

 **the RADIOCHEMISTRY SOCIETY**  
*expanding horizons*  
**Faculty • Consulting Team**

• **Larry A. Burchfield, PhD**

*EDUCATION:*

PhD in Nuclear Chemistry  
University of Arkansas, 1982

*SUMMARY of EXPERIENCE:*

More than 20 years experience in the field of radiochemistry. He has published numerous articles on radiochemistry and has served as a consultant to many of the Department of Energy sites, commercial nuclear laboratories as well as nuclear instrument providers. He has written many articles and reports on radioactivity in the environment, as well as making many oral presentations on nuclear research and measurements. He has served in the US Army Nuclear Weapons program and has recently retired from the Army National Guard. Dr. Burchfield combines his Army experience with his scientific education in a practical manner that makes his teaching fun, practical and easy to follow.



Dr. Burchfield has served as the Conference Chairman of the Bioassay, Analytical, Environmental and Radiochemistry Conference in 1990. The Sub-Group Chairman for the Committee on Radiochemical Data Validation in 1994. He was an invited member of the Joint Russian - American Working Group for Waste Disposal and Environmental Protection in 2000. He is a founding member of the Radiochemistry Society.

He has been an invited speaker to several international conferences and has taught chemistry and radiochemistry at two major universities at both the graduate and undergraduate level. Dr. Burchfield also designed and developed the Alpha Management Software that has now become the industry standard at all major DOE sites and commercial laboratories.

• **Bruce J. Kaiser, PhD**

*EDUCATION:*

PhD Nuclear Engineering Science  
University of Florida, 1977

*SUMMARY of EXPERIENCE:*

Dr. Kaiser has a broad and deep technology background in executive business management and financial training from General Electric, ABB, and Battle. He has authored 10 successful patents and has authored more than 22 technical papers. Additionally, Dr. Kaiser is very active in both the technical world and the world of business management.



From 1977 to 1983, he held a senior engineering position in Westinghouse Hanford and GE. In 1986, he accepted a position as the Chemical Science Department Manager at Battelle's Pacific Northwest National Laboratory in Richland, WA. After a successful 5 years with the Department, winning many science awards and doubling the business size, he accepted a position at GE that led to moving into the executive level as the Manager of Fuel Manufacturing Operations. In that position he restructured the manufacturing and laboratory operations, from a detailed technical and an organizational point of view, introducing new products, reducing cost by 30% and increasing output by 50%, and reducing cycle time by 80%. Dr. Kaiser managed the day-to-day operations, which produced about \$300 million worth of nuclear fuel for commercial power reactors world wide each year. In this position, he was the site emergency director and became very familiar with EPA and NRC regulations and regulators.

In 1996, he joined ABB as Vice President of Nuclear Fuel for ABB. Again, his skills in technology, management and business restructuring within a much-regulated nuclear business provided invaluable. Over a two year period I caused the manufacturing and supporting laboratory facility to be modernized and business orders were increased by \$1.2 billion, costs were cut by 30%, process cycle time was reduced by 60%, and by closely working with the NRC the business was removed from their watch list.

As an instructor and consultant for the Radiochemistry Society, Dr. Kaiser combines his unique humor and candor with his technical skills for very powerful and informative lectures.

• **Tjalle T. Vandergraaf, PhD, FCIC**

*EDUCATION:*

PhD in Analytical Chemistry  
The Pennsylvania State University, 1969

*SUMMARY of EXPERIENCE:*

He has 35 years experience in the nuclear energy field as a research scientist, project manager, and section head at the Whiteshell Laboratories of Atomic Energy of Canada, Ltd. (AECL) in Pinawa, Manitoba, Canada. He is an Adjunct Professor in Physical and Environmental Science at Providence College, Otterburne, Manitoba. He is member of the American Scientific Affiliation and of the Geological Society of America, a Fellow of the Chemical Institute of Canada, and a charter member of the Canadian Nuclear Society.



Dr. Vandergraaf's academic background is in neutron activation analysis. During his career he has worked in the many areas of nuclear energy research, including the chemical and radiochemical analysis of irradiated fuel and nuclear reactor components, the chemical behavior of fission products and actinides in geological systems, remedial cleanup demonstrations, radionuclide transport in consolidated volcanic rock under unsaturated and saturated conditions and in natural fractures in granitic rock. He has served as the Canadian delegate to, and chairman of, a subcommittee of the Nuclear Energy Agency (NEA) of the Organization for Economic Cooperation and Development (OECD) and as a consultant to nuclear waste management organizations in Switzerland

and the United States. He has been a member of the International Scientific Committee of the "International Conference on the Chemistry and Migration Behaviour of Actinides and Fission Products in the Geosphere."

He has written a large number of papers on contaminant transport in the geosphere in refereed journals, internal and external AECL reports and Ontario Power Generation reports. He has given invited presentations in Korea, Japan, China, Ukraine, the Netherlands, the United States and Canada. He has extensive experience in giving presentations to the general public and high school students.

### • **Dennis W. Wester, PhD**

#### *EDUCATION:*

PhD in Inorganic Chemistry  
University of Florida, 1975

#### *SUMMARY of EXPERIENCE:*

Dr. Wester has more than 25 years experience in the nuclear field as a scientist and manager at Argonne National Laboratory, Mallinckrodt Medical, NeoRx Corp., and Pacific Northwest National Laboratory. He has taught chemistry as an Adjunct Associate Professor at the University of Missouri-St. Louis and is presently Adjunct Assistant Professor in the Nuclear Medicine Certificate Program at Washington State University-Tri-Cities. He is a member of the American Chemical Society, Society of Nuclear Medicine, American Association for the Advancement of Science, Sigma Xi, American Crystallographic Association, and Tri-Cities Technical Council and has served in various capacities in several of these organizations.

Dr. Wester has extensive experience in radiopharmaceutical research and development, radioisotope production, separation science, fundamental actinide chemistry, management of nuclear waste, and material protection, control and accounting. His expertise in technetium chemistry was gained during a multi-year search for classes of compounds that are preferentially absorbed by myocardial tissue. He participated in the development and commercialization of Y-90 production from Sr-90. Recently Dr. Wester acted as the System Lead for research and development on an engineered form of crystalline silicotitanate for removal of cesium from highly alkaline nuclear waste.

In addition, Dr. Wester is fluent in Russian, has a broad network of contacts with Russian research institutes, and translates scientific journals from Russian to English. He is the technical lead for development of regulations on Material Protection, Control and Accounting with the Russian Ministry of Transport and Communications and the Russian Shipbuilding Agency. He spent three years in Moscow as the manager of the Adjunct Program Office for the International Nuclear Safety Program. Dr. Wester has translated journals such as Soviet Radiochemistry, Chemistry of Natural Compounds, Chemistry of Heterocyclic Compounds, Soviet Crystallography, Russian Journal of Inorganic Chemistry, Soviet Electrochemistry, and Inorganic Materials, among others.



## • Sebastian Tindall

### *EDUCATION:*

M.S., Chemistry (1982)  
University of California, Santa Cruz, (UCSC)

### *SUMMARY of EXPERIENCE:*

Mr. Tindall has more than thirteen years of experience in environmental consulting, including project management, and has been advising the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) on CERCLA and RCRA issues. He has a strong academic and research background in organic chemistry and has more than fifteen years of experience as a chemistry instructor, teaching at the college and university chemistry level. Mr. Tindall excels as a public speaker, instructor, consultant and trainer, with exceptional skills in effectively conveying complex technical concepts to non-technical audiences.



## • Joe Estey

### *SUMMARY of EXPERIENCE:*

Joe Estey has been a corporate trainer, educational advisor, and a manager in four different industries over the past twenty-two years. He has been featured as an expert in leadership and organizational development in video/audio cassette and compact disc training productions such as "Attitude: Your Most Priceless Possession" and "Improving Your Performance." Mr. Estey's book, "The Tomorrow Tapestry: Life Woven on the Fabric of Change", is available from Publish America.

Recognized nationally, Mr. Estey is a speaker, facilitator and presenter to over 45,000 people and hundreds of organizations annually. He is a frequent keynote speaker at state, regional, and national conferences and is a consultant to corporations, small businesses, government agencies, and school systems in the United States. His work has earned two National Educational Outreach Program Awards from the U. S. Secretary of Energy, and numerous Total Quality Management and Project Management awards from industry and community leaders.

Most recently, he has assisted a variety of organizations, including manufacturing, financial services, and school districts in Professional Development, Resistance and Change Management, and Productivity Improvements. Mr. Estey works with a multitude of organizations wanting to improve their performance by creating and supporting self directed teams, who create vision, decision and action, and identify what customers really need and want from those responsible for serving them.

