Shirley Johnson

BIO

Ms. Johnson completed her B.Sc. in Chemistry at Gonzaga University in 1969. Her graduate studies focused on Separations Chemistry, and Laboratory instrumentation and methodology at the Hanford Graduate Center from 1969–1972. Her career as an Analytical Chemist started with separation systems at the Hanford Nuclear Site between 1969–1980. Ms. Johnson provided R&D separation process support, at the Purex Reprocessing Plant, the Hanford Plutonium Purification and Conversion Facility and the Cesium and Strontium Separation and Isolation Plant. In 1980 she moved to the Idaho National Engineering Laboratory where she worked on sampling and measurement methodology in order to perform speciation studies that would help define the transport mechanisms of nuclear material during and after the Three-Mile-Island incident.

In 1982, Ms. Johnson joined the IAEA as a safeguards inspector, where her work was focused toward the implementation of safeguards at reprocessing plants, primarily in Germany and Japan. She was Group Leader and then Section Head in SGOA Division for reprocessing and research facilities in Japan. In 1991 she was a member of the 4th IAEA inspection team to Iraq. Ms. Johnson was Head of the JNFL Project from 2001 to 2006 and then Section Head of SGOB1 (India, Pakistan, Africa, Canada, and Switzerland) until she retired in April 2007.

Since retirement from the IAEA Ms. Johnson has established her own consulting business, Tucker Creek Consulting, PLLC, with a focus on nuclear non-proliferation and disarmament issues. She provides expert assistance in the areas of safeguards approaches and implementation, safeguards by design, process monitoring and system authentication. She is also working to develop safeguards approaches for verification of an FMCT. In addition, she provides support to BNL in their exhibit booth at technical meetings to recruit candidates for the IAEA in safeguards. Ms. Johnson has also been actively involved in lecturing at various US national laboratory intern courses and international non-proliferation courses.

Ms. Johnson has produced numerous papers on reprocessing safeguards, analytical chemistry techniques, facility design verification, and verification of an FMCT. She has held office positions within the American Nuclear Society, the American Chemical Society, and the Institute for Nuclear Materials Management.