
PEOPLE NEWS

Tom Fuller Appointed New Head of Fuel Cell/Battery Center



TOM FULLER has been appointed the new director of the Center for Innovative Fuel Cell and Innovative Battery Technologies at the Georgia Institute of Technology (Georgia Tech). Fuller began his new job July 1 at the Georgia Tech Research Institute (GTRI), the applied research arm of Georgia Tech. He also holds a joint appointment as a full professor in Georgia Tech's School of Chemical and Biomolecular Engineering.

"GTRI is recognized for its ability to develop and test prototype devices for a diverse set of customers," Fuller said. "It is also part of Georgia Tech, one of the top engineering schools in the country. That is an unbeatable combination. It's an honor to work with such an impressive group of scientists and engineers."

Among Fuller's goals for the Center is building a sustainable research program focused on electrochemical systems for energy conversion and storage. He's interested in combining fundamental science with practical applications of that work.

Fuller comes to GTRI from United Technologies Corporation (UTC) in South Windsor, CT, where he was director of engineering at UTC Fuel Cells, a unit of UTC Power. There he led the development of technology for fuel-cell stacks, as well as directed the design, construction, and delivery of fuel-cell power sections. He built a team of scientists and engineers who regularly integrated newly developed lab results, such as ideas for improved power density or durability, into products for major auto manufacturers.

Previously, Fuller served as a post-doctoral fellow at Lawrence Berkley Laboratory at the University of California-Berkeley, where he completed his PhD. He is a member of ECS and the American Chemical Society. ■



In Memoriam

Katsumi Niki

1931-2004

KATSUMI NIKI passed away unexpectedly on May 4, 2004 in Pasadena, California, where, since 2002, he had been pursuing collaborative research projects with colleagues in the Division of Chemistry and Chemical Engineering at the California Institute of Technology. He was a member of The Electrochemical Society since 1972 and an ECS Fellow since 1998. Professor Niki was born in Atsugi, Kanagawa Prefecture, Japan on March 8, 1931. He earned bachelor and master degrees at Yokohama National University (1953) and Tokyo Institute of Technology (1957), respectively. He began his career as a project engineer at Sumitomo Chemical Company in 1957, but in 1962 he left Japan to enter graduate school at the University of Texas in Austin where he worked with Professor Norman Hackerman. He was awarded a PhD degree from the University of Texas in 1966. He returned to Japan and continued his association with Sumitomo Chemical Company until 1968 when he was invited to join the faculty at Yokohama National University. He held positions as lecturer, assistant professor, and professor; he was named a professor emeritus in 1996.

Professor Niki was an indefatigable researcher who made important contributions in pure electrochemistry, spectroelectrochemistry, and bioelectrochemistry. Among his most notable achievements was the development of a highly sensitive spectroelectrochemical technique for examining molecules adsorbed on the surfaces of electrodes. He was particularly proud of his recent description of a method for obtaining remarkably well-developed voltammograms for metalloproteins adsorbed on miniature gold electrodes and of a paper, presently in press, in which the important role of proton donor groups in facilitating electron-transfer within metalloproteins is demonstrated quantitatively for the first time.

Professor Niki had a remarkable record of collaborative research with colleagues throughout the world including several in the US as well as those in Japan, France, China, Britain, Korea, Czechoslovakia, and others. He was also committed to the support of professional chemistry and electrochemistry organizations. He served on numerous committees of The Electrochemical Society and held offices in the Organic and Biological Electrochemistry Division. He chaired the Commission on Electrochemistry of IUPAC and was elected as president of the International Society of Electrochemistry (ISE) in 1997. Katsumi was such an active participant in meetings of professional societies that one became accustomed to encountering him at ACS, ECS, ISE, Pittcon, and IUPAC meetings, as well as at many Gordon Conferences. He and his co-workers published over 100 papers and he delivered talks at over 200 meetings around the world.

Just last year he endowed a prize in bioelectrochemistry that the ISE will award for the first time in 2004. The Organic and Biological Electrochemistry Division of ECS will hold a Symposium on Biophysical Electrochemistry in Honor of Katsumi Niki at the 207th Meeting in Québec City in May 2005. Professor Niki is survived by his wife, Hisae, and their children. ■

This notice was prepared by Fred Anson, of the California Institute of Technology, and an ECS Fellow.

In Memoriam

William R. (Bill) Hencke

WILLIAM R. (BILL) HENCKE died on April 11, 2004, at the age of 81. Bill was best known to many attendees of ECS meetings for his entertaining, enthusiastic, and informative career-related workshops held on Sundays and Mondays during the spring and fall meetings. In May 1997, Bill initiated and conducted, until 2001, workshops on writing cover letters for résumés and on job interviewing tips; in addition, he held a “résumé round table,” to provide feedback and suggestions for improving resumes. During these sessions, he advised numerous people—graduate and undergraduate students, post-doctoral researchers, foreign engineers seeking employment in the U.S., and practicing engineers—on approaches to improve their chances to secure an interview, and subsequently on methods to better “sell” their skills during an interview. Bill and his wife Edith enjoyed traveling. As a result, both of them participated in ECS meetings, where they always had a smile and a warm greeting for attendees at the Sunday evening get-together and Monday evening mixer.

Bill obtained a BS degree in chemical engineering from Virginia Polytechnic University and an MS from the University of Michigan. He also attended the School of Nuclear Science & Engineering at Argonne National Laboratory. In addition, Bill was a Navy veteran, who served in World War II as a lieutenant (junior grade).

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William Hencke

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Bill spent 38 years at Texaco, where he worked in facilities in New York, California, and Texas as a research engineer. During his career, he was involved in the development of the world's first process for the continuous manufacture of grease; during these efforts he was awarded 10 U.S. patents, primarily for innovations relating to lubricating grease. After retiring from Texaco, Bill joined the chemical engineering department at Lehigh University as an adjunct professor. At Lehigh, he assisted in the rebuilding and operation of undergraduate laboratories, managed industrial liaison programs for the Center for Chemical Process Modeling and Control, and taught professional development courses.

Mentoring, service, and professional development were primary focal points of Bill Hencke's career and life. In addition to his Lehigh and ECS activities, he had a long history of service to the American Institute of Chemical Engineers. At AIChE, he was chair and a member of the Professional Development Committee, which is where he began his work-

shops for writing cover letters and taking interviews. He also served as AIChE Foundation Trustee, chair of the Steering Committee, and as member of the Public Relations Committee. In recognition of his contributions to chemical engineering and his service to AIChE, he received the F. J. and Dorothy Van Antwerpen Award from AIChE in 2000. Bill was extremely active in the Boy Scouts organization for nearly 50 years, where he most recently served on the Council Commissioners Staff and the Council Advisory Board. Because of his distinguished service to youth, Bill was awarded the Silver Beaver Award from the Boy Scouts.

Bill is survived by his wife Edith; his sister Ruth Mullaney; children Richard, Randy, James, and Judy Houston; ten grandchildren; and two great-grandchildren. ■

In Memoriam

BO EVERT HAKANSSON (1947-2004), member since 1983, Corrosion.



In Memoriam

Supramaniam Srinivasan

1932-2004

SUPRAMANIAM SRINIVASAN was born in Sri Lanka on August 12, 1932 and he died on May 4, 2004. His name is inverted, *i.e.*, the family name is Supramaniam, but the frequency with which Westerners assume that the surname is the last name persuaded the subject of this note to allow the error to remain. Soon, Srinivasan came to be known among his colleagues as simply “Srini.”

Srinivasan came to work as a PhD student at the University of Pennsylvania in 1959 and he was an excellent student. After he had completed the course work for a PhD degree, he carried out two and a half years of work on measuring separation factors of hydrogen with respect to tritium. Some work on the subject already had been published but Srini took the field much further. He calculated the potential dependence for the three main mechanisms by which the hydrogen evolution reaction is discussed. A total of five papers came out of Srini’s PhD work and the conclusion was clear and sharp: the values of the predicted separation factors for the three different mechanisms were so far apart that a single determination of the separation factor for the reaction on a given metal defined the mechanism—a considerable advance over the several different types of examination formerly needed.

Srini stayed on at the University of Pennsylvania and worked as a postdoctoral fellow on the theory of porous electrodes. After he left Penn, Srini made a sharp turn and went to the Downstate Medical Center in Brooklyn to take up bio-electrochemical work in collaboration with Dr. P. Sawyer, a heart surgeon interested in controlling clotting by changing the electrical charge on the surface of his instruments. Srini and Sawyer accomplished much. The primary result of the work was again sharp and clear: If one kept the potential of an instrument, including prosthetics, at a potential more negative than a critical value, clotting would not occur. This was developed into a tool for the selection of prosthetic materials and studying the effects of drugs on blood clotting. Srini stayed at Downstate for four years during the late 1960s. In 1968, one of the authors (J. O’M. B.) collaborated with Srini on the writing of a fuel cell book.

In 1974 Srini moved to Brookhaven National Laboratory and soon became the active leader of his own group of eight. The work covered mostly water electrolysis and fuel cells. In 1980 Srini left Brookhaven for Los Alamos, where he set up a fuel cell group. While there he took a leave of absence to work with a group in Toronto, under the direction of David Scott, a great visionary of the development of a “hydrogen economy.” A significant accomplishment of Srini’s Los Alamos group was the development of fuel cell electrodes, with low loadings of carbon supported platinum, for use in polymer electrolyte membrane (PEM) fuel cells. This reduced the platinum loading by a factor of ten and made PEM fuel cells a viable option for transportation applications.

In 1988 Srini became Deputy Director of the Center for Electrochemical Systems and Hydrogen Research at Texas A&M University. In 1982, the chemistry department at Texas A&M had become the base of the NSF Industry Center in Hydrogen Studies. After the first five years, it became clear that the work needed to be more applied than was suitable for a chemistry department and it was relocated to the Texas Experimental Engineering Station (TEES), on campus. The University was anxious to appoint John Appleby as director and Srini was the obvious choice for the second in command. Soon after the transfer of the Center to TEES, Srini received an appointment which lasted for more than nine years.

Together with Appleby, Srini wrote many proposals, a good proportion of which were indeed funded, and the group extended and thrived for most of the decade following 1988. There he worked on several types of fuel cells, metal hydride batteries, and H₂S removal from natural gas. Another happy thing developed during this time: Srini formed a company. He had observed that there was one element missing in the growing fuel cell activity and that was a setup to test fuel cells. Srini was the designer of the equipment, which found ready customers.

After leaving the Center in 1997, Dr. and Mrs. Srinivasan went to live in Princeton, NJ, where Srini was joyfully received by the Institute for Energy and the Environment and where he played a role on the fuel cell side for several years. His wife, Mangay, had helped Srini intensely during his post university appointments, but now (equipped with her own PhD) her help to Srini became ever more important, because of his declining health.

For almost 25 years, Srini was very active in the affairs of The Electrochemical Society. He became a member in 1968. In 1977, along with Jerry Woodall, he was a co-founder of the Energy Technology Group (now the Energy Technology Division). He served as chair of the Group in 1978. He also served as a Group/Divisional Editor for the *Journal* from 1980-1991. He served as a member of the Society Meeting Committee (1998-1991) and the Publication Committee (1995-1998). Srini was an organizer of several very successful Society symposia. This included the series on “Electrode Processes and Materials for Energy Conversion and Storage,” held in 1977, 1987, 1994, and 1997. He also organized a very successful symposium on “Industrial Water Electrolysis” in 1978. He co-edited proceedings volumes for all of these symposia. Srini received the Energy Technology Division’s Research Award in 1996 and was named an ECS Fellow in 2001.

Several world-known leaders in electrochemistry (*e.g.*, Brian Conway and Roger Parsons) came from the groups in

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London and Philadelphia. But Srimi stood out as an extraordinarily intelligent and fast thinking scientist. A scientific discussion with him was hard fought, but it usually ended up with a definite conclusion. He was not only quick thinking and energetic, but focused sharply upon the task at hand. The question "Why?" would burst forth from him when a weak point occurred in the discussion. Yet, Srimi was by no means entirely concerned with the materialistic side of life. He practiced a spiritual discipline that he had learned in Sri Lanka and which included daily practice of yoga.

It is often good to end a biographical sketch by picking out a single thing that a person has done. In Srimi's case, there is no doubt that it is the work that he led (but which originated in theoretical work done in collaboration with Boris Cahan at

Penn) in the early 1990s on reducing the amount of platinum needed in a fuel cell. There is much in favor of choosing Srimi as the most achieving academic in the fuel cell world in the last half century and if, by 2025, say, we are driving around in our fuel cell powered cars, the numbers on the registration plates should surely include the letter "S."

Srimi is survived by his wife Mangayarkarasy, his daughter Shankari of England, and three grandchildren. ■

This notice was contributed by John O'M. Bockris (bockris@tca.net) and James McBreen (jmcBreen@bnl.gov).