctoral work under Professor Gerischer on the homogeneous catalysis of radical reactions in aromatic nitro compounds.

In 1971, following a postdoctoral appointment at the renowned Bell Laboratories in New York, Dieter Kolb became a group leader in Berlin, where he once again worked with Heinz Gerischer, who was now director of the Fritz Haber Institute. During this time, he carried out his pioneering work on underpotential deposition of foreign metals on electrode surfaces.[1,2]

In 1976 Dieter Kolb completed his habilitation in Physical Chemistry at the Free University of Berlin, where he was appointed Professor of Chemistry in 1984. On September 1, 1990, Dieter Kolb moved to the University of Ulm, as Professor of Physical Chemistry and Director of the Institute of Electrochemistry. Under his direction, electrochemistry research at the University of Ulm rose to international prominence. In 2011 Professor Kolb was named a director at the newly formed Helmholtz Institute Ulm for Electrochemical Energy Storage. Professor Timo Jacob now serves as his successor at the University of Ulm.

Kolb gained a worldwide reputation for his groundbreaking contributions to our fundamental understanding of electrochemical processes. While his scientific work covered a wide range of topics over the years, his research is especially characterized by its exploration of the interplay between the atomistic surface structures of electrode materials and the electrochemical reactions taking place on them. Thus, he took full advantage of the techniques of modern surface science to explain the classical phenomena of electrochemistry in terms of the atomistic structures at the liquid–solid interface.

The high quality of his experimental measurements is well-known in the electrochemistry community, and his atomic-resolution in-situ scanning tunneling microscopy (STM) images of electrode surfaces have stood at the forefront of the development of modern, experimental electrochemistry.[3] His research interests included electrocatalysis,[4] investigations of organic overlayers,[5] the characterization of nanostructures using STM, and the new field of ionic liquids in electrochemistry. Thus, his pioneering spirit has paved the way for the next generation of scientists to advance even further in the field of electrochemical surface science.[6,7]

Dieter Kolb played an active role in the German Bunsen Society for Physical Chemistry, as well as in the International Society of Electrochemistry, serving as President of the latter from 2003 to 2004. The extent and importance of his scientific accomplishments is reflected in the numerous awards and honors with which he was recognized. Among these are the Pergamon Gold Medal and Olin Palladium Award from the International Society of Electrochemistry, the D. C. Grahame Award from the Electrochemical Society, and the Faraday Medal from the Royal Society of Chemistry.

In September 2011, Dieter Kolb was awarded the Frumkin Memorial Medal by the International Society of Electrochemistry in honor of his life's work in the field of electrochemisty. He was particularly delighted to receive this award, as for him it represented the final recognition of the significance his contributions to the international electrochemistry community.

Dieter Kolb's doctoral adviser, Heinz Gerischer, was a co-worker of Karl Friedrich Bonhoeffer, who in turn had studied under Walter Nernst and Wilhelm Ostwald. Thus, he found himself following in the footsteps of these two eminent founders of physical chemistry. Dieter Kolb's rich contributions to electrochemistry and classical physical chemistry do full justice to his scientific pedigree, and it is fitting that he too takes his place in the ever growing tradition of physical chemistry.

His extensive knowledge of electrochemistry stemmed not only from the results of his own experimental research, but also from a thorough study of the literature. His expertise was widely sought out in scientific discussions, and he was looked to as an authority in the field of electrochemistry. He was a great promoter of young, developing scientists, and had a knack for quickly identifying his students' strengths and supporting them accordingly.

Dieter Kolb took his highly esteemed mentor Professor Heinz Gerischer as his own scientific role model. After Gerischer's death in 1994, he, along with other colleagues, organized the Gerischer Symposium, which meets every three years in Berlin to address fundamental issues in electrochemistry. Furthermore, Dieter Kolb followed in Gerischer's footsteps by assuming the editorship of

"Advances in Electrochemistry and Electrochemical Engineering" together with Richard Alkire.

In 1993 his wife Franziska passed away, far too soon. In her memory, Dieter Kolb founded the Franziska Kolb Foundation for the Support of Leukaemia Research, and then he gave himself over to his scientific work even more fully than before. Since that time he considered the members of his Institute of Electrochemistry to be his family.

Professor Kolb stands among the eminent scientists who have left their mark on the field of chemistry. Many friends and colleagues esteem him highly as an academic, but even more as a unique and extraordinary individual. He will be sorely missed within the electrochemical community.

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