

Meet the Presenter...

Dr. Rebecca Thomas

Dr. Rebecca Thomas is a mass spectrometrist at the Department of Energy's New Brunswick Laboratory (NBL), which is the United States' certification authority for nuclear reference materials. During her 12-year career at NBL, Dr. Thomas has worked on uranium and plutonium reference materials for quality control of nuclear safeguards and environmental analysis. Prior to working for the DOE, Dr. Thomas' experience was in geochemistry. She earned a BA in geology and chemistry from Williams College in 1996, and completed her Ph.D. in Geochemistry at the University of Minnesota in 2004. For her Ph.D., she studied uranium and its short-lived daughter isotopes (thorium-230, protactinium-231, and radium-226) as geochronometers, and in volcanic rocks as tracers of melting processes. From 2009 through early 2013, Dr. Thomas worked at the International Atomic Energy Agency (IAEA) in Vienna, Austria, supporting the IAEA's international network of analytical laboratories in analysis of both environmental and nuclear safeguards samples. Her work included support for the qualification of new member laboratories, and working with others to develop analytical criteria and evaluation of the candidate laboratories. Dr. Thomas' work/research interests include mass spectrometry of inorganic elements, analysis of trace elements in nuclear and environmental samples, practical applications of ion exchange and extraction chromatography techniques, trouble-shooting sample preparation and mass spectrometry analyses, and quantifying sources of uncertainty in mass spectrometry measurements.



Contact Information

Phone: (+1) 630-252-2464

Email: rebecca.thomas@ch.doe.gov

