OBITUARY

Hans-Heinrich Möbius (1929–2011)

Ulrich Guth

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Hans-Heinrich Möbius passed away on October 14, 2011 on his 82nd birthday. Professor Möbius was born in Ostrau (Saxony, Germany) on October 14, 1929. He studied chemistry at the University of Rostock, where he was awarded his diploma. He also worked there as a research assistant before earning his doctorate in 1959. His doctoral thesis was a remarkable and original study of solid electrolyte fuel cells (SOFC). For this pioneering work, he was awarded the Christian Friedrich Schönbein Medal of the European Solid Oxide Fuel Cell Forum in Oslo in May 2006 [1].

In 1960, he moved to the University of Greifswald, as a *Docent* of Physical Chemistry, and in 1966 became a

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lecturer. In 1990, he was appointed Associate Professor of Physical Chemistry and in 1992 became full Professor of Electrochemistry. He retired in 1995. He was a prominent figure in the development of the electrochemistry of solid electrolytes, a topic which has contributed significantly to the development of many batteries, fuel cells, and sensors. His findings were particularly important in the development of the lambda probe, which is used commercially to measure the amount of oxygen in the exhaust gas of automobiles. He also contributed to the development of solid oxide fuel cells. He supervised about 100 graduate, doctoral, and postdoctoral students and published more than 120 scientific papers. He was also co-author of two textbooks and the owner of 50 patents. Most notably, he discovered how to measure the concentration of oxygen in gases in the temperature range 400 °C to 1,500 °C. This invention was patented in 1958. In his theoretical and experimental studies, he also described how to titrate oxygen using a solid electrolyte. Throughout his life, he was always interested in transferring his scientific results into practical devices. He was personally responsible for bringing high temperature oxygen measurements to the ceramic and glass industries. He was also a member of the Editorial Board of this journal and published several articles about the history of SOFC [2-4].

Professor Möbius was an extremely creative scientist and a highly respected teacher. It was always a great pleasure to collaborate with him. His empathy and inspirational advice were appreciated by young students and professional colleagues alike. In his public life, he remained active in scientific research until the end. In his private life, he was married and the father of two sons and a daughter. He will be missed by all.



References

- Hartung RG, Scholz F (1997) 1996 Schönbein Medal of Honour awarded to Hans-Heinrich Möbius. J Solid State Electrochem 1:114–115
- 2. Möbius HH (1997) On the history of solid electrolyte fuel cells. J Solid State Electrochem 1:2–16
- Möbius HH, Hartung R (2010) Solid-state potentiometric gas sensors a supplement. J Solid State Electrochem 14:669–673
- 4. Möbius HH (2003) Galvanic solid electrolyte cells for the measurement of CO₂ concentrations. J Solid State Electrochem 8:94–109

