

## Gerald S. Frankel Named 2012 Recipient of The ECS Cleveland Section's Yeager Award



**Gerald S. Frankel**

The ECS Cleveland Section is proud to announce **GERALD S. FRANKEL** as the 2012 recipient of the Ernest B. Yeager Electrochemistry Award. The Cleveland Section's Yeager Award is given once every two years to an individual in recognition of significant contributions to the advancement of electrochemistry in the U.S. Midwest and Great Lakes region of Canada.

Professor Frankel is currently the DNV Chair in Materials Science and Engineering, and Director of the Fontana Corrosion Center at The Ohio State

University. He joined the faculty at OSU in 1995 after a distinguished industrial career as a Research Staff Scientist at the IBM T. J. Watson Research Center (Yorktown Heights, NY) from 1986-95. Prior to his stint at IBM, he conducted postdoctoral research at the Swiss Federal Technical Institute (Zurich, Switzerland) from 1985-86. He completed his ScD and ScB degrees in materials science and engineering from MIT (1985) and Brown University (1978), respectively. Dr. Frankel is currently the Technical Editor for Corrosion for the ECS journals.

Professor Frankel has had a distinguished career as an educator in the field of corrosion electrochemistry. He currently advises 13 graduate students, with 16 PhD students and nine MS students completed. He

has also directed 22 postdoctoral researchers over the years. He has developed and taught training courses in basic electrochemistry and corrosion science through the Fontana Corrosion Center at OSU and teaches short courses on the subject. He has published over 140 peer-reviewed manuscripts in top electrochemical and corrosion journals. He regularly publishes in the *Journal of The Electrochemical Society*. He is on the editorial board of 4 other journals.

Frankel is a Fellow of The Electrochemical Society, NACE International, and ASM International. He received the U. R. Evans Award from the Institute of Corrosion in 2011, the OSU Distinguished Scholar Award in 2010, the 2010 ECS Corrosion Division H. H. Uhlig Award, the Alexander von Humboldt Foundation Research Award for Senior U.S. Scientists in 2004, the 2007 T. P. Hoar Prize from the UK Institute of Corrosion, the 2000 Uhlig Award from NACE, and the Harrison Faculty Award from the OSU College of Engineering in 2000.

Dr. Frankel's primary research interests are in the passivation and localized corrosion of metals and alloys, atmospheric corrosion, corrosion inhibition, and protective coatings. His research has produced fundamental understanding of corrosion processes at various metals and alloys and includes development of new *in situ* methods for studying the mechanisms and kinetics of corrosion processes.

The Yeager Award will be presented at a special symposium and student poster session held in Professor Frankel's honor. The event is tentatively planned to be held at Case Western Reserve University in January 2013. ■

*This notice was prepared by Erin Catney, IBM Research.*

## In Memoriam



**Vladimir Bagotsky**  
1920-2012

**VLADIMIR SERGEEVICH BAGOTSKY**, ECS Fellow, passed away in Boulder, Colorado on November 12, 2012 at the age of 92. During his uniquely long scientific career Prof. Bagotsky authored more than 400 scientific papers and six monographs. The first was *Kinetics of Electrode Processes* (1952) published together with A. N. Frumkin, Z. A. Iofa and B. N. Kabanov in Russian and available in English as an NBS translation. Late in his life, he was still actively publishing, with *Fundamentals of Electrochemistry* (ECS Monograph Series, Wiley, 2006)

and the treatise *Fuel Cells: Problems and Solutions* (also in the ECS Monograph Series, Wiley, 2009). Up to his last days Professor Bagotsky was working on his next book, which is scheduled to be published in the near future.

Vladimir Bagotsky was born in Bern (Switzerland) on January 22, 1920, and moved to Moscow in 1938. Being a student at Moscow State University (MSU), he joined the widely recognized Frumkin school of fundamental electrochemistry and started with hydrogen evolution and oxygen reduction kinetics on mercury. His quantitative treatment of the

concentration polarization for diffusion to growing mercury drop (1948) is one of important contributions to the theory of polarography.

Between 1949 and 1965 Vladimir Bagotsky worked at the All-Union Research Institute of Power Sources. He was a head of the laboratory that developed the batteries for spacecrafts (mostly high capacity silver-zinc and mercury-zinc). Starting in 1960, Dr. Bagotsky became a leader of the fuel cell development in the Soviet Union, and from 1980 he supervised Russian R&D related to lithium batteries. When, in 1958, Frumkin founded the Institute of Electrochemistry of the Russian Academy of Sciences, he invited Prof. Bagotsky to be the head of the power sources division. Basic aspects of electrochemical energy conversion, addressed by Bagotsky and his co-workers in the Frumkin Institute, are related to electrocatalysis, electrode kinetics on porous electrodes, and electrochemical intercalation.

After his retirement, Prof. Bagotsky moved to the U.S. and continued his work on monographs, and always holding very special contacts with many people in ECS. A special session in his honor—Professor V. S. Bagotsky – 65 Years in Theoretical Electrochemistry, Electrocatalysis, and Applied Electrochemistry—was arranged as a part of the ECS 218<sup>th</sup> meeting (Las Vegas, October 2010). An issue of *ECS Transactions* dedicated to this event was published in 2011 (Vol. 33, No. 32). Although he was living in the U.S., he never interrupted his contacts with his Russian colleagues, who will always remember him as a kind and attentive teacher and friend. ■

*This notice was prepared by Erin Catney, IBM Research. An "ECS Classics" article on Prof. Bagotsky will appear in a future issue of Interface.*